

DELTA PROTECTION COMMISSION DETAILED COMMENTS TO U.S. ARMY CORPS OF ENGINEERS DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Introduction:

Because the DEIS relies on much the same content as the DEIR, it carries forward the same errors and deficiencies. For this reason, errors and deficiencies in the DEIR are described in the following comments, with suggested ways to remedy the deficiencies in the DEIS where possible.

Chapter 1: Purpose and Need

In the Purpose and Need discussion, project objectives narrow the focus similarly to the DEIR framework improperly and unreasonably narrows the threshold of significance such that many resource impacts are found to be less than significant. Chapters with unreasonably narrow thresholds include but are not limited to Chapter 9, Flood Protection; Chapter 11, Groundwater; Chapter 13, Land Use; Chapter 15, Noise and Chapter 16, Recreation.

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 2-3 paragraphs maximum.

Chapter 2: Project Description and Alternatives

No action alternative The Commission continues to recommend a no action alternative coupled with accelerated improvement of Delta levees, consistent with the Commission’s Economic Sustainability Plan (ESP). This alternative is more feasible than the tunnel, with lower cost, reduced environmental impact, and less controversy.

DEIS Analysis Should Include Operations.

The Commission believes that the Project Description itself perfectly demonstrates the “but for” argument that should support the Corps including project operations in its permit review and consequently, the DEIS. An example is the North Delta Intakes description (p. 2-19) and accompanying Figure 2-4 showing just one of the two proposed diversion works - the massive

intake structure, fish screens, electrical building, flow control structure and outlet shaft, sedimentation basin and drying lagoons:

Constructing the intakes along the riverbank would require relocating the jurisdictional levee and State Route (SR) 160 prior to building the intake structure and fish screens. The jurisdictional levee was constructed as part of the Sacramento River Flood Control Project Levee program established by USACE to provide flood management for surrounding lands. Altering a jurisdictional levee requires approval by USACE with a Section 408 permission, and the Central Valley Flood Protection Board prior to undertaking any modifications and requires that conformance with flood control criteria be maintained continuously during construction of any modifications. A temporary jurisdictional levee would be built at the intake sites east of the existing levee to reroute SR 160 and maintain continuous flood protection during construction of the new intake facilities (Figure 2-4).

But for the necessity of obtaining Corps permission to relocate the jurisdictional levee, the intakes could not be built and there would be no diversion of Sacramento River water from that location. The intakes thus could not operate without the Corps permission to accommodate their construction.

Description of the project includes statements which are contradicted in virtually the same sentence. For example, the description of Reusable Tunnel Material (RTM) at DEIS Section 2.6.1.4 (p. 2-28) states:

After RTM is removed from the tunnel, it would be tested for hazardous materials, dried mechanically or allowed to dry naturally, then stockpiled and transported for reuse or *permanently stored* at tunnel launch shaft sites. Quantities of RTM generated would vary depending on tunnel diameter and length. (emphasis added)

It then goes on to describe temporary storage and disposal of RTM:

The applicant would develop site-specific plans for the beneficial reuse of RTM to the greatest extent feasible for construction of the selected action alternative. Excavated RTM would be placed in *temporary stockpile areas* and tested (generally once or twice a day) in accordance with the requirements of the Central Valley Regional Water Quality Control Board and the Department of Toxic Substances Control for the presence of hazardous materials at concentrations above their regulatory threshold criteria.

Several stockpiles would be developed. Each temporary area would be generally sized to accommodate up to 1 week of RTM production to allow for testing the RTM before stockpiling on-site or transporting off-site. (emphasis added) ...

For RTM not slated for reuse, wet RTM would be spread over a broad area in relatively thin lifts (e.g., 18 inches) and allowed to dry and drain naturally over a period of up to 1 year. Continuous spreading in thin lifts would allow RTM that is not mechanically dried to be dried naturally and compacted in place without excessive earthmoving requirements.

All of these statements leave significant room for doubt that so-called temporary stockpiles would become permanent stockpiles, or virtually permanent if they were to remain for the duration of the 13-year preferred alternative construction period. This concern is discussed further in comments on Aesthetics and Visual Resources, Agriculture, and Geology and Soils.

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 1 paragraph maximum.

Chapter 3: Affected Environment

Chapter 3.1: Aesthetics and Visual Resources

Scenic Highways. Section 3.1.1 of the DEIS should be expanded to reflect relevant provisions of the scenic highway corridor protection program submitted by Sacramento County and approved by Caltrans for State Route 160 and the River Road, especially provisions related to land use, site planning, design review, earthmoving, and landscaping. A similar review of relevant provisions of Sacramento, San Joaquin, and Contra Costa scenic highway plans and ordinances affecting locally designated scenic routes should be undertaken. Conflicts with these state and local standards should be addressed.

Driving for pleasure is among the most popular recreations in the Delta (Recreation and Tourism in the Delta, A Study of Preferences for Activities and Facilities, Information Sources, and Economic Contributions of Delta Events (pp 8-9) Delta Protection Commission. 2019). The scenic highway designation alerts motorists to the roads' pleasant vistas, expanding participation in this relaxing pastime. Recreational motorists drawn by the scenic highway designation support visitor-serving businesses, including cafes, resorts, gift shops, and other retailers in legacy communities along the road. State Park properties at Locke Boarding House, Delta Meadows, and Brannan Island also draw visitors traveling the scenic highway. All these uses would suffer by loss of the scenic highway designation.

That the project risks Caltrans' revoking scenic highway designation of State Route 160 as a state scenic highway is a potential significant adverse effect that deserves more careful

consideration in consultation with Caltrans and Sacramento County. Losing state scenic highway status would also undermine the State’s Delta Plan, which recommends that Caltrans should seek designation of State Route 160 as a National Scenic Byway and prepare and implement a scenic byway plan for it (see Delta Plan DP R2). Both recommended actions depend upon the continuation of the state scenic highway designation.

Assessment of Visual Character of the Study Area

Key Observation Points (KOPs) in the Area of Visual Effects are incorrectly documented. By relying on the DEIR’s Chapter 18, DEIS Section 3.1.2.1 repeats several of its errors. Among these is the DEIR’s assessment of the visual character of the study area. Our staff has driven Delta roads extensively over the past decades, attended exhibits of Delta landscape art, and viewed many hundreds of Delta photos in agency publications, on their websites, and on the Facebook [Delta News](#) group. Based on this experience, the defining visual features of Delta landscapes should have been described as follows.

- *Agricultural landscapes.* Within agricultural landscapes, vineyards display close-spaced trellises and a variety of training systems of middle height, in contrast to orchards’ height and greater uniformity. The landside of levees, dropping steeply toward the farmed Delta plain, add interest and provide a vantage point overlooking farmland, especially along the Sacramento and San Joaquin Rivers. These farmlands are more visible to highway travelers than levees’ waterside and are not encumbered by rock revetments. Farmsteads add variety, with houses and outbuildings of differing historic styles and uses. Farmstead landscaping, including rows of palms, cedars, and shade trees, adds vertical interest and a domestic component to the working agricultural landscape. Windbreaks of Lombardy poplar, roadside arbors of shade trees, and other plantings in orchards and vineyards do the same. Farm laborers at work, agricultural machinery, livestock, wading birds, and waterfowl add movement and variety to agricultural lands when they are present.
- *Mount Diablo.* Mount Diablo is a welcome landmark on the horizon in views from both waterways and roads. Intrusions that degrade or interfere with views towards the mountain will be especially undesirable.
- *Open space.* In a lush agricultural landscape, abandoned land can be an unpleasant sight. Fallow land among productive vineyards, orchards, or farm fields may lead viewers to wonder why the land is unused. To some, it may be a reminder of a tragedy, such as a farm bankruptcy or a flood that has scoured the site or deposited sand there. Others may see a signal of a high-water table or dangerous seepage beneath a levee. Views toward the Montezuma Hills are notable for the wind turbines clustered there.

Because the DEIR failed to recognize too many of these defining visual features, it did not accurately assess aesthetic and visual resources affected by the project. The DEIS should not rely on it without modification.

The DEIS also depends on inadequate photo renderings of the landscape from the DEIR's Appendix 18. The renderings used as the basis for the photo simulations (KOPs) (DEIR page 18-28) are based on photographs taken in November, when agricultural vegetation has been removed or gone dormant. These images are not representative of the landscape. New KOPs should be developed based on summer-time images and used as the basis for evaluating visual impacts. Further recommendations to improve accuracy of the project's visual effects:

1. Additional KOPs presenting renderings along State Route 160 should be developed to supplement those provided in the DEIR's Figure 18-10. Travelers on this Scenic Highway are more likely to be drawn to view towards the Sacramento River and the adjoining orchards.
2. In considering effects on scenic vistas (Impact AES-3), the EIS should consider views towards Mount Diablo from San Joaquin County's locally designated scenic routes. Long-distance views across the Delta towards the mountain are among the Delta's signature landscapes. When those views are interrupted by piles of tunnel muck and other discordant project features, visual impacts are significant.
3. The screen of "native" trees depicted in the DEIR's Figure 18-10 neither accurately depicts the extent of visual impact nor effectively illustrates the mitigation value of the proposed planting. A more useful visual simulation would depict the intakes as viewed from the river and from State Route 160 looking north to south.

The DEIR errs in not rating the quality of the landscape with the project as "low" in contrast to the No Project alternative. Every significant feature of the project will degrade Delta scenery and harm the Delta's unique visual appeal. The DEIS correctly acknowledges the significant and unmitigable impact caused by construction of the project intakes but does not fully capture its magnitude. Impacts of the launch shaft complexes, however, fail to accurately reveal the extent of this damage.

The landscape with the project will be "very disrupted", "very discordant", and will likely be perceived as an eyesore. Similarly, the cultural landscape as viewed with the project lacks the cohesion and sense of place that have evolved over time, and it will be perceived as blight. The RTM stockpiles remaining on site will substantially degrade significant portions of the

landscape. Only a major redesign, such as relocating the RTM stockpiles outside the Delta, can rectify this incompatibility with surrounding environments.

Examples of these errors in the DEIR's description of impacts include:

- *Intake Facilities.* Few residents, recreationists, or motorists are likely to concur that the visual quality of the landscape remaining after the intakes' construction is "moderate", as the DEIR asserts. The project will replace this area's river views, naturalized riverside, orchards, wheat fields, an iconic corridor of palms, and several rural farmsteads with what the DEIR concedes is a "monotonous", "utility or industrial type facility" surrounded by a gray chain link fence. Views of these industrial facilities will instead greet recreationists on the river and highway motorists after the removal of orchards and other vegetation. Views along Scenic Highway SR 160's winding tree line will be degraded. The intake construction site will be "visually discordant" with the surrounding landscape. The massive structures resulting from project construction will fit the "very low" criteria of the DEIR's Table 1.3-5: "natural landscape is in disarray and severely degraded", "cultural landscape is in disarray and severely degraded", and "project site is in disarray and severely degrades the natural or cultural landscape. Major redesign or relocation of the facilities would be required to approach compatibility with surrounding environments."
- *Twin Cities complex, including the Lambert Road Concrete Batch Plant and Hood-Franklin Park-and-Ride lot.* Construction at the Twin Cities complex will transform and degrade scenery at this rural ranchland setting. Existing historic ranch complexes at the site would be removed to make way for the launch shafts and pads, tunnel segment storage, two concrete batch plants, cranes and other construction equipment, and a helipad, surrounded by a chain link fence. Livestock will be absent. The project will leave behind a 15-foot-high pile of tunnel muck covering an area equivalent to up to 290 football fields. This area of tunnel muck should not be described as "native habitat" even if native grass is planted and survives on the pile.

The quality of the landscape left behind by the project should be rated as "low". Its natural landscape will be "very disrupted", "very discordant", and will be perceived as an eyesore. Its cultural landscape lacks design cohesion and any sense of place and will be perceived as blight. The piles of tunnel muck remaining on site will substantially degrade the landscape. Only a major redesign, such as relocating them outside the Delta, can correct this incompatibility with surrounding environments.

- *Lower Roberts Island Launch and Reception Shaft and Tunnel Muck Storage* (DEIR pages 18-70 to 72). The current visual quality of the area should be rated high, as indicated by San Joaquin County's designation of scenic routes surrounding the area. Roberts Island's riverside levees provide an elevated perch from which motorists can view the meandering

San Joaquin River and Whiskey Slough as well as the island's croplands and pastures, stamped with the pattern of its drainage and irrigation networks. The Turner Cut and Tiki Lagoon Resorts provide recreation destinations prized by boaters and other visitors. Farm workers and equipment can be seen planting, tending, and harvesting. Wading birds and waterfowl are visible while they use the area. Mount Diablo anchors the horizon, a landmark known to all. Travelers visiting the resorts along the San Joaquin River, families and anglers who fish and recreate along the riverbanks, and residents value these views, which the DEIR text correctly states are emblematic of the Delta and its natural endowment of fertile fields, abundant water, and sunshine.

Project construction will redefine this landscape for an estimated 13 years. The Lower Roberts Island construction site would occupy an area the size of 407 football fields. At the shaft site, stored tunnel liners, construction equipment, a slurry/grout mixing plant, tunnel muck handling facility, offices, a helipad, and a 2-mile-long conveyor will replace the present farm landscape. After construction, permanent pads, access ramps and shafts will rise 30 feet above the plain. Nearby, the abandoned tunnel muck will sit in a 15-foot-high pile covering an area the size of 71 football fields. Both the shafts and the mound of tunnel muck will blemish views to Mount Diablo from Holt Road, a county-designated scenic route on the island, as shown in DEIR's Figure 18-15.

Adjacent to Whiskey Slough, vegetation will be removed from 67 acres of levees and adjoining areas, which after construction will be maintained to the Delta Specific PL 84-99 standard. This standard requires that levees be free of trees and shrubbery, rather than recolonized with "natural vegetation" over time, as the DEIR text suggests. Parts of Turner Cut Resort and adjoining structures will be removed, dramatically altering the recreational character of the Whiskey Slough shoreline and Neugebauer Road landscape.

The resulting landscape fits the "low" criteria of DEIR's Table 1.3-5: The loss of 407 acres of farmland will leave the site's agricultural landscape "in disarray and severely degraded". Damage to the Turner Cut Resort along Whiskey Slough will disrupt the visual cohesion of that area. At both locations, the resulting land uses will be "highly disjointed", with extensive and highly disruptive construction sites adjoining farms, resorts, and Whiskey Slough. After construction, the mound of abandoned tunnel muck will disrupt the naturally flat landscape in a way that local people and visitors will perceive as an eyesore and will detract from views toward Mount Diablo.

Neither plantings of native grass nor the screen of "native" trees depicted in DEIR's Figure 18-15 do much to reduce damage to views across the site done by the tunnel pad, shafts, and the 15-foot-high, 471-acre mound of tunnel muck left after construction. The rendered view after construction shows the trees will be an additional intrusion on the landscape, rather than softening the interruption of the level horizon and views of Mount Diablo.

The EIS should not rely on the DEIR's assessment of aesthetic impacts without modification to address these shortcomings.

Visual resource impacts of action alternatives are not correctly mitigated. A suggested measure to avoid the impact of leaving tunnel muck piles distributed across farmland visible from scenic routes designated in local general plans, would be to work upfront with Reclamation Districts and others to develop the system vaguely referred to in Section 2.6.1.4 for RTM disposal. A meaningful mitigation would match tunnel material to users and transport it to those users, if necessary, at DWR's expense or through a cost-share program. Material which cannot be reused should be removed from sites visible from these scenic routes and deposited elsewhere than the Delta, which must not become a disposal site for the project's waste.

Another mitigation measure that should be considered is constructing smaller diversion works sediment basins that are set back sufficiently from SR 160 to allow planting of a wide strip of trees, such as pears or walnuts, to screen the basins and associated facilities from views of travelers on the scenic highway. There appears to be no clear estimate of sediment the basins are likely to receive. Reducing the size of the sediment basins, coupled with more frequent sediment removal if needed, would minimize both the visual and the land use impacts.

Finally, rather than planting conifers or other "native" trees, as depicted in DEIR's Figure 18-10, mitigation landscaping should consider palms, Lombardy poplars, or other shade trees typical of agricultural landscapes, mimicking the tree line that the project will remove. Nearby residents and businesses should be consulted about preferred options for tree screens and other landscaping.

3.2 Agricultural Resources

The DEIR does not use available data. While the DEIS lists the commodities grown in the Delta, changes in Delta cropping are significant. The conversion of lands to high-value permanent crops is not even discussed. More recent information is available in our recent update to the Commission's [Economic Sustainability Plan](#) (ESP), which we provided to DWR's Delta Conveyance Office at their request. In several locations, crop conversions over the past 5 years need to be considered in the impact analysis. The significant conversion to high-value permanent crops is not even discussed in the document. Section 3.2.1 references Delta agriculture but omits any discussion of the significant proportion of Delta lands that have been

converted to high value crops including almonds, pistachios, cherries, wine grapes, and even corn for distilling purposes.

Water Quality: The DEIS, in omitting project operations, thereby overlooks impacts of the conveyance facilities on water quality that affect agriculture. Especially in the western and south Delta, agricultural resources already suffer from impaired Delta water quality caused in part by the State Water Project's and Central Valley Project's diversions, including increasing salinity due to reduced freshwater flows.

The water quality impacts the conveyance project will have on Delta agriculture should be addressed. The project's DEIR forecasts that it will cause declines in water quality that threaten farming after August 15 of any normal water year. Based on the assumption of late fall as the tipping point, DWR concluded the project operations "would not be expected to trigger a substantial conversion of Important Farmland to nonagricultural uses." Such analysis is predicated on the assumption that "many of the crops are harvested by early fall" and outlines a series of crop types that no longer exists in the Delta. The model and its output, however, need to consider:

1. The fastest growing commodities including tree nuts and wine grapes are irrigated and harvested in the fall, with some harvest times as late as November.
2. The DWR's model of impacts considers only normal water years to forecast the water quality impacts on agriculture. In addition, it also needs to study the worst drought years on record to fully show the impact of the project's operations.
3. With climate change affecting the onset of seasonal changes, the use of terms like "early" or "late" fall is an increasingly impractical gauge.

The claims on page 3.2-17 that impacts to agriculture from degraded water quality "would modestly increase salinity" fails to account for long term trends and provides little assurance that the project's water quality impacts on agriculture will be insignificant. The assertion that impacts in the west Delta are insignificant because agriculture there is primarily managed for pasture fails to take into account the area's historic farm production, which on Sherman Island for example, included crops of asparagus, barley, beans, field corn, milo, and wheat as recently as 1945, before the CVP and SWP operations began to degrade water quality (see *The Settlement Geography of the Sacramento-San Joaquin Delta*. John Thompson, Ph.D. Dissertation. Stanford University, 1957.). Consideration of the project's cumulative impacts on agriculture needs to account for this legacy of water quality effects.

Acreage of converted farmland. In multiple rounds of comments, the Commission has requested inclusion of a single table to show all the potential impacts to farmland from the No Action alternative in comparison to the Proposed Alternatives beyond just the construction footprint. This table should include everything from actual farmland converted due to the construction of the project including a clear description of the final acres lost permanently inside of the RTM areas, remnant parcels too small for commercial agriculture, farmland rendered useless due to construction impacts such soil compaction or impaired drainage, to those acres lost due to the water quality impacts. The loss of farmland to habitat restoration that will be part of this project’s compensatory mitigation program is of particular concern.

Mitigation should be improved. The ratio of agricultural land protection to land conversion should be increased beyond 1:1 to reflect the cumulative effects DWR’s Delta projects have on agriculture. Additional measures that should be required include buffer areas to protect farms from construction impacts including dust, seepage, impaired drainage, and depredations by wildlife drawn to compensatory mitigation areas. Provisions of the “Delta good neighbor checklist” should be fully adhered to.

Cumulative Analysis. Section 3.2.2.3 overlooks many habitat restoration projects that have converted Delta farmland. A recent report to the Delta Stewardship Council identifies not just three habitat restoration projects on Delta farmland, but 20,760 acres of projects planned, underway, or completed (<https://deltacouncil.ca.gov/pdf/council-meeting/powerpoints/2022-11-17-item-11-ecosystem-restoration-progress-review-presentation.pdf>). In addition to these restoration actions, limitations that DWR has imposed on other farmland through easements and lease restrictions add to this cumulative impact. It is the cumulative impact of activities of DWR and its SWP contractors that is driving the loss of Delta farmland and limitations on agricultural use of thousands more agricultural acres, rather than other development.

A presentation of DWR projects’ cumulative effects on Delta agriculture is documented in the table below. Acreage estimates are derived from the Natural Resources Agency EcoRestore [website](#)) and the Delta Conveyance DEIR. These data also account for tidal habitat compensatory mitigation for the Delta conveyance project, which Solano County’s DEIR comments estimated at an additional 1228-1600 acres in the Delta priority restoration area, but they do not include several recently proposed private mitigation banks. Section 3.2.3.3 and Table 3.2-7 should be revised to reflect the true scale of cumulative effects to Delta farmland from DWR’s actions.

	Acres – Planned, Underway, and Completed		
	Converted to habitat or Delta conveyance features	Farming restricted (including lease restrictions)	Total
Dutch Slough	1187	n/a	1187
Lookout Slough	3000	n/a	3000
Yolo Ranch	1700	n/a	1700
Staten Island	n/a	8400	8400
McCormack-Williamson Tract	1400	n/a	1400
Grizzly Slough	400	n/a	400
Sherman Island	2377	11623	14000
Twitchell Island	2000	1000	3000
Delta Conveyance	3438	unknown	3438
Total	15502	21023	36,525

The scale of DWR’s conversions and restrictions on Delta agricultural land demands that mitigation by easement acquisitions at ratios greater than 1:1 should be required.

3.7 Cultural Resources

The DEIR and Appendix 19a assessment of impacts on cultural resources is deficient. Its fundamental shortcoming is its reliance on the DEIR’s identification of cultural resources, and the project’s impacts to them. The DEIS compounds those documents errors with some mistakes of its own.

The DEIS overlooks the Delta’s value as a cultural landscape. Section 3.7.1 1 (Area of effect for Built-environment Resources) and subsequent sections overlook the Delta’s status as a cultural landscape valued by native California Indian tribes and by current Delta residents and visitors. These values are documented in Attachment 2 of this letter. We noted in our comments on the NOI and again in a preliminary reconnaissance survey of those resources that was provided to the Corps in February 2021, that the Delta is a nationally important cultural landscape comprised of layers of historic districts, sites and other cultural assets.

The Delta, including the Sacramento and San Joaquin Rivers, their distributaries, remnant marshes and streamside woodlands, neighboring islands and tracts, including lands bordering the Sacramento River communities, and Highway 160 and other scenic routes are all integral elements of this important cultural landscape. In many ways, the Delta is a collection of potential historic districts of vast scale, linked by its waterways and scenic highways, and strewn with features of significance to native California Indian archaeology, exploration, settlement, maritime history, engineering, agriculture, commerce, conservation, ethnic heritage, invention, government, and transportation. The Delta's cultural landscape also provides context for individual buildings or historic districts there that are listed on the National Register of Historic Sites or eligible for listing.

A key flaw in the DEIS - and the DEIR on which it relies - is its focus solely on built environment resources and archaeological sites, rather than the much larger cultural landscape within which the built resources and archaeological sites are located. This leads to a narrowly constrained in area of impact (AI) that ignores cultural landscape components. Impacts to this surrounding landscape would diminish the integrity of specific sites, districts, or landmarks. For example, the orchards and farms surrounding the Locke National Historic Landmark, while outside the landmark's boundaries, were the worksites where many of Locke's Chinese residents worked, including lands owned by George Locke, the community's proprietor. These orchards and farms provided much of the produce packed by Locke residents in Locke's packing shed.

The DEIR fails in its description of these resources. Properly assessing cultural resources requires historical research, inventory, and documentation of existing conditions, site analysis and evaluation of integrity and significance, according to the National Park Service's *Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*. The DEIR's Appendix 19A reiterates these steps but fails to systematically apply them to the Delta districts and properties potentially eligible for listing in the National Register that the project will affect.

Rather, as section titles and contents of the DEIS' Chapter 3.7 and DEIR's Chapter 19' confirm, the DEIS and DEIR assesses only buildings and structures, rather than the full range of historical landscape resources. Previously completed assessments of cultural landscapes at Bouldin and Staten Island are recognized, but equally thorough descriptions and evaluations of are not provided for other similar features, such as Pearson District and Roberts Island, where assessments are offered of only individual structures, such as levees or an individual pumphouse, with little mention of their role in these tracts' overall landscapes or the tracts'

other character-defining features, such as orchards, vineyards, crops, and farm buildings. No assessment is provided of the spatial organization and cluster arrangements of these features, including the levees and drainage works noted in the DEIR's Appendix 19A. Cultural traditions of the tracts' settlers that influenced these landscapes are ignored. Viewsheds within and from the tracts are not considered.

The text regarding historical context of these resources in the DEIR's Appendix 19A is insufficient for assessing important landscapes affected by the project, as it portrays only a handful of communities (Brentwood, Byron, Stockton, Tracy, and Mountain House), some only lightly affected by the project, while omitting others, including Hood and Courtland, that will be at the center of damaging project impacts. The historical context provided for Delta farmlands is equally incomplete, describing the Delta's diverse agriculture in only four paragraphs about "industrial agriculture" in San Joaquin County from the 1910s to 1950s. Entirely ignored is 19th century agriculture, during which patterns of land tenure, farming systems, labor, and agricultural markets were established. Agricultural development in Sacramento County is entirely overlooked as is cattle ranching which occupies rangelands that the project affects. Appendix 19A's misleading statement that water supplied by the California Aqueduct underlies the region's diverse agriculture (page 31) reveals the shallowness of the report's research, as agricultural landscapes affected by the project are watered from the Delta's channels, not the SWP's exported supplies.

The DEIR acknowledges these other islands and tracts affected by the project could be evaluated as rural cultural landscape districts (Appendix 19A page 15). Some descriptions, such as those of Staten and Bouldin Islands' landscapes, approach the level of identification and assessment warranted. Evaluation of other districts, including Pearson District, Terminous Tract, Roberts Island, Jones Tract, Bacon Island, and Byron Tract, is also necessary. The statement on Appendix 19A's page 16 that "this level of analysis was outside the scope of this project, so these islands were evaluated only for the extent of their built resources only" confirms the incomplete nature of these resources' investigation. A wide variety of materials are available to support this assessment, including the extensive written materials listed in the attachment to these comments, and aerial photographs, even if access to properties is unavailable.

Assessment of these important cultural landscapes seems to have been reduced to several days of hasty windshield observations of some individual levees, siphons, and pump stations. The historical significance of these features cannot be determined without consideration of the

larger water conveyance system, Appendix 19A acknowledges, which has evidently not been done.

Inadequate consultative outreach. The Commission's 2020 EIR NOI Comments advised outreach to local groups and experts ranging from local transportation authorities to historical societies and representatives of local cultural groups. Despite these recommendations, the DEIR's Appendix 19A, for example, lists no local historical organizations, neighborhood groups, or archaeological societies. Local expertise was undocumented, and the Corps would be unable to assess the area's historic resources without this information. DWR's decision to not consult with local historical societies and museums (Appendix 19A, p. 10) is contrary to best practices. In addition, the Appendix did not document Traditional Cultural Properties. Such work is done partly through consultation with community representatives. Landowners, local businesses, local historians/preservationists, and local agencies are all helpful as informants, historians, architects, landscape architects, folklorists, sociologists, or anthropologists.

Appendix 19A asserts on page 10 that sufficient outreach to local groups for this project had been conducted during past projects. This approach is inadequate as well as inaccurate. Because this preferred alignment has not been the object of prior studies such as BDCP's historical resources reports, it is premature to conclude that additional outreach would not yield new results. Moreover, the methods section of the Built Historical Resources Evaluation Report for the BDCP Project mentions no outreach to important historical societies and cultural resource organizations in key areas directly affected by this project, including the Sacramento River Delta Historical Society, the Locke Foundation, the Rio Vista Museum, the Rio Vista's Dutra Museum of Dredging, Stockton's Filipino American National Historical Society, or the Portuguese Historical Society in Sacramento. All these groups could have information useful to analysis of historic and cultural resources affected by this project. Historical organizations that had been contacted several years ago for the BDCP EIR may have gained new understanding or obtained additional records about cultural properties affected by the project, as the San Joaquin Historical society's comment letter on the DEIR points out. New outreach about this project is warranted.

National Register criteria are not applied consistently. National Register criteria are applied inconsistently in these landscapes' evaluation. A useful guide is CalTrans' report *Water Conveyance Systems in California, Historical Context Development and Evaluation Procedures*. As it advises, water conveyance features such as ditches, levees, or the Delta's sloughs can be eligible under the National Register's Criterion A because they are important to an important

pattern of development, such as the development of irrigated farming. This is certainly the case of the islands affected by the project, given their importance in the reclamation of the Delta and the development of California agriculture. In fact, the islands' levees, ditches, and drains were directly associated with these developments and also with the origins of California's system of special districts and California farm labor organizations. They are also eligible under the National Register's Criterion B, because of their association with important persons' lives. Josiah Buckman Greene, a pioneer in Pierson District, was among early settlers responsible for building the Pierson District's first levees. Also important was John Roberts, a San Francisco speculator and the founder of the Tide Land Reclamation Company which at its height owned 250,000 acres in the Delta and Yolo Basin, including much of Pierson District, King Island, Union Island, and his namesake Roberts Island. San Joaquin River Delta islands affected by the project are the site of farm labor organizing by Stockton-based Filipino American activist Larry Itliong, who led the Agricultural Workers Organizing Committee, a precursor of the United Farm Workers Union, which Mr. Itliong co-founded with Cesar Chavez and Delores Huerta. California celebrates Larry Itliong Day on October 25. The levees and drainage features of islands the project will affect are also good examples of California's application 19th century engineering and construction technology to the drainage and improvement of wetlands for agriculture. These practices include the work of thousands of immigrant Chinese laborers and later development of the Stockton dredge, Caterpillar tractor, and LeTourneau earthmovers. Pierson Tract is also the site of the first 1960s demonstrations of machine harvested processing tomatoes, which contributed to California's dominance of the global tomato production. All these features need to be considered in evaluations of properties' eligibility for the National Register.

The DEIR's Appendix 19A and the DPR 523A forms prepared for the project and the BDCP employ a haphazard and overly restrictive approach to evaluating the National Registry eligibility of these island's landscapes. As CalTrans' report advises, a water conveyance system "must possess several, and usually most, of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association." Notably, possessing all seven all seven attributes is not required. All these islands and tracts and their reclamation works retain their original location. Most of their levees and ditches also retain their original designs, with only modest variations to adapt to modern safety standards. Their setting along the Delta's rivers and channels and the islands and tracts and their agricultural crops often remain unchanged. Their earthen materials are also unchanged, except where revetments were added to their exteriors in a process that began in the 1950s. Speculation and presumptions in the DPR 523A forms, such as that for Lower Roberts Island, levee maintenance and flood recovery

activities have damaged these features’ integrity cannot substitute for actual evidence of substantial alteration of these features. Appendix 19A and the DPR 523A forms prepared for the project document no changes to these features that eliminate the relationship between their current appearance and their appearance in the late 19th century and early 20th century. The DEIR’s inadequate evaluation of the Highway 160/River Road/Victory Highway landscape suffers from similar inconsistencies.

Alternatively, the DEIR could have followed the approach of the BDCP EIR, which in its *Built Historical Resources Evaluation Report* identified Grand Island (Reclamation District 3) and Netherlands District (Reclamation District 99) as significant historic districts without more detailed inspection and recommended further research and obtaining access to the properties to establish the integrity of their features (page 87). It is notable that an attribute of Grand Island cited in this conclusion is the island’s avoidance of flooding in the 20th century, a record compatible to Pierson Tract and Roberts Island, which last flooded in 1907 and 1906 respectively.

The historic context of potential National Register properties has been insufficiently researched and hastily evaluated. The limited time devoted to research, field surveys, and local consultation is evident in the unbalanced and incomplete narrative of the DEIR’s Appendix 19A (pages 22-41). Those pages, apparently intended to provide the context for evaluation of historical properties throughout the affected area, are primarily about Contra Costa County and urban Stockton. No information is provided about the context for evaluating districts and properties in Sacramento or Yolo Counties or the rural San Joaquin River Delta. One supposes that either these area’s importance was unrecognized or that insufficient time was provided to complete this research. It is unfortunate that the coronavirus epidemic curtailed the research and consultation needed to properly evaluate historical resources at risk from the project. A proper approach would have been to deploy additional personnel when pandemic protocols allowed or to extend the DEIR’s production schedule, rather than to rely upon a document with the many voids in Appendix 19A (p. 12).

Many more districts and sites warrant evaluation and avoidance or impact mitigation. Because of the errors, many districts and sites potentially eligible for the National Register are inadequately or improperly evaluated. The DEIS should be revised to identify these additional resources, at a minimum, as well as others identified by local agencies and local experts:

1. Sacramento River
2. Sacramento Southern Railroad
8. Roberts Island
9. Jones Tract

- | | |
|------------------------|---------------------------|
| 3. Victory Highway | 10. Bacon Island |
| 4. Pierson District | 11. Union Island |
| 5. The 40-mile Orchard | 12. Byron Tract |
| 6. Hood | 13. Diersson Road ranches |
| 7. Terminous Tract | |

Information about these properties and their historical significance is summarized in the Attachment, Draft Survey of Cultural Resources in the Delta Conveyance Project Area. With proper identification of these sites and districts, the EIS should report that the project will diminish the integrity of 44 historic properties, rather than the 31 reported on the DEIS' page 3.7-7.

Impacts on historical resources resulting from project construction and operation. After the identification of historical resources, including significant landscapes, is revised following consultation with local experts, then the Chapter 19 assessment of impacts should be revised accordingly. This should include consideration of impacts of noise, glare, and visual degradation on these settings of the project.

Laws Protecting Cultural Resources Are Not Fully Reflected in Section 3.7. Table 416 should be revised to more fully reflect laws protecting the Locke National Historic Landmark, including the National Historic Preservation Act's Section 110(f). The Locke Foundation, in its comments on the draft EIR, expressed concern that the project will damage the Locke National Landmark as disrupted traffic leads to disuse of the town's buildings occupied by visitor-serving businesses.

Chapter 3.8: Environmental Justice

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 2-3 paragraphs maximum.

Chapter 3.9: Flood Protection

Drainage. The Commission's response to the 2020 Notice of Intent (NOI) recommended that construction activities could have an impact on levees and the drainage systems in the Delta. Drainage is critical to consider, as the foundations of the existing levees can become weak without adequate drainage. However, DEIS' Section 3.9 focuses primarily on changes in water surface elevation (WSE) and increases to the amount or rate of surface runoff that would result

in localized flooding. This approach is inadequate to establish full significance of impact to levees, as other issues (such as drainage) could be compromised by the project's construction and permanent facilities. For example, there could be an inability to siphon or remove flood waters at the toe of a levee because of an increased WSE from the proposed project.

Indemnification of Reclamation Districts and Other Levee Management Agencies. The DEIS notes the importance of levee maintenance and monitoring for quickly identifying vulnerabilities in or damage to levees during project construction. However, the DEIS does not document any commitment by DWR and its contractors to defend, indemnify, and hold harmless affected Reclamation Districts (RDs) against all claims, liabilities, charges, losses, expenses, and costs (including their attorneys' fees) that may arise from the project. This statement should be made part of the project description and the analysis in this chapter to confirm that state funding supports this work, rather than creating a new burden on the local RDs. The State insists on these indemnifications when it permits encroachments on its State Plan of Flood Control levees. Local RDs deserve no less.

Reusable Tunnel Material (RTM). The Commission has recommended that excavated tunnel material should be handled and stored to segregate material of different quality so it can more easily be reused. Uses for which tunnel material is suitable, as should the agencies and others prepared to reuse it, should be identified. Costs of hauling tunnel material to reuse sites should be borne by the project, rather than by those who may reuse it. We were unable to find this in the Project Description, nor as a mitigation measure. Instead, permanent RTM stockpiles are proposed to be left in unsightly stockpiles 15 feet high occupying over two hundred acres at the Twin Cities Complex and nearly two hundred acres at the Lower Roberts Island Complex. Experience with excavated spoil in rural areas elsewhere in the Central Valley, such as material excavated at the Tisdale Bypass and Fremont Weir, demonstrates that local RDs are unable to bear the costs of reusing excavated material, which instead sits in stockpiles for decades.

The cost of fill materials has sky-rocketed in recent years. Increasingly, bids received from RDs solicitations are consistently higher than the construction estimates. The Commission has heard directly that this impacts how much of a project can be completed and still stay on budget. With heavy competition for fill materials for the many haul roads needed by the project (or the alternatives) this will become a critical issue. All suitable fill materials should be sorted and available for use by local area for the required improvement and continual maintenance of levees.

Equitable Funding of Improved Levee Operations and Maintenance. As highlighted in its 2012 Economic Sustainability Plan, the Commission supports the improvement and maintenance of all Delta levees to at least the federal PL 84-99 standard. Given the difficulties with PL 84-99 inspections, the Commission would now endorse the (similar) DWR Bulletin 192- 82 standard instead of PL 84-99. It is notable that two islands’ levees would be brought to PL 84-99 standards to protect the launch sites and personnel during construction of the tunnels. While this improves flood protection over existing conditions, maintenance of a PL 84-99 levee to the US Army Corps of Engineers’ exacting inspection standards would be the local RD’s and its landowners’ responsibility and is known to be very costly. We would expect the Final EIS to address the following:

1. If the project proceeds, there needs to be a broad consensus-building process with local agency officials and on-island property owners on how to implement a new fee structure that better reflects the assets protected by these improved levees. This EIS needs to evaluate the value and interests of “tunnel beneficiaries” including the benefits of protection to SWP and its customers and estimate the value of their assets and the benefits they receive from the improved levees. Maintenance fees should not be based simply on a per-acre basis. In addition, the limited subventions funding for Delta levees should not be used for the two islands which will be brought to PL 84-99 standards.
2. In the Commission’s response to the 2020 NOI, the Commission recommended DWR and the Delta Conveyance and Design Authority (DCA) should pay local RDs an inspection fee to cover inspection costs, including staff and/or consultant time and expenses, for any inspections before, during, post-construction, and regularly thereafter. This would include the time expected for new PL 84-99 standard inspections. This is another condition that the State imposes upon encroachments on its SPFC levees, and should be extended to this project’s encroachment on local RDs’ levees. However, DEIS’ Chapter 3.9 fails to account for the additional time or extra activities associated with inspections, nor are there mitigation measure(s) mentioning cost reimbursement.

Twin Cities Road Complex flooding. The DEIS properly addresses the risk that the ring levee and remnant RTM pile at the Twin Cities Road complex may impede drainage and risk deepening flooding and extending its duration at Glanville Tract (pages 3.9-27). The January 2023 flooding on the Cosumnes River highlights the risks to life, property, and transportation potentially associated with any elevation of flood elevations or impairment of drainage in this area. The DEIS seems to suggest flooding will be caused by the project, including overtopping

local roads and the railroad that would serve the complex. The DEIS suggests this flooding is acceptable because it affects only 10 acres of grazing land and would last only 2-3 days (see lines 18-34 on p. 3.9-27). This loss may be mitigated if the long-delayed McCormack-Williamson Project is at last completed, the DEIS claims.

Assessment of this impact is incomplete. Flooding would recur for the full decade when the project is under construction. No assessment is provided of the aerial extent of flooding after the ring levee is removed. Does it remain 10 acres or does it diminish, and if so, how much? The flooding of this grazing land and its impact to agricultural operations should be reflected in Section 3.2.1 Agricultural Resources. Compensation to the landowner and mitigation for lost grazing opportunities should be proposed. Impacts on railroad operations and traffic on Franklin Boulevard should be described. If the McCormack-Williamson Tract is to provide mitigation for this flooding, DWR should address compliance with Water Code section 85089(a).

Chapter 10: Geology and Seismicity

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 2 paragraphs maximum.

Chapter 14: Land Use

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 2-3 paragraphs maximum.

The Land Use analysis makes incorrect assumptions about the significance of impacts in a rural setting. Key elements of the Commission’s and counties’ land use approach are: 1) to preserve the rural lands for agriculture and agricultural-related businesses, 2) allow for rural, visitor-serving venues such as wineries and event facilities, marinas, and resorts in optimal locations for fishing, pleasure travel and water sports to support recreation, and 3) protect and enhance the legacy communities as retail and residential centers to support agriculture and tourism. The proposed tunnel is incompatible with this fundamental strategy, both during the 13-year construction period and during project operation. Not all Delta communities will be affected in the same way by the project, or perhaps with the same intensity, but all will be affected.

For example, construction of intake facilities on the Sacramento River would result in adverse impacts on the communities along State Route 160 including Hood, Clarksburg, and Courtland. Hood would be permanently adversely affected by construction of the intakes. In San Joaquin County, launch shafts, tunnel material handling, and maintenance and retrieval shafts will convert farmland and disrupt marinas and recreational boating. Contra Costa county communities such as Discovery Bay would suffer major recreation impacts. In Solano County, the economic and cultural impact of required project mitigations from agricultural lands being converted to restoration projects are a major concern, as are water quality impacts on municipal wells for Rio Vista and agricultural users in the Cache Slough region.

Construction and operation of the Twin Cities and Lower Roberts Island Complexes and the two concrete batch plants would also alter and adversely affect the current and designated land uses, as well as neighboring areas and the Stone Lakes National Wildlife Refuge. Much of the road construction and widening, bridge modifications and interchange improvements occur within the primary zone, in direct conflict with the most fundamental principles of the land use approach of the Delta Protection Act and the Commission’s Land Use and Resource Management Plan. After project construction is completed, pressure will grow for non-farm development at areas adjoining sites that cannot be returned to agriculture.

The proposed project will result in significant changes in land use, mainly conversion of land at the following principal facility locations:

1. Tunnel intakes.
2. Twin Cities and Lower Roberts Island Double Launch Shaft Complexes and Lambert Road Concrete Batch Plants
3. Maintenance shafts
4. New or improved access roads

Construction of the tunnel intakes will also create significant noise impacts incompatible with the commercial, residential, and community park uses of Hood.

The Land Use analysis incorrectly dismisses the project’s potential to divide communities. The DEIR cannot help but acknowledge that construction of the conveyance project facilities will permanently convert land uses from residential, agricultural, commercial, recreational open space and other uses. However, it dismissively concludes that the project will not divide communities simply because, for example, “residential structures that would be removed are in

areas of scattered residences in agricultural areas.” This demonstrates a lack of understanding about what rural agricultural communities are, and a lack of recognition of what the Delta as a Place is. As noted in our comments on Chapters 18 and 19, the Delta itself is a community, a collection of existing and historical communities linked by its waterways and scenic highways, and united by both common and unique features of significance. In a rural landscape, land use changes on the scale of the proposed project are more noticeable and more significant because they are not lost in surrounding urbanization, but instead stand out starkly on the landscape.

Chapter 15: Noise

Thresholds of significance. The thresholds of significance for construction noise are inconsistent with established local and national standards and underestimate the harm of construction related noise. They should be revised.

The proposed thresholds are less protective than the standards of affected local governments’ general plans and ordinances. For example, San Joaquin and Sacramento counties’ noise ordinance limits noise from stationary sources to 50 (Leq, dB) in daytime and 45 (Leq dB) at night, rather than the 60 dbA on an hourly Leq during daytime and 50 (Lew dBA) at night proposed on page 3.15-3. The counties’ standards also omit the additional criteria proposed on page 3.15-3 that noise must also increase by 5 dB relative to existing daytime noise to exceed the ordinance’s standards. County’s general plan limits noise to 50 dBA L50 in daytime and 45 dBA L50 at night. Local government ordinances and general plans reflect local land use, residents’ expectations, and other local conditions. Noise that exceeds these levels can disrupt existing land uses and residents’ activities. The DEIS’ thresholds of significance should be revised in coordination with Delta local governments.

Where local standards are unavailable, or where there are special uses, such as parks, nature areas, recreation sites, schools, libraries, churches, or other especially sensitive uses, these federal guidelines should be considered. Increased noise that exceeds any of these standards should be considered significant.

Ldn < 55 dB	Outdoor activity interference and annoyance
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Leq (24) < 55 dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
Ldn < 55 dB	Outdoor areas where people spend limited amounts of time, such as schoolyards, playgrounds, etc. Indoor activity interference and annoyance
Leq(24) < 45 dB	Indoor residential areas. Other indoor areas with human activities such as schools, etc.
Leq (24) ≤ 45 dB	Other outdoor areas with human activities such as schools

Source: U.S. EPA, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Section 4, Identified Levels of Environmental Noise In Defined Areas. March 1974. Leq(24) = the sound energy averaged over a 24-hour period. Ldn = the Leq with a 10 dB nighttime penalty

Noise consistent with the DEIR’s thresholds would impair community life in affected Delta communities and recreation sites. Noise at the DEIR’s thresholds could result in noise twice as loud as current ambient levels.

Instead, thresholds of significance used to assess noise impacts should reflect the Delta’s existing conditions and the land use in areas where noise effects would occur. One threshold could be noise that exceeds the background sound level by at least five (5) dBA during daytime or nighttime hours, as proposed. Noise standards of applicable local government general plans and ordinances should provide another set of thresholds, as these reflect local land use, residents’ expectations, and other local conditions. Where local standards are unavailable, or where there are special uses, such as parks, nature areas, recreation sites, schools, libraries, churches, or other especially sensitive uses, the US EPA guidelines should be considered. Increased noise from the project that exceeds any of the local or US EPA standards should be considered significant.

Ambient noise. Relying on the measurements of ambient noise in San Joaquin and Alameda counties reported in the DEIR’s Tables 24-3 (page 24-14) and 24-4 (page 24-15) is insufficient. None measure ambient noise along the preferred route or near the footprint of the preferred project alternative, such as near the Lower Roberts Island Double Launch/Reception shaft, the

proposed haul route on Lower Roberts Island, or the Bethany complex. This additional information is essential to determine whether project-related noise exceeds the DEIS's proposed threshold of significance – an increase in noise exceeding 5 dB relative to existing noise levels. Additional monitoring at these additional sites should be conducted and reported in the Final EIR.

Noise impacts of the project. Impacts reported in Section 3.15.2.2 should be revised to reflect the standards of significance suggested above. Judged against the EPA guidelines cited above, significant impacts would be much greater. Areas that will suffer noise in excess of applicable thresholds should be mapped. In addition to reporting and mapping affected residences, noise impacts to Hood Community Park should be noted, as it is used by many local families, as should impacts to noise sensitive businesses, such as the Hood Station café and the Willow Ballroom wedding venue. The narrative should also acknowledge that excessive noise will also impact recreation uses at the Stone Lakes National Wildlife Refuge, Cosumnes River Preserve, the Rivers End and Lazy M marinas, and the Sacramento and San Joaquin Rivers, impairing recreation there.

Work windows for impact pile driving should minimize excessive noise on weekends and afterschool hours. Nearby residents and Hood's children deserve as careful consideration as the fish for which wildlife and fish agencies expect to limit work periods.

Verify mitigation measures. It is unclear whether the insulation program proposed will adequately reduce noise levels. Outdoor noise levels will be unaffected by the insulation program. Rather, residents of Hood and other affected areas will find construction-related noise a near-constant annoyance over countless years, interfering with routine outdoor activities. Relations between family members and neighbors visiting in the close-knit community's yards will be disrupted if residents relocate.

Affected residents, business operators, and homeowners should be consulted about the acceptability of the proposed sound insulation program. The mitigation program should be expanded to include noise-sensitive businesses and institutional uses, such as Hood's post office. Special care should be made to consult with renters, who comprise most of Hood's residents. Under California law, tenants are entitled to the quiet enjoyment of their property, which landlords may not impair. For some residents, the sound insulation program may be just one more disruption added to other impacts of the project's construction. Even if the insulation program is widely accepted, it would still leave residents cooped up within their homes for

several years to avoid damaging noise – an unwelcome echo of the past few years’ COVID experience.

It is unclear why wall insulation is excluded from the program, which offers only improved window and doors. We note that Los Angeles residents were offered wall insulation under the LAX Master Plan. Delta residents who would want wall insulation should have this option readily available. To minimize noise disruption of residents and businesses, criteria for participation should be generous. LAX’s program was delivered in partnership with well-recognized community organizations, which facilitated its acceptance. DWR should seek out similar opportunities.

Any sound barriers should be removed at the end of construction unless residents want them retained. Local agencies, community members, and affected residents and businesses should be involved in developing noise mitigation plans. At a minimum, these measures must comply with the Delta Plan’s Mitigation, Monitoring and Reporting Program Measures 15 1-3.

Chapter 16: Recreation

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 2-3 paragraphs maximum.

Limiting surveys of recreational locations and access points to two days is inadequate to provide a proper baseline. During meetings in 2020 and 2021, Commission staff repeatedly encouraged DWR’s Delta Conveyance Office and consultants to conduct surveys at key recreation locations such as marinas and boat ramps. Specific simple, non-contact observational survey techniques used on a multi-state Natural Resource Damage Assessment were recommended to allow data to be gathered safely despite the pandemic conditions. Contact information for the survey designer was provided. However, despite ample time to conduct almost a full year of surveys, only two days field reconnaissance of a handful of project sites were completed, in February 2021. (DEIR, pp. 16A.2-6-20.) Limiting surveys of chosen recreational locations and access points to two days is inadequate to provide a proper baseline. As with cultural resource surveys, this brief effort during winter does not accurately reflect activity levels and types at recreational access locations. Recreational activities vary seasonally and even daily based on weather conditions and other considerations. The known recreational locations that would be impacted by the project should have been properly evaluated over a longer period.

The recreation economy in the Delta is second only to the agricultural economy, yet the analysis failed to consult with the extensive pool of experts regarding recreational uses in the Delta. A handful of parks and recreation staff provided input, however none of the data that the Commission developed from interviews with focus groups for the recreation update to the Economic Sustainability Plan in 2020 appears to have been used in the DEIR's analysis of impacts. The minimal effort to characterize the recreation baseline was inadequate to properly analyze the project's environmental impacts.

Chapter 17: Socioeconomics

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 2-3 paragraphs maximum.

Chapter 19: Transportation

Section completion pending, in consultation with Commission ad hoc committee. Additional text approximately 2 paragraphs maximum.

According to the Office of Planning and Research's (OPR) Technical Advisory on Evaluating Transportation Impacts, a proposed project exceeding a level of 15 percent below existing regional Vehicle Miles Travelled (VMT) per employee may indicate a significant transportation impact. The DEIS should account for the fact local jurisdictions must meet the 15 percent reduction as the significance threshold for VMT and the project impacts must not add to the burden on local jurisdictions meeting state requirements.

While the proposed project includes improvements to various roads and bridges as well as new transportation facilities, the cost and responsibility for on-going maintenance and operation of these new facilities should be assessed in the DEIS.