

Appendix K. Comment Letters and Responses on the Draft Environmental Impact Statement/ Environmental Impact Report

- **United States Department of the Interior, Fish and Wildlife Service (USFWS)**
- **United States Environmental Protection Agency (USEPA)**
- **United States Department of the Interior (USDO)**
- **California Department of Fish and Wildlife (CDFW)**
- **Lower Sacramento Delta North Region (LSDN)**
- **County of Yolo (YOLO)**
- **City of West Sacramento (WS)**
- **MBK Engineers (MBK)**
- **Conaway Preservation Group (CPG)**

USFWS U.S. Fish and Wildlife Service

Comment USFWS-1:

Subject: Comments on Draft Environmental Impact Statement/Environmental Impact Report for the Lower Elkhorn Basin Levee Setback Project (Corps File Number SPK-2016-00457), Yolo County, California

Dear Mr. Simmons:

The Sacramento Fish and Wildlife Office has reviewed the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) for the Lower Elkhorn Basin Levee Setback Project, Yolo County, California. The following comments are provided for your use and information to assist your efforts in complying with the National Environmental Policy Act.

The U.S. Fish and Wildlife Service’s (Service) mission is to protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. Therefore, our comments are focused on the DEIS/EIR analysis of fish, wildlife, plants, and their habitats. In general, the Service is supportive of setback levees constructed along mainstem rivers. Under the right elevations setback levees along a river in the flood control system can provide more frequently inundated floodplain that is directly connected to the river which provides direct nutrient input into the river when the floodplain is activated. It also provides higher quality terrestrial habitat as it is always adjacent to the water which can provide greater habitat complexity for species dependent on riparian habitats. While we understand the multiple objectives for this project, setting back the levee of the Yolo Bypass does not provide similar benefits as setting back a levee along the Sacramento River given the lesser frequency that the Yolo Bypass inundates. Ideally, floodplain activation should occur every year. According to the DEIS/EIR the weir to the Yolo Bypass only overtops 72 percent of the time.

The Service encourages the Department of Water Resources (DWR) to pursue future setback levee projects within the flood control system along the mainstem rivers.

USFWS-1

Response USFWS-1:

This comment does not raise any issues related to the analysis contained in the EIS/EIR. No response is required.

Comment USFWS-2:

SPECIFIC COMMENTS

Page 3-27 - We would like to see the specific acreages affected by the various alternatives. Table 3-3 has a range of acreages affected with the various alternatives; however, in Chapter 4 the exact acreages are provided for each habitat type. Please update this table with the numbers from Chapter 4. Additionally it is difficult to tell if these are acres that are adversely affected or created. It would be helpful if that could be split out in this table, a column for habitat lost and a column for habitat created.

USFWS-2

Response USFWS-2:

This comment refers to Table 3-3 (which provides ranges of how much habitat of which types would be constructed as part of each of the action alternatives) and requests additional detailed impact information as provided in Chapter 4. In Section 4.5, “Biological Resources – Vegetation and Wildlife,” there are several tables which present acreages of impact to various habitat types by alternative. These tables

focus on different information (habitat to be created in Table 3-3 vs. potential habitat impacts in Section 4.5). No change to the EIS/EIR is proposed in response to this comment. See also the response to Comment CDFW-23 for a discussion of mitigation and restoration details.

Comment USFWS-3:

Page 4.4-4 - The second paragraph makes it sound as though the Yolo Bypass is actively dewatered for agricultural production. However, the Yolo Bypass naturally drains as stated elsewhere in the document from north to south. There are some water years where a late inundation of the Yolo Bypass can impact agricultural production and there is no way to remove the water to prevent that.

USFWS-3

Response USFWS-3:

The text on page 4.4-4 has been changed in response to this comment:

However, because the Yolo Bypass floodplain is seasonally ~~dewatered~~ dry and used for agricultural production during late spring through autumn, introduced fish species can only establish year-round dominance in the few areas of perennial aquatic habitat (Sommer et al. 2003).

Comment USFWS-4:

Page 4.4-5 - Table 4.4-2 describes delta smelt as occurring typically downstream of Isleton. They have also been recorded upstream of Isleton all the way to Verona.

USFWS-4

Response USFWS-4:

Table 4.4-2 indicates delta smelt typically occur downstream of Isleton. This comment observes that the species has been recorded farther upstream. Because the table describes only a typical distribution, not the full range of recorded occurrences, the following edits have been made to the last paragraph on page 4.4-7 in response to this comment and Comment USFWS-5 to disclose the range of recorded occurrences:

Delta smelt (*Hypomesus transpacificus*) is Federally listed as Threatened and State-listed as endangered. Designated critical habitat includes the southern Yolo Bypass, up to approximately 1 mile south of the Sacramento Bypass. Delta smelt are endemic to the Sacramento-San Joaquin estuary and are found seasonally in Suisun Bay and Suisun Marsh (Moyle 2002). Distribution varies with river outflow, extending from the Lower Sacramento River into Suisun Bay during high outflow and concentrating in the upper Delta and Lower Sacramento River during low outflow. Although delta smelt have been recorded in the Sacramento River as far upstream as Verona, most of the Yolo Bypass is upstream of the typical delta smelt distribution, which generally remains downstream of Isleton, but Nevertheless, the species is known to occur year-round in the Cache Slough complex at the lower end of the Bypass and could occasionally range as far upstream as the project site.

Comment USFWS-5:

Page 4.4-8 - Depending on what you are considering the Yolo Bypass, delta smelt are known to occur year round in the Cache Slough Complex which includes portions of the lower Yolo Bypass near Liberty Island.

USFWS-5

Response USFWS-5:

The comment indicates delta smelt are known to occur year-round in the Cache Slough Complex, which includes portions of the lower Yolo Bypass near Liberty Island. The response to Comment USFWS-4 includes text edits made to incorporate this additional information:

Comment USFWS-6:

Page 4.4-1 - Bank Protection – We recommend you consider looking at other alternatives to armoring the remnant levees and Sacramento Bypass levees with rock. Have you considered using biotechnical measures instead? What is the cause of erosion in these areas? It seems that water in the bypass is slow moving with the likeliest cause being wind wave erosion. Would vegetation be an appropriate substitute?

USFWS-6

Response USFWS-6:

Hydraulic and engineering analyses have determined that rock slope protection is not required on the remnant levees, and articulated concrete blocks are now proposed on the main portion of the Sacramento Bypass levee instead of rock slope protection. Hydraulic analysis has shown that concrete lining is required for a portion of the Sacramento Bypass Levee due to high velocities directly downstream of the Sacramento Weir. Erosion Protection is discussed in Section 3.4.5 in Chapter 3, “Alternatives,” including a identification of wave action and high flow velocities as causes of erosion.

Comment USFWS-7:

Page 4.4-21 - Much of the effects analysis uses qualifying language as opposed to quantifying language. For example shaded riverine aquatic habitat will have very little removed compared to existing shaded riverine aquatic habitat. How much existing shaded riverine habitat is there in the project area? Additionally, in order to evaluate the effects of the alternatives it would be helpful to know how much riparian habitat would be planted with each alternative.

USFWS-7

Response USFWS-7:

Table 4.5.1 provides the acreages of riparian and riparian scrub habitat that currently exist in the project study area. Table 3-3 provides a range for the proposed acreage of riparian habitat that could be established under each alternative. DWR has not yet finalized the design for future habitat that will be established as part of the project; details of the habitat design will reflect USACE’s consultation with USFWS under Section 7 of the Endangered Species Act.

Comment USFWS-8:

Page 4.5-12 - What protocols did you use for the rare plant surveys? The document says that surveys for woolly rose-mallow were going to be done in June 2017. Did those surveys get accomplished? Why were the results not included in the DEIS/EIR?

USFWS-8

Response USFWS-8:

A reconnaissance survey was conducted on September 21, 2017. No rare plants, including woolly rose-mallow, were identified in the project footprint. The results have been added to the Final EIS/EIR in the third paragraph on page 4.5-12, as follows:

Habitat suitability and CNDDDB occurrence records indicate this species could potentially occur in the study area. Special-status plant reconnaissance surveys were ~~are planned to be~~ conducted during the blooming period of woolly rose-mallow in ~~June~~ September 2017, and no woolly rose-mallow were identified in the project footprint.

Comment USFWS-9:

Page 4.5-37 - The mitigation measure for pesticide use around elderberry shrubs states two different distances. One limits pesticide use within 100 feet of a shrub and the other says 20 feet. We recommend the most protective of no pesticide use within 100 feet of an elderberry shrub. Additionally, when considering transplanting elderberry shrubs within the project area keep in mind that these shrubs may be subject to increased inundation and this could be a long-term adverse effect to the valley elderberry longhorn beetle by creating habitat that would be flooded at a certain frequency.

USFWS-9

Response USFWS-9:

To maintain consistency with DWR's Environmental Permitting for Operations and Management (EPOM), this measure has been amended as:

“Prohibit Use of Pesticides or Chemicals within Established Buffers around Elderberry Shrubs. No insecticides, herbicides, or other chemicals that might harm the beetle or its host plant will be used by DWR within established buffers (20 feet) around elderberry shrubs.”

Comment USFWS-10:

Page 4.5-39 - We would like to see the Corps and DWR include an analysis of the effects of widening the floodplain and the subsequent inundation of lands that are not currently inundated would have on giant garter snakes in the project area. Additionally, the alternative descriptions did not provide enough detail to understand any benefits that may be derived to the giant garter snake through the enhancement of habitat along the Tule Canal. It would be helpful if the DEIS/EIR could explain how this would provide additional habitat and how it will affect connectivity and movement corridors in the Yolo Bypass for giant garter snakes. Additionally, how would the planting of woody vegetation affect movement and habitat preferences for the giant garter snake along the Tule Canal, given that giant garter snakes seem to avoid riparian areas because they lack basking areas.

USFWS-10

Response USFWS-10:

Please refer to the Response to Comment USFWS-7 regarding habitat enhancements associated with the project and Section 7 Consultation. Woody vegetation would be planted along the Tule Canal where riparian habitat currently exists along the canal. Text highlighting the impacts and benefits of the expanded floodplain have been added to pages 4.5-41:

Beneficial impacts to giant garter snake, which could result from implementing the ecosystem project elements, include enhancing habitat quality for the snake along the Tule Canal – which is the primary movement corridor for snake in the study area. Sections of the Yolo Bypass East Levee, which are currently maintained as grassland, would not be degraded but retained, and nonnative invasive species would be removed and perennial native grasslands would be established on the upland areas. A small amount of riparian habitat exists along the waterside toe of the levee; planting of additional riparian areas would occur. These upland areas would no longer be maintained for flood control purposes, although O&M activities along the remnant levee would be conducted to ensure flood conveyance.

The expanded floodplain – which is currently upland crops – would remain in agricultural use, and would be more likely to be cultivated in rice due to the post-project elevations and frequency of inundation. This could expand suitable habitat for the giant garter snake, particularly during its active season. DWR could preserve some of these rice fields, which are known to provide suitable foraging habitat for giant garter snake, through easements, thereby supporting expanded opportunities for foraging and rearing habitat for this species. During the snake’s inactive season, the remnant levee – which is approximately 25 feet high – would be above the average inundation depth (average depth estimated at 3.7 feet) (DWR 2017b).

USEPA U.S. Environmental Protection Agency

Comment USEPA-1:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The DEIS/EIR evaluates the potential impacts of implementing the Lower Elkhorn Basin Levee Setback Project for the purposes of expanding the flood capacities of the Yolo and Sacramento Bypasses - both critical flood risk reduction elements for urban and agricultural areas in the lower Sacramento River watershed. This is an important project that would increase resiliency to climate change effects in the Basin.

While EPA supports this effort, we have concerns regarding significant construction noise impacts to two residences that would be rendered directly adjacent to the levee as a result of the project. The noise levels predicted for those residences, which are located within 100-200 feet of the proposed construction, are high enough to warrant evaluation of the potential to cause hearing loss. We recommend that this impact be discussed in the Final EIS/EIR and that the lead agencies identify additional means of reducing this exposure, including, if feasible, providing support for the residents to relocate from the site if they so choose, either permanently via a buyout offer, or temporarily during periods of high construction noise. Because of this concern, we have rated the action alternatives as *Environmental Concerns, Insufficient Information (EC-2)* (see enclosed "Summary of Rating Definitions"). The enclosed Detailed Comments elaborate on this concern and provide suggestions to disclose and address other environmental impacts.

EPA appreciates the opportunity to review this DEIS/EIR. Please inform us when the FEIS/EIR is released for public review. If you have any questions, please contact me at (415) 972-3521, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

USEPA-1

cont.
USEPA -1

Response USEPA-1:

USACE and DWR acknowledge receipt of this comment and will provide notice of the FEIS/FEIR. See response to Comment USEPA-2 for a specific response regarding noise impacts.

Comment USEPA-2:

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/REPORT FOR THE ELKHORN BASIN LEVEE SETBACK PROJECT, YOLO COUNTY, CALIFORNIA, JULY 3, 2018

Construction noise impacts to residents

Construction phase noise is predicted to be significant for the occupants of two residences identified in the DEIS/EIR, as “construction crews and equipment would be located immediately adjacent to these residences” (p. 5-38). The DEIS/EIR states that, for these residences within 100 to 200 feet of the construction areas, noise levels may be as high as 86 decibels (A-weighted equivalent 1-hour sound level) during periods when construction is adjacent. According to the DEIS/EIR, this represents a potential increase of approximately 10 to 20 decibels (A-weighted Day Night Average) over likely existing sound levels under all action alternatives for most residences in the construction area, and potentially even higher noise levels at the two residences identified by address. It states that this amount of sound level increase at the project site “would be perceived by most people as a doubling to quadrupling of noise. These sound level increases would be expected to be highly annoying to local residents” (p. 4.17-17). Please note that these levels also may present a risk of hearing loss. EPA established 75 decibels for an 8-hour exposure as the average noise level standard requisite to protect 96% of the population from a greater than 5 decibel permanent threshold shift (decrease in the ear’s sensitivity or acuity to perceive sound)¹.

USEPA-2

Recommendations: In the Final EIS, disclose the potential for hearing loss for the residents within 200 feet of construction, particularly the occupants of the two residences identified in the document that would be rendered adjacent to the project levee construction. Identify additional mitigation that could reduce noise impacts. Consider whether a buyout option for these one or two residences, similar to that which the residences within the project levee setback alignment would receive, would be appropriate and, if so, identify potential funding sources. At minimum, consider offering the residents of these two affected properties temporary relocation during periods of high construction noise impacts. We note that the DEIS/EIR includes such mitigation for potential impacts of nighttime lighting on these two residences (p. 4.2-26), and noise impacts have the potential to cause as much, if not greater, distress and adverse health impacts.

Response USEPA-2:

DWR and USACE acknowledge the concern identified by the commenter, and will make text changes to Mitigation Measure NOI-1 as proposed by the commenter. The text of the EIS/EIR already identifies the potential for hearing loss with $L_{eq(24)}$ of 70 dB or higher, as identified by the commenter.

The following paragraph has been added to Mitigation Measure NOI-1 on page 4.17-15 in response to this comment:

DWR will offer to temporarily relocate the residents at 19946 County Road 124 and 21788 County Road 124 to a hotel during the period when construction noise would occur within 1,000 feet of the residence(s). The hotel will not be located more than 10 miles from the residences. Reimbursement of hotel accommodations will be limited to reasonable expenses and will be limited to the duration of active construction within 1,000 feet of the specified residences.

Comment USEPA-3:

Operations-phase impacts not evaluated

The project would locate new levees closer to existing residences, thereby bringing air pollutant emissions, as well the potential for exposure to other hazards from operations and maintenance, closer to those residences. The DEIS/EIR discloses that at least one residence will be surrounded on three sides by new levees². Potential exposures from operation and maintenance (O&M) activities that would be brought closer to this and, possibly, another residence appear to include those from application of herbicides and rodenticides, increased dust from erosion repair, emissions from maintenance vehicles and equipment, and emissions from controlled burning (Table 3-5). The DEIS/EIR does not evaluate operational phase impacts to air quality, stating that O&M activities are not discussed further because they would occur under existing conditions and be similar with the project (p. 4.3-10). The closer proximity of those activities to existing residences under the proposed project does not appear to have been taken into account in that determination.

USEPA-3
↓

Recommendation: In the Final EIS/R, disclose the air quality and other impacts -- including any potential exposure to herbicides or rodenticides -- of levee O&M activities on residences to which the new levee would be adjacent as a result of the project. In consultation with the residents who would be most affected, identify measures that could mitigate those impacts, such as providing advance notice of O&M activities to affected residents, requiring the use of low- or zero-emission vehicles and mechanical equipment, employing non-chemical means of managing weeds and rodents, offering temporary relocation during impactful activities, or offering buyouts of the most heavily impacted residences, as appropriate.

↑
cont.
USEPA-3

Response USEPA-3:

DWR and USACE acknowledge the concern identified by the commenter. However, residences are located immediately adjacent to similarly operated and maintained levees throughout the Sacramento region, including the American River north and south levees, and the Sacramento River east levee. Furthermore, the levee maintenance activities, including use of patrol vehicles, occasional grading or erosion repair, and occasional application of pesticides and herbicides, do not differ substantially from activities associated with existing agricultural uses adjacent to the residences on the project site; although there might be new emissions from occasional patrolling, erosion repair, grading, or pesticide applications, these new emissions would be offset by the reduction of nearby emissions associated with agricultural activities, including use of equipment and vehicles for field preparation and grading, application of pesticides, irrigation, and harvesting, because agricultural operations would cease on the levee and its associated maintenance areas. No change to the EIS/EIR is proposed in response to this comment.

Comment USEPA-4:

Alternatives to Rodenticides

The DEIS/EIR indicates that rodenticides are used in bait stations for rodent abatement as part of O&M activities (p. 3-38, 3-41). We understand changes to O&M activities are not a focus of the project, however, the project may offer an opportunity to explore additional Integrated Pest Management (IPM) Practices. The Ventura County Watershed Protection District (WPD) recently completed a Raptor Pilot Study with the goal to compare the extent of ground squirrel damage along a levee reach where raptor perches were installed with a similar reach where traditional anticoagulant bait stations were used, to determine whether owls and hawks can be attracted to flood-control facilities and reduce the ground squirrel populations on levees and dams. Raptor perches and nesting facilities were installed along a 6,000 foot reach of Revolon Slough levee in Oxnard, California. The study results, available here: <http://vcportal.ventura.org/BOS/District2/RaptorPilotStudy.pdf>, showed that raptor-friendly habitats reduce ground squirrel burrowing damage by 50 percent when compared to using anticoagulant rodenticides. The study estimated an annual savings of \$7,500 per levee mile by converting from the current rodenticide program to a raptor program.

The study results show promise for flood control facilities with adjacent raptor habitat areas. The Elkhorn Basin Levee Setback DEIS/EIR indicates that Swainson’s hawk (a special status species), red-tailed hawk, northern harrier, white-tailed kite, American kestrel, barn owl, and great horned owl were observed during the field surveys and are known or have potential to nest in or adjacent to the study area (p. 4.5-5). It also states that raptor nesting habitat along these levees is limited to a narrow corridor. Mounting raptor perches and owl boxes on or near the levees could offer additional nesting habitat and provide an opportunity to reduce rodenticide use, which would benefit Swainson’s hawks and other raptors by potentially reducing secondary poisonings.

Recommendation: Review the Ventura County study report and assess the potential to integrate this IPM strategy into the project.

USEPA-4

Response USEPA-4:

As noted by the commenter, changes to existing operations and maintenance (O&M) activities are not proposed as part of the project. Section 3.4.12 in Chapter 3, “Alternatives,” describes the authorities that govern O&M activities on Sacramento River Flood Control Project facilities, with reference to the specific O&M manuals applicable to the facilities affected by the project. The referenced study has been provided to DWR’s Flood Maintenance Office for evaluation. No change to the EIS/EIR is proposed in response to this comment.

Comment USEPA-5:

General Conformity

The discussion regarding the project’s compliance with General Conformity requirements under the Clean Air Act is not clear. Tables 4.3-5a and b estimate emissions of NOx at over 100 tons per year (tpy) for both 2018 and 2019, well over the General Conformity de minimis threshold of 25 tpy, and the text on p. 4.3-22 states “the maximum annual construction emissions for all action alternatives under the long haul and reuse scenarios are projected to exceed the applicable de minimis threshold for NOx”. Yet the DEIR/S also states that “If NOx emissions exceed the general conformity de minimis thresholds, DWR will contribute to Yolo-Solano Air Quality Management District’s (YSAQMD) off-site mitigation fee program as required by the general conformity regulations.” (p. 4.3-17). The DEIS concludes that the air quality effects for General Conformity are considered a significant impact and mitigation measures have been identified to address this impact (p. 4.3-23). One of the mitigation measures identified is the contribution to YSAQMD’s off-site mitigation fee program.

USEPA-5

The discussion is confusing because it appears to conflate mitigation and offsets, which have specific meanings in general conformity. For example, the District’s off-site mitigation fee program does not meet the general conformity definition of mitigation, which, according to 40 CFR 93.152, means any method of reducing emissions of the pollutant or its precursor taken *at the location of the Federal action* and used to reduce the impact of the emissions of that pollutant caused by the action. Contributing to YSAQMD’s off-site mitigation fee program may meet the definition of an emissions offset– which can only be considered in the general conformity determination, not the applicability analysis (i.e. the comparison to the de minimis thresholds). A contribution to this fee program is not specifically required under the rule, as the DEIS/EIR states on p. 4.3-17; however, it is one of several options for demonstrating conformity (40 CFR 93.158). If you would like to discuss general conformity with EPA staff, please contact Tom Kelly at (415) 972-3856.

Recommendation: Clarify in the Final EIR/S that a General Conformity determination is necessary and will occur for the project, and ensure that the discussion does not suggest that contributing to the offsite mitigation fee program removes the obligation to conduct the full general conformity determination. Clarify that contributions to YSAQMD’s off-site mitigation fee program are not specifically required to demonstrate conformity, but are, instead, the project’s preferred option, if this is the case.

While it is not required, EPA encourages federal agencies to include general conformity determinations as part of NEPA documentation, to piggyback on NEPA’s public notice and comment requirements. For more information on the public notice and comment requirements under General Conformity, see 40 CFR 93.156.

cont.
USEPA-5

Response USEPA-5:

USACE finds that the project construction emissions would exceed General Conformity thresholds for nitrogen oxides, or NO_x. However, these emission increases would be offset through off-site emission reduction fees paid to the Yolo-Solano Air Quality Management District (YSAQMD) or the Sacramento Metropolitan Air Quality Management District (SMAQMD), as required by Mitigation Measure AIR-1d. USACE expects to make a Conformity Determination after entering into an agreement or agreements to purchase offsets.

The text describing General Conformity in Impact AIR-3 (first and second full paragraphs on page 4.13-23) has been updated for clarity as follows:

“NO_x is a regionally significant pollutant and local control measures cannot achieve the required reductions for this pollutant. Regardless of which action alternative is selected, USACE will need to make a Conformity Determination, and the project would need to implement ~~mitigation~~ measures, including the purchase of offsets, to reduce NO_x emissions ~~below YSAQMD’s significance threshold for NO_x of 10 tons per year.~~ If NO_x emissions exceed the general conformity *de minimis* thresholds, DWR would contribute to ~~YSAQMD’s off-site mitigation~~ an eligible fee program as required by the General Conformity regulations. DWR would coordinate fee payment so that emissions offsets are committed prior to or concurrent with emissions ~~for YSAQMD thresholds and~~ as required by General Conformity regulations ~~if *de minimis* thresholds are exceeded.~~

~~The analysis methods for demonstrating General Conformity must be coordinated in advance with USACE, the agency responsible for making the General Conformity determination.~~ Therefore, the air quality effects, under all action alternatives for General Conformity, are considered a **significant** impact. Mitigation Measures AIR-1a through AIR-1e, described below, have been identified to address this impact.”

The text describing the significance of Impact AIR-3 after mitigation on page 4.3-24 has been updated for clarity as follows:

“Implementation of Mitigation Measures AIR-1a, AIR-1b, AIR-1c, ~~AIR-1d~~, and AIR-1e would reduce NO_x emissions, but may not reduce emissions to levels below the *de minimis* significance thresholds. If project refinements and revised modeling prior to contracting cannot further reduce emissions, USACE will make a Conformity Determination, and implement Mitigation Measure AIR-1d to offset NO_x emissions in accordance with General Conformity requirements. Therefore, with implementation of these mitigation measures, significant air quality impacts would be reduced to **less than significant.**”

If required, USACE will provide a General Conformity determination for public and agency review prior to initiating construction.

USDO I U.S. Department of the Interior

Comment USDO I-1:

Dear Ms. Toland:

The United States Department of the Interior (DOI) through the U.S. Geological Survey (USGS) has reviewed the *Lower Elkhorn Basin Levee Setback Project Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR)*, dated May 25, 2018. The USGS has a streamgauge near the upstream end of the project and provides related information and comments below.

USGS streamgauge on Yolo Bypass near Woodland, California

The USGS operates streamgages along streams throughout the United States to collect water quantity and quality data for a variety of purposes. Continuous operation of USGS streamgages is essential for our stakeholders. These streamgages have permanent infrastructure and are vulnerable to disruption when nearby construction or dredging occurs in the vicinity of them. The USGS maintains an active streamgauge just upstream of the proposed Elkhorn Basin Levee project area. This streamgauge is cooperatively funded by the California Department of Water Resources.

USDO I-1

USGS Station Number	USGS Station Name	USGS Site Status	State	County
11453000	Yolo Bypass near Woodland California	Current	CA	Yolo

The EIS/EIR should list this streamgauge as a site to be safeguarded and describe a process for coordination with the USGS during design and construction. Please contact the USGS California Water Science Center (WSC) at the contact information provided below, and give sufficient advanced notice before construction near active USGS streamgages. We appreciate your efforts

Response USDOI-1:

DWR and USACE acknowledge the presence of this stream gage and will consult with USGS as described below in the responses to Comments USDOI-2 through USDOI-7.

Comment USDOI-2:

to both preserve streamgages and minimize impacts to the data collected at these sites. Please make pre- and post-project hydraulic modeling and design details available to the USGS for evaluation of impacts to flow measurements and calculations.

USDOI-2

Response USDOI-2:

DWR will distribute pre- and post-project hydraulic modeling and design details to USGS as requested.

Comment USDOI-3:

Concerns for this streamgage and data are as follows:

- it is unclear from the DEIS if streamgage access will be impacted by the planned construction;

USDOI-3

Response USDOI-3:

Project construction would not affect access to the stream gage based on its reported location upstream of the project site.

Comment USDOI-4:

- the stage-discharge rating for this streamgage will be affected during flood flows if the project is completed;

USDOI-4

Response USDOI-4:

DWR concurs with this conclusion. USGS will need to revise stage-discharge curves for this stream gage following construction of the project.

Comment USDOI-5:

- there may be uncertainty in the streamgage stage record during construction due to potential modifications of the hydraulic control; and

USDOI-5

Response USDOI-5:

Construction activities are scheduled to occur during low-flow periods outside the flood season. DWR does not anticipate that the construction activities would affect stream gage recordings.

Comment USDOI-6:

- in addition to stage, this streamgage is instrumented to monitor turbidity and daily sediment. Potential impacts to these data should be evaluated.

USDOI-6

Response USDOI-6:

Potential impacts to geomorphology/sedimentation were evaluated as part of the Section 408 submittal to USACE. Using the hydraulic analysis, DWR concluded that changes in velocities are minor and are not expected to affect sedimentation/turbidity.

Comment USDOI-7:

Thank you for the opportunity to review and comment on the draft EIS/EIR. If you have technical questions regarding these comments, please contact Diana Crilley at the USGS California Water Center at 619-225-6150 or via email at dcrilley@usgs.gov or J. Michael Norris at the USGS at (603) 226-7847 or via email at mnorris@usgs.gov. For all other questions you may contact me at (415) 420-0524 or via email at janet_whitlock@ios.doi.gov.

USDOI-7

Response USDOI-7:

DWR and USACE acknowledge receipt of this information and will consult with USGS as described in the responses to Comments USDOI-2 through USDOI-7.

Sutton, Drew

From: Ford, Gina R.@Wildlife <Gina.Ford@wildlife.ca.gov>
Sent: Tuesday, June 26, 2018 10:31 AM
To: Brehmer, Erin@DWR; DWR Lower Elkhorn Levee Setback Project
Cc: Barker, Kelley@Wildlife; Drongesen, Jeff@Wildlife; Wildlife R2 CEQA
Subject: CDFW CEQA comments for Lower Elkhorn Basin Levee Setback Draft Environmental Impact Report
Attachments: CDFWcomments_LEBLS_26June2018.xlsx

Subject: Lower Elkhorn Basin Levee Setback (Project)
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
SCH# 2016092015

Dear Ms. Brehmer:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Availability for the DEIR from the California Department of Water Resources (DWR) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code (Fish & G. Code).

CDFW ROLE

CDFW is California’s Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on Projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) Based on the Project description, the Project may be subject to CDFW’s lake and streambed alteration (LSA) regulatory authority (Fish & G. Code, § 1600 et seq.). If the implementation of the Project as proposed may result in “take” as defined by Fish and G. Code section 86 of any species listed pursuant to the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), CDFW may authorize the Project’s take by permit. CDFW also administers the Native Plant Protection Act, Natural Community Conservation Act, and other provisions of the Fish and Game Code that afford protection to California’s fish and wildlife resources.

PROJECT DESCRIPTION SUMMARY

The Project is a component of the Phase I Implementation of Yolo Bypass System Improvements pursuant to DWR’s Sacramento Basin-Wide Feasibility Study. The main focus of the Project is reduction of flood risk in the Lower Sacramento River Basin. The Project would set back levees protecting the Lower Elkhorn Basin, including the Sacramento Bypass North Levee and a portion of the Yolo Bypass East Levee. The Project proposes to include compensatory mitigation, which DWR states will be implemented as part of a broader framework of ecosystem Project elements.

The DEIR included the evaluation of four (4) alternatives for the Project, and determined that Alternative 2 was DWR’s preferred alternative. According to Alternative 2, the Project would specifically include a new setback levee in the Yolo

CDFW-1

Bypass along the Lower Elkhorn Basin, aligned north to south, which would be set back approximately 1,500 feet east of the existing alignment. The setback levee would begin just south of I-5 and continue approximately 5.6 miles south, ending at the new Sacramento Bypass Levee. Alternative 2 would create a new setback levee approximately 1,500 feet north of the existing levee, which would be approximately 1.6 miles long. Most of the existing Yolo Bypass Levee and Sacramento Bypass North Levee would be degraded following construction of the setback levees, up to 3,800 linear feet of levee would remain to provide upland habitat for special-status species. How DWR will handle the treatment of the 3,800 linear feet of existing levee, referred to as remnant levee, is not fully defined in the DEIR.

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CDFW-1

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist DWR in adequately identifying and, where appropriate, mitigating the Project’s significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

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Compliance with LSA

Notification to CDFW is required, pursuant to Fish & G. Code §1600 et seq., for proposed Projects that may: substantially divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; use material from a streambed; or result in the disposal or deposition of debris, waste, or other material where it may pass into any river stream, or lake. Based on the DEIR, the Project, as proposed, may require notification for some activities. In issuing a LSA Agreement, CDFW will be acting as a Responsible Agency pursuant to CEQA. Therefore, it is important that the DEIR address all of the potential biological streambed alteration impacts and propose feasible mitigation for those impacts. This will reduce the need for CDFW to require additional mitigation measures for issuance of the LSA Agreement.

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CDFW-2

Compliance with CESA

CDFW issues CESA permits pursuant to Fish & G. Code §2080 et seq., to ensure appropriate mitigation and enhancement measures are provided consistent with conserving state-listed candidate, threatened, or endangered species and their habitats. Based on the DEIR, the Project, as proposed, has the potential to result in “take” of plants or animals listed under CESA. Therefore, CDFW recommends that DWR obtain a CESA permit for the Project. Early consultation is encouraged, as modification to the Project and additional mitigation measures may be required in order to obtain a CESA Permit. Candidate species are protected under CESA to the same extent as species listed as endangered or threatened (Fish & G. Code, § 2085.)

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CDFW-3

A CESA permit requires the impacts of the authorized take of the species are minimized and fully mitigated and adequate funding is ensured to implement the mitigation measures. CDFW may only issue a CESA permit if the CDFW determines that issuance of the permit does not jeopardize the continued existence of the species. CDFW will make this determination based on the best scientific information available, and shall include consideration of the species’ capability to survive and reproduce, including the species known population trends and known threats to the species. Issuance of a CESA permit may take up to 180 days from receipt of an application from the applicant.

Conservation Planning

It is vital the DEIR demonstrate consistency with the Central Valley Flood Protection Plan Conservation Strategy (CVFPPCS), and not preclude the ability to implement future multi-benefit Projects. CDFW would also like to see that the Project is designed in such a way that it achieves the measurable objectives of the CVFPPCS to the maximum extent practicable within DWR’s preferred alternative (Alternative 2). The CVFPPCS, developed by DWR for adoption and integration with the 2017 update of the Central Valley Flood Protection Plan (CVFPP), overlaps the Project area. The CVFPPCS identifies long-term measurable objectives that will be used to guide and inform the planning, funding, and implementation of multi-benefit and strategic advance mitigation projects and the operations and maintenance activities needed to maintain them within the Central Valley Flood System.

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CDFW-4

CDFW recommends ensuring consistency by including how the Project will implement concepts identified in Appendix E (Invasive Plant Management Plan), Appendix G (Targeted Species Plan), Appendix H (Central Valley Chinook Salmon Rearing Habitat Needed to Satisfy the Anadromous Fish Restoration Program Doubling Goal), and Appendix I (Floodplain Restoration Opportunities Analysis) of the CVFPPCS.

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In order to better accomplish this recommendation, CDFW suggests that DWR coordinate with the Central Valley Flood Protection Board (CVFPB) and its Advisory Committee (AC) to request their review of the proposed project and provide advice on how the project could better achieve the goals and objectives both the CVFPB and the CVFSCS. The AC is charged by the CVFPB to provide advice towards implementation of projects within the system that will help the CVFPB achieve the goals and objectives of both the CVFPB and the CVFSCS.

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CDFW-4

CDFW Wildlife Areas

The Project area includes valuable habitat located near CDFW wildlife management areas. To minimize the impact of the Project on the fish and wildlife resources that depend on these lands, the DEIR should: ensure that the Project is consistent with applicable policies, procedures, and goals of the management plans within public-owned areas; analyze how the Project will maintain or enhance habitat values on adjoining non-public lands to ensure riparian corridor ecosystem function (including riparian forest restoration); and ensure that the Project does not conflict with or limit the heritage of outdoor recreation (including hunting) along the levee systems.

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CDFW-5

Additionally, wildlife habitat and associated values are often dynamic. For example, habitat quality, overall vegetation quantity and temporal seasonality can alter ecological significance. Because of this inherent variability, the DEIR should state that coordination with CDFW land managers will occur prior to manipulating (such as mowing, pruning, burning, etc.) habitat on or adjacent to lands owned or managed by CDFW. DWR should consult with the appropriate CDFW Regional Office for appropriate lands manager contacts.

Fisheries Management

The Project may potentially result in the stranding of federal and State listed fish species including Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley steelhead (*Oncorhynchus mykiss*), and southern Distinct Population green sturgeon (*Acipenser medirostris*).

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CDFW-6

CDFW recommends incorporating mitigation measures that include design and construction of fishways to increase fish passage off the floodplain and surveys to identify fish stranding and isolation points. In consultation with CDFW, DWR should integrate ways to reduce or eliminate fish stranding issues where they currently exist and ensure any future proposed actions are designed to avoid stranding or submitting fish to areas with minimal cover that leads to fish being subjected to excessive predation.

ADDITIONAL CDFW COMMENTS

Additional comments from CDFW are included in the attached table.

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CDFW-7

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

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CDFW-8

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

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CDFW-9

CONCLUSION

Pursuant to Public Resources Code §21092 and §21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed Project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670.

CDFW-10

CDFW appreciates the opportunity to comment on the DEIR. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Questions regarding this letter or further coordination should be directed to Gina Ford, Senior Environmental Scientist (Specialist) at 916-358-2094 or gina.ford@wildlife.ca.gov.

Sincerely,
Gina Ford

Attached: CDFW Comment Table (filename: CDFWcomments_LEBLS_26June2018.xlsx)

Gina Ford
Senior Environmental Scientist (Specialist)
California Department of Fish & Wildlife
1701 Nimbus Road – Rancho Cordova, CA 95670

From: DWR Lower Elkhorn Levee Setback Project <LowerElkhorn@water.ca.gov>
Sent: Friday, May 25, 2018 3:19 PM
Subject: Notice of Availability: Lower Elkhorn Basin Levee Setback Project Draft EIS/EIR

Notice of Availability:

Lower Elkhorn Basin Levee Setback Project Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) Released for Public Review by California Department of Water Resources (DWR) and U.S. Army Corps of Engineers, Sacramento District (Corps)

Comment Period May 25, 2018 to July 9, 2018.

PUBLIC MEETING: A public meeting to present information about the project and receive oral or written comments on the Draft EIS/EIR will be held on Thursday, June 7, 2018 from 4 p.m. to 6 p.m. at West Sacramento City Hall, 1110 West Capitol Avenue, West Sacramento, California 95691

PROJECT LOCATION: The project site is located in Yolo County, California, and is bounded by the Sacramento River on the east, the Tule Canal and Yolo Bypass on the west, the Sacramento Bypass on the south, and Interstate 5 (I-5) on the north.

PROJECT DESCRIPTION: DWR proposes to construct levee setbacks to widen portions of the Yolo and Sacramento Bypasses to increase conveyance capacity and reduce flood risk. The proposed project would be part of a series of proposed flood-risk reduction improvements contemplated under DWR’s Central Valley Flood Protection Plan and its related Sacramento River Basin-Wide Feasibility Study. The proposed project would entail the following flood-risk reduction elements: (1) widening the Yolo Bypass by constructing a setback levee approximately 1,500 feet east of the Tule Canal in the Lower Elkhorn Basin (between I-5 and the Sacramento Bypass) , (2) widening the Sacramento Bypass by constructing a setback levee approximately 1,500 feet north of the existing levee, (3) potential degrading of all or portions of existing levees; and (4) implementing ecosystem improvements

SIGNIFICANT EFFECTS: The proposed project would have potentially significant or significant environmental effects related to aesthetics; air quality; biological resources (fisheries and aquatic organisms, vegetation and wildlife, and wetlands and waters); climate change, cultural resources, geology, soils, and paleontological resources; hazards and

hazardous materials; land use and planning, and agricultural and forestry resources; noise and vibration; recreation; socioeconomics (NEPA only); traffic and transportation; utilities and service systems; and water quality.

CORTESE LIST: Portions of the project site are included on lists of sites enumerated under Section 65962.5 of the California Government Code.

AVAILABILITY: The Draft EIS/EIR is available on DWR's webpage at <https://www.water.ca.gov/Programs/Flood-Management/Flood-Projects/Lower-Elkhorn-Basin>. Hard copies of the document are also available for review during normal business hours at 3464 El Camino Avenue, Sacramento. The document is also available for review at the Yolo County Library at 1212 Merkley Avenue in West Sacramento, and at the Woodland Public Library at 250 First Street in Woodland.

SUBMITTING COMMENTS: Please submit written comments, including via e-mail, by 5:00pm on July 9, 2018 to either:

Erin Brehmer, Environmental Project Manager
Department of Water Resources, Flood Projects Office
3464 El Camino Avenue Suite 150
Sacramento, CA 95821
Email: LowerElkhorn@water.ca.gov

Tanis Toland
Sacramento District, US Army Corps of Engineers 10th Floor, Planning Division
1325 J Street
Sacramento, CA 95814-2922
Email: LowerElkhorn@water.ca.gov

Please note that all comment letters received become part of the public record.

Comment Form - Review of the May 2018 LEBLS public draft EIR/EIS

Section	Print Page #	PDF Page #	Issue / Comment	Solution / Suggested Fix	
General			<p>Maps needed to illustrate "after" landownership. These need to include: 1. Close up cross section of project detailing where CR 124 will be located as well as riparian "wave" buffer.</p> <p>2. Map/graphic showing how SBWA users will access the SBWA from CR 124 through private property.</p>		CDFW-11
General			<p>The LEBLS project appears to be providing DWR with an opportunity to incorporate a suite of possible measures that would greatly enhance existing ecosystem benefits of the project, or potentially create additional benefits not already described. At this time, however, there are many lost opportunities for ecosystem improvements that could be provided by this project. Therefore, this project is not being designed to maximize the benefits to the SPFC for ecosystem improvements.</p> <p>Listed as an objective for the LEBLS project is: "Identify potential locations for improving ecosystem functions and contributing to meeting Central Valley Flood System Conservation Strategy (CVFSCS) objectives, consistent with CVFPP goals, while still meeting river stage and bypass conveyance goals." Simply identifying ways to improve ecosystem function does not help achieve the goals and objectives of the CVFSCS, nor is it an objective in and of itself. This bullet is part of the methods to achieving the objective of improving ecosystem function.</p> <p>Line 29 and 30 - Without future ownership information it is not possible to adequately address impact of the entire project.</p> <p>Ecosystem benefit (3) Encouraging wildlife friendly ag. practices is not a benefit of the project. That can be done with or without the project. Mandating the implementation of wildlife friendly ag. practices is a benefit.</p> <p>Ecosystem benefit - "(4) installing riparian plantings along the east side of the Tule Canal, along the edge of the newly constructed Sacramento Bypass North Levee, and/or within the existing Sacramento Bypass within the footprint of the existing Sacramento Bypass North Levee (after portions of the levee is degraded)." This implies that there is a benefit to these plantings, however, it is unclear if this is a benefit or will just mitigate for losses from the project.</p>	<p>The Advisory Committee (AC) is charged by the Central Valley Flood Protection Board (CVFPB) to provide advice towards implementation of projects within the SPFC that will help the CVFPB achieve the goals and objectives of both the CVFPP and the CVFSCS. CDFW has staff on the AC, and recommends that DWR coordinate with the CVFPB and its AC to request their review of the proposed project and provide advice on how the project could better achieve the goals and objectives both the CVFPP and the CVFSCS.</p>	CDFW-12
ES.2	8	ES-2	<p>Listed as an objective for the LEBLS project is: "Identify potential locations for improving ecosystem functions and contributing to meeting Central Valley Flood System Conservation Strategy (CVFSCS) objectives, consistent with CVFPP goals, while still meeting river stage and bypass conveyance goals." Simply identifying ways to improve ecosystem function does not help achieve the goals and objectives of the CVFSCS, nor is it an objective in and of itself. This bullet is part of the methods to achieving the objective of improving ecosystem function.</p> <p>Line 29 and 30 - Without future ownership information it is not possible to adequately address impact of the entire project.</p> <p>Ecosystem benefit (3) Encouraging wildlife friendly ag. practices is not a benefit of the project. That can be done with or without the project. Mandating the implementation of wildlife friendly ag. practices is a benefit.</p> <p>Ecosystem benefit - "(4) installing riparian plantings along the east side of the Tule Canal, along the edge of the newly constructed Sacramento Bypass North Levee, and/or within the existing Sacramento Bypass within the footprint of the existing Sacramento Bypass North Levee (after portions of the levee is degraded)." This implies that there is a benefit to these plantings, however, it is unclear if this is a benefit or will just mitigate for losses from the project.</p>	<p>CDFW suggests that the objective should be edited as follows: "Identify potential locations for improving ecosystem functions and implement them to contribute to..."</p>	CDFW-13
	11	ES-5	<p>Line 29 and 30 - Without future ownership information it is not possible to adequately address impact of the entire project.</p>	<p>Add future fee owner maps.</p>	CDFW-14
E.S.6.	14	ES-8	<p>Ecosystem benefit (3) Encouraging wildlife friendly ag. practices is not a benefit of the project. That can be done with or without the project. Mandating the implementation of wildlife friendly ag. practices is a benefit.</p> <p>Ecosystem benefit - "(4) installing riparian plantings along the east side of the Tule Canal, along the edge of the newly constructed Sacramento Bypass North Levee, and/or within the existing Sacramento Bypass within the footprint of the existing Sacramento Bypass North Levee (after portions of the levee is degraded)." This implies that there is a benefit to these plantings, however, it is unclear if this is a benefit or will just mitigate for losses from the project.</p>	<p>Please provide further justification as to why this is listed as a benefit.</p>	CDFW-15
E.S.6.	14	ES-8	<p>Ecosystem benefit (3) Encouraging wildlife friendly ag. practices is not a benefit of the project. That can be done with or without the project. Mandating the implementation of wildlife friendly ag. practices is a benefit.</p> <p>Ecosystem benefit - "(4) installing riparian plantings along the east side of the Tule Canal, along the edge of the newly constructed Sacramento Bypass North Levee, and/or within the existing Sacramento Bypass within the footprint of the existing Sacramento Bypass North Levee (after portions of the levee is degraded)." This implies that there is a benefit to these plantings, however, it is unclear if this is a benefit or will just mitigate for losses from the project.</p>	<p>Please provide maps or further justification as to why this is listed as a benefit.</p>	CDFW-16
Figure 3-2	87	3-9	<p>County Road 124 not visible on map.</p>	<p>Maybe consider a change of colors to highlight placement of new road. Clarify if the new road is on the levee top, or if on bottom of landside levee.</p>	CDFW-17
3.4.6	97		<p>O&M Access Corridors - O&M roads will be vectors for invasive weeds. Weed management plan should be developed. Management should be annual and ongoing.</p>	<p>Add section detailing effort to reduce weeds brought in via access roads.</p>	CDFW-18
3.4.10	103		<p>Setback levees to create floodplain habitat - While this does allow for potentially being used as rearing habitat for fish, it is not guaranteed to be used as such. The topography of the floodplain will be of importance to prevent potential fish stranding when waters recede, and the way the way the property is managed will also have an impact on the use of the area for fish rearing or other ecosystem benefits of floodplain inundation.</p>	<p>Please revise description of benefit to clarify that simply creating an area that can be inundated does not necessarily mean it will also serve to improve fish rearing within the bypass.</p>	CDFW-19
3.4.10	103		<p>Wildlife Friendly Ag. - There are no guarantees that the agricultural operations will be wildlife friendly. This benefit is based off of a wide range of variables that are outside the control of DWR as a project proponent, and should not be considered as positives.</p>	<p>It is important to consider that as project proponents, that DWR will have no control over private agriculture. So, this will be difficult to guarantee. Please revise to clarify that there are many variables at play, and that this is not a certain outcome.</p>	CDFW-20

Comment Form - Review of the May 2018 LEBLS public draft EIR/EIS

Section	Print Page #	PDF Page #	Issue / Comment	Solution / Suggested Fix
3.4.10	104	104	Remnant Levee Habitat - Remnant levees should not be subject to Flood Maintenance. Expanding the floodplain means expanded capacity. Expanded capacity will allow for vegetation to remain unchecked on the remnant levees and truly act as refugia for wildlife.	In order to obtain the maximum ecosystem benefit from this action, CDFW recommends that the remnant levees are not actively maintained. Instead of rip-rap, CDFW recommends the consideration of using environmental-based engineering concepts with large woody debris or other methods of stabilization would allow for better wildlife refugia.
3.4.10	104	104	Establish Native Grasslands - Mowing for SWHA. Dates needed. Growing season co-insides with nesting season for ground nesting birds. Mowing could have negative effects on other wildlife.	Add dates and verbiage to consider mowing timing and effects to ground nesting birds. June 15 would be a compromise start date.
Table 3.3	105	105	Huge variation in acreage. Map and explanation needed for the variation	Include map and explain why the variation is so high.
4.4	198	2	"Studies in the Yolo Bypass also indicate that managed inundation of rice fields may provide valuable nursery habitat; juvenile salmon reared in rice fields purposely flooded in winter exhibited rapid growth and high survival rates (Katz et al. 2013)."	This reference is mistaken. Katz 2013 states, "Overall survival was variable between [flooded agriculture] fields and experiments. Free-swimming survival ranged with fields from 0% to 29.3%". Several other studies have found that fish feed well while exposed to flooded ag land, however Katz found fish exposed to flooded ag land could have poor to no survival. Please revise this section based on this information.
4.4	220	24	4.4-24, "... a key component of the project is continued agricultural production. As a result, the set back area would be designed and graded appropriately to facilitate future agricultural use, ..." Earlier in the document, chapter 4.4-2, "(Katz et al. 2013). This research also indicated that rates of avian predation on juvenile salmon can be high in flooded rice fields, depending on habitat conditions. For example, high predation rates were observed in 2013, when very little aquatic habitat other than the experimentally inundated rice fields was available in the region and water depth in the fields was relatively shallow. These two factors appear to have resulted in a high concentration of piscivorous birds foraging in the experimental fields."	Project components and reference appear to be contrary. According to the cited research by Katz et al. 2013, predation of juvenile salmonids on flooded ag land with little habitat complexity is intense; therefore alternatives 2-5 will impact listed species. Listed salmonids are likely to be present whenever the yolo bypass becomes an active floodplain. Stating that this project impact is less than significant is inaccurate, based on information presented at this time. CDFW suggests the addition of mitigation measures to offset this impact or O&M that includes managing the land similar to Sacramento Refuge; not as active ag land, but constantly fallow, graded appropriately to drain toward the toe drain with complex habitat when flooded. Otherwise rearing benefits for juvenile salmonids as discussed in this EIR/EIS are not realistic. Please revise analysis accordingly.
4.4	220	24	"In addition, the setback area drainage system would be designed to minimize attraction of fishes into dead-end drainage and irrigation infrastructure that could interfere with fish movements, impede passage, or increase stranding potential. To further minimize potential for fish stranding, portions of Tule Canal and the canal along the waterside toe of the Sacramento Bypass North Levee also could be altered if their existing conditions represent a fish-stranding hazard."	Current dead-ends drainages in the immediate area include the Sacramento Weir splash basin and depressions within the Sacramento Bypass. Thousands of fish become stranded in these areas after every weir spill event, including listed adult and juvenile Central Valley salmonids. Over time, flows may create depressions in the project area due to scour. Mitigation or the O&M for the project should include descriptions of maintenance over time to fill new scour holes/stranding sites in the project area. Another mitigation consideration for this project could include fixing the Sacramento Weir apron and other depressions in the Sacramento Bypass to reduce/eliminate fish stranding; this would work toward satisfying "NMFS RPA 1.7 to Reduce Migratory Delays and Loss of Salmon, Steelhead and Sturgeon at Fremont Weir and Other Structures in the Yolo Bypass".
4.4	221	25	"Benefits of this floodplain expansion for larval and juvenile salmonids could be maximized if habitat complexity is provided, such as diversity in water temperature, refugia from swift water, and cover and structure for predator avoidance. The extent to which such components would be incorporated into the project is not known at this time, but expanding the floodplain and increasing the amount of aquatic habitat is likely to result in some degree of beneficial effects compared to the existing conditions, regardless of the resulting habitat complexity."	Expanding complex habitat is an excellent component, while expanding fish exposure to predation in flooded ag land is not. CDFW does not consider it a beneficial impact to have natural origin Central Valley salmonids exposed to increased predation. CDFW suggests that habitat complexity components be incorporated into the project description, or provide mitigation assurances to offset impacts accordingly. Currently there are no mitigation measures provided for this component of the document.
4.5.1	227	4.5-5	Wildlife present or known to exist - this should also include turkey, ring-necked pheasant, mallard and wood duck.	Please add these species to those known to occur in the area.

Comment Form - Review of the May 2018 LEBLS public draft EIR/EIS

Section	Print Page #	PDF Page #	Issue / Comment	Solution / Suggested Fix	
Bio-4	267	4.15-45	For Northwestern Pond Turtles, consider addition of the mitigation measure: Utilize limbs from cut vegetation to create basking sites to offset loss of basking sites and habitat.	Please add mitigation measure.	CDFW-29
4	486	4.15-24	It is unclear what is meant by: "...future agricultural use in the project footprint could also be designed to be compatible with fish habitat..." The first sentence in the Yolo Bypass paragraph: "The Yolo Bypass is inundated approximately once every 3 years with floodwaters from the Sacramento River and Sutter Bypass." Further up in the document (pp.197) it is stated that the Yolo Bypass floods in about 70% of years. Does once every 3 years refer to a full (levee to levee) inundation?	Please elaborate on how agricultural use in the project footprint can be designed to be compatible with fish habitat.	CDFW-30
4	575	4.22-1	Tule Canal: text edit needed, text in paratheticals should read as: "... (below the City of West Sacramento)."	Please clarify the statement throughout the document.	CDFW-31
4.18.1	522	4.18-2	West Sacramento Regional Trails Initiative: CDFW should be consulted. The proposed trail utilizes the already overtaxed parking area on Tule Jake Rd.. This facility is used to access SBWA for Wildlife Oriented Recreation. Any additional use will create additional management considerations for CDFW. The parking facility cannot handle the additional traffic. Any use of this facility will need substantial investment from DWR and consultation with CDFW to reduce management conflicts.	edit text	CDFW-32
4.18.3	525	4.18-5	West Sacramento Regional Trails Initiative: Trail should include access for hunters and anglers.	Create larger parking lot; consult with CDFW on proposed trail.	CDFW-33
4.18.3	525	4.18-5	Text Edit and clarification: YBWA and SBWA are not comparable. SBWA is open for all legal species, excluding big game every day of the year free of charge. YBWA is open 3 days a week, for game birds only (primarily waterfowl) and charges a fee. In addition, SBWA is very popular for fishing. YBWA does not offer a comparable experience or opportunity.	Add hunting and fishing as proposed uses of the trail.	CDFW-34
REC-1	528	4.18-8	Because YBWA and SBWA are not comparable as stated impacts to loss of fishing and hunting opportunities needs to be changed to Potentially Significant and mitigation needs to be implemented.	Edit to reflect species that are hunted at SBWA and clarify in text.	CDFW-35
REC-1	528	4.18-8	REC 2 does not adequately mitigate for loss of parking. REC section explains the parking and access from CR 126 but does not adequately mitigate or address in REC 2.	CDFW advises this be changed to potentially significant and mitigation be proposed to reduce the level of significance.	CDFW-36
REC2	532	4.18-6	Sacramento Bypass Wildlife Area text edit, should be revised to read as: "... is approximately 360-acres and provides important..."	Add creation of parking lot or designation of parking to REC 2.	CDFW-37
5.2.2	591	591	Sacramento Bypass Wildlife Area: CDFW Land Managers are not adequately consulted in vegetation maintenance activities.	edit text as proposed	CDFW-38
5.2.2	591	591	The agricultural crossing (AG4) over the Tule Canal owned by Swanston properties (located immediately south/west of Sacramento Bypass) will not be modified in 2017 and a NEPA/CEQA document for this project has not yet been prepared.	Edit to show CDFW is not currently consulted. CDFW requests better coordination going forward.	CDFW-39
5	617	617	The descriptions of notch locations are inaccurate. Proposed Fremont Weir inundation structure alternatives (notch concepts) all go through Fremont Weir on either the West side, East side or central location of Fremont Weir. (lines #1-15)	Please change language so that Agricultural Road Crossing 4 is not described as being part of the Fremont Weir Adult Fish Passage Project	CDFW-40
5	618	618		Please correct the description of notch alternatives.	CDFW-41

Comment CDFW-1:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Availability for the DEIR from the California Department of Water Resources (DWR) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code (Fish & G. Code).

CDFW ROLE

CDFW is California’s Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on Projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) Based on the Project description, the Project may be subject to CDFW’s lake and streambed alteration (LSA) regulatory authority (Fish & G. Code, § 1600 et seq.). If the implementation of the Project as proposed may result in “take” as defined by Fish and G. Code section 86 of any species listed pursuant to the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), CDFW may authorize the Project’s take by permit. CDFW also administers the Native Plant Protection Act, Natural Community Conservation Act, and other provisions of the Fish and Game Code that afford protection to California’s fish and wildlife resources.

PROJECT DESCRIPTION SUMMARY

The Project is a component of the Phase I Implementation of Yolo Bypass System Improvements pursuant to DWR’s Sacramento Basin-Wide Feasibility Study. The main focus of the Project is reduction of flood risk in the Lower Sacramento River Basin. The Project would set back levees protecting the Lower Elkhorn Basin, including the Sacramento Bypass North Levee and a portion of the Yolo Bypass East Levee. The Project proposes to include compensatory mitigation, which DWR states will be implemented as part of a broader framework of ecosystem Project elements.

The DEIR included the evaluation of four (4) alternatives for the Project, and determined that Alternative 2 was DWR’s preferred alternative. According to Alternative 2, the Project would specifically include a new setback levee in the Yolo

Bypass along the Lower Elkhorn Basin, aligned north to south, which would be set back approximately 1,500 feet east of the existing alignment. The setback levee would begin just south of I-5 and continue approximately 5.6 miles south, ending at the new Sacramento Bypass Levee. Alternative 2 would create a new setback levee approximately 1,500 feet north of the existing levee, which would be approximately 1.6 miles long. Most of the existing Yolo Bypass Levee and Sacramento Bypass North Levee would be degraded following construction of the setback levees, up to 3,800 linear feet of levee would remain to provide upland habitat for special-status species. How DWR will handle the treatment of the 3,800 linear feet of existing levee, referred to as remnant levee, is not fully defined in the DEIR.

CDFW-1

cont.
CDFW-1

Response CDFW-1:

Remnant levee would be included in Alternatives 2 and 4. See response to Comment CDFW-23 which addresses mitigation and restoration components of the project. The treatment of remnant levee is described on page 3-26 of the EIS/EIR.

Comment CDFW-2:

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist DWR in adequately identifying and, where appropriate, mitigating the Project’s significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Compliance with LSA

Notification to CDFW is required, pursuant to Fish & G. Code §1600 et seq., for proposed Projects that may: substantially divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; use material from a streambed; or result in the disposal or deposition of debris, waste, or other material where it may pass into any river stream, or lake. Based on the DEIR, the Project, as proposed, may require notification for some activities. In issuing a LSA Agreement, CDFW will be acting as a Responsible Agency pursuant to CEQA. Therefore, it is important that the DEIR address all of the potential biological streambed alteration impacts and propose feasible mitigation for those impacts. This will reduce the need for CDFW to require additional mitigation measures for issuance of the LSA Agreement.

CDFW-2

Response CDFW-2:

DWR will obtain all permits, including a Streambed Alteration Agreement (SAA) and California Endangered Species Act (CESA) permit, in accordance with Federal and State laws. DWR has evaluated impacts to aquatic and biological resources in Section 4.4, “Biological Resources – Fish and Aquatic Organisms” and Section 4.5, “Biological Resources – Vegetation and Wildlife,” and proposed several mitigation measures related to aquatic and biological resources (BIO-1a through BIO-8b, GEO-2, HAZ-1, HAZ-2c, WQ-1, and WQ-2). If necessary, DWR will provide more detailed, specific information in its application to CDFW for an SAA and CESA permit as more detailed design information is developed.

Comment CDFW-3:

Compliance with CESA

CDFW issues CESA permits pursuant to Fish & G. Code §2080 et seq., to ensure appropriate mitigation and enhancement measures are provided consistent with conserving state-listed candidate, threatened, or endangered species and their habitats. Based on the DEIR, the Project, as proposed, has the potential to result in “take” of plants or animals listed under CESA. Therefore, CDFW recommends that DWR obtain a CESA permit for the Project. Early consultation is encouraged, as modification to the Project and additional mitigation measures may be required in order to obtain a CESA Permit. Candidate species are protected under CESA to the same extent as species listed as endangered or threatened (Fish & G. Code, § 2085.)

A CESA permit requires the impacts of the authorized take of the species are minimized and fully mitigated and adequate funding is ensured to implement the mitigation measures. CDFW may only issue a CESA permit if the CDFW determines that issuance of the permit does not jeopardize the continued existence of the species. CDFW will make this determination based on the best scientific information available, and shall include consideration of the species’ capability to survive and reproduce, including the species known population trends and known threats to the species. Issuance of a CESA permit may take up to 180 days from receipt of an application from the applicant.

CDFW-3

Response CDFW-3:

Acknowledged. DWR will obtain a CESA permit prior to initiating project construction. See response to Comment CDFW-2.

Comment CDFW-4:

Conservation Planning

It is vital the DEIR demonstrate consistency with the Central Valley Flood Protection Plan Conservation Strategy (CVFPPCS), and not preclude the ability to implement future multi-benefit Projects. CDFW would also like to see that the Project is designed in such a way that it achieves the measurable objectives of the CVFPPCS to the maximum extent practicable within DWR's preferred alternative (Alternative 2). The CVFPPCS, developed by DWR for adoption and integration with the 2017 update of the Central Valley Flood Protection Plan (CVFPP), overlaps the Project area. The CVFPPCS identifies long-term measurable objectives that will be used to guide and inform the planning, funding, and implementation of multi-benefit and strategic advance mitigation projects and the operations and maintenance activities needed to maintain them within the Central Valley Flood System.

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CDFW-4
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CDFW recommends ensuring consistency by including how the Project will implement concepts identified in Appendix E (Invasive Plant Management Plan), Appendix G (Targeted Species Plan), Appendix H (Central Valley Chinook Salmon Rearing Habitat Needed to Satisfy the Anad²omous Fish Restoration Program Doubling Goal), and Appendix I (Floodplain Restoration Opportunities Analysis) of the CVFPPCS.

In order to better accomplish this recommendation, CDFW suggests that DWR coordinate with the Central Valley Flood Protection Board (CVFPB) and its Advisory Committee (AC) to request their review of the proposed project and provide advice on how the project could better achieve the goals and objectives both the CVFPP and the CVFSCS. The AC is charged by the CVFPB to provide advice towards implementation of projects within the system that will help the CVFPB achieve the goals and objectives of both the CVFPP and the CVFSCS.

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cont.
CDFW-4

Response CDFW-4:

The project is consistent with and supports the Central Valley Flood Protection Plan's (CVFPP's) primary goal of improving flood risk management as well as supporting the CVFPP and Conservation Strategy goals to promote ecosystem function and multi-benefit projects. The project falls within the CVFPP's Systemwide Investment Approach for flood management.

Appendices E, G, H, and I of the Conservation Strategy address invasive species, target species for focused conservation plans, Chinook salmon rearing habitat, and floodplain restoration. The LEBLS project, particularly the Ecosystem Project Elements and operation and maintenance activities, were designed to be consistent with these documents and with DWR's Environmental Permitting for Operations and Maintenance (EPOM).

DWR has briefed CVFPB board members and staff on the progress of the LEBLS project throughout the development of the project design and environmental review. DWR intends to continue its engagement with Federal, State, and local agencies, landowners, Native American tribes, and other interested stakeholders as the project progresses through permitting and construction.

This comment does not identify any issue related to the environmental analysis presented in the EIS/EIR. No change to the EIS/EIR is proposed in response to this comment.

Comment CDFW-5:

CDFW Wildlife Areas

The Project area includes valuable habitat located near CDFW wildlife management areas. To minimize the impact of the Project on the fish and wildlife resources that depend on these lands, the DEIR should: ensure that the Project is consistent with applicable policies, procedures, and goals of the management plans within public-owned areas; analyze how the Project will maintain or enhance habitat values on adjoining non-public lands to ensure riparian corridor ecosystem function (including riparian forest restoration); and ensure that the Project does not conflict with or limit the heritage of outdoor recreation (including hunting) along the levee systems.

Additionally, wildlife habitat and associated values are often dynamic. For example, habitat quality, overall vegetation quantity and temporal seasonality can alter ecological significance. Because of this inherent variability, the DEIR should state that coordination with CDFW land managers will occur prior to manipulating (such as mowing, pruning, burning, etc.) habitat on or adjacent to lands owned or managed by CDFW. DWR should consult with the appropriate CDFW Regional Office for appropriate lands manager contacts.

CDFW-5

Response CDFW-5:

The comment does not identify specific concerns related to the project and its proximity to wildlife management areas. More specific comments on this topic are presented by CDFW in its Comments CDFW-33 through CDFW-39, which address the EIS/EIR’s analysis of effects on hunting, and coordination with neighboring land managers. Project impacts on riparian habitat are discussed in detail in Impact BIO-8, beginning on page 4.5-59 of the FEIS. Although DWR will maintain contact with managers of adjacent land and provide advance notice of maintenance activities where possible, due to the need to address critical maintenance issues promptly, or adjust maintenance schedules with limited notice, DWR cannot commit that noticing of neighboring land managers will always occur in advance of maintenance activities. See detailed responses to Comments CDFW-33 through CDFW-39.

Comment CDFW-6:

Fisheries Management

The Project may potentially result in the stranding of federal and State listed fish species including Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley steelhead (*Oncorhynchus mykiss*), and southern Distinct Population green sturgeon (*Acipenser medirostris*).

CDFW recommends incorporating mitigation measures that include design and construction of fishways to increase fish passage off the floodplain and surveys to identify fish stranding and isolation points. In consultation with CDFW, DWR should integrate ways to reduce or eliminate fish stranding issues where they currently exist and ensure any future proposed actions are designed to avoid stranding or submitting fish to areas with minimal cover that leads to fish being subjected to excessive predation.

CDFW-6

Response CDFW-6:

The project description specifies that post-project grading and slopes will be designed to avoid the potential to strand fish. See response to Comment CDFW-26 for additional detail related to potential fish stranding related to scouring.

Comment CDFW-7:

ADDITIONAL CDFW COMMENTS

Additional comments from CDFW are included in the attached table.

CDFW-7

Response CDFW-7:

Responses to these comments are found under Comments CDFW-11 through CDFW-41.

Comment CDFW-8:

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW-8

Response CDFW-8:

DWR has submitted survey data to CNDDDB as required.

Comment CDFW-9:

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CDFW-9

Response CDFW-9:

DWR will pay EIR filing fees in compliance with State law.

Comment CDFW-10:

CONCLUSION

Pursuant to Public Resources Code §21092 and §21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed Project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670.

CDFW appreciates the opportunity to comment on the DEIR. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Questions regarding this letter or further coordination should be directed to Gina Ford, Senior Environmental Scientist (Specialist) at 916-358-2094 or gina.ford@wildlife.ca.gov.

CDFW-10

Response CDFW-10:

DWR will continue to include CDFW staff on the project mailing list for notifications and plans to continue to work with CDFW as it has since the Notice of Preparation (NOP) was released.

Comment CDFW-11:

Maps needed to illustrate "after" landownership. These need to include: 1. Close up cross section of project detailing where CR 124 will be located as well as riparian "wave" buffer. 2. Map/Graphic showing how SBWA users will access the SBWA from CR 124 through private property.

CDFW-11

Response CDFW-11:

The post-project pattern for land ownership, and process for disposition of land following project construction has not been established. For land in private ownership after project construction, DWR intends to purchase and impose easements as needed to comply with mitigation and project operational requirements, including long-term management of flood conveyance facilities. These easements could include (but are not limited to) conservation and flowage easements. Where necessary to reduce or avoid otherwise significant impacts of the project, mitigation measures in the EIR (including Mitigation Measures AG-1c and REC-2) would require that DWR establish relevant easements regardless of future property ownership.

DWR has committed to providing access from CR-124 to the SBWA in Mitigation Measure REC-2. The location of this access point will be determined in consultation with CDFW during final project design.

Comment CDFW-12:

The LEBLS project appears to be providing DWR with an opportunity to incorporate a suite of possible measures that would greatly enhance existing ecosystem benefits of the project, or potentially create additional benefits not already described. At this time, however, there are many lost opportunities for ecosystem improvements that could be provided by this project. Therefore, this project is not being designed to maximize the benefits to the SPFC for ecosystem improvements.

The Advisory Committee (AC) is charged by the Central Valley Flood Protection Board (CVFPB) to provide advice towards implementation of projects within the SPFC that will help the CVFPB achieve the goals and objectives of both the CVFPP and the CVFSCS. CDFW has staff on the AC, and recommends that DWR coordinate with the CVFPB and its AC to request their review of the proposed project and provide advice on how the project could better achieve the goals and objectives both the CVFPP and the CVFSCS.

CDFW-12

Response CDFW-12:

DWR has coordinated with the Central Valley Flood Protection Board throughout the project and during the design process has meet with NMFS, USFWS, and CDFW regarding incorporation of multi-benefit elements into the project. Additionally, ongoing coordination is occurring with NMFS, USFWS. and CDFW for permitting and mitigation for the project.

Comment CDFW-13:

Listed as an objective for the LEBLS project is: "Identify potential locations for improving ecosystem functions and contributing to meeting Central Valley Flood System Conservation Strategy (CVFSCS) objectives, consistent with CVFPP goals, while still meeting river stage and bypass conveyance goals." Simply identifying ways to improve ecosystem function does not help achieve the goals and objectives of the CVFSCS, nor is it an objective in and of itself. This bullet is part of the methods to achieving the objective of improving ecosystem function.

CDFW suggests that the objective should be edited as follows: "Identify potential locations for improving ecosystem functions and implement them to contribute to..."

CDFW-13

Response CDFW-13:

The change proposed by the commenter has been incorporated in the Executive Summary and Chapter 2 of the Final EIS/EIR. The fourth bullet on page ES-3 and the sixth bullet under Section 2.4 on page 2-2 have been changed to read:

Identify potential locations for improving ecosystem functions and implement improvements to contribute ~~contributing~~ to meeting Central Valley Flood System Conservation Strategy (CVFSCS) objectives, consistent with CVFPP goals, while still meeting river stage and bypass conveyance goals.

Comment CDFW-14:

Line 29 and 30 - Without future ownership information it is not possible to adequately address impact of the entire project.

Add future fee owner maps.

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CDFW-14

Response CDFW-14:

See response to Comment CDFW-11.

Comment CDFW-15:

Ecosystem benefit (3) Encouraging wildlife friendly ag. practices is not a benefit of the project. That can be done with or without the project. Mandating the implementation of wildlife friendly ag. practices is a benefit.

Please provide further justification as to why this is listed as a benefit.

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CDFW-15

Response CDFW-15:

Page ES-8 of the EIS/EIR summarizes actions that would be implemented as part of the project alternatives. The description of project alternatives in Chapter 3 provides additional detail. Current wildlife value of the crops being grown is considered to be low and can be increased with implementation of wildlife-friendly agriculture, which would be a benefit over existing conditions. No change to the EIS/EIR is proposed in response to this comment.

Comment CDFW-16:

Ecosystem benefit - "(4) installing riparian plantings along the east side of the Tule Canal, along the edge of the newly constructed Sacramento Bypass North Levee, and/or within the existing Sacramento Bypass within the footprint of the existing Sacramento Bypass North Levee (after portions of the levee is degraded)." This implies that there is a benefit to these plantings, however it is unclear if this is a benefit or will just mitigate for losses from the project.

Please provide maps or further justification as to why this is listed as a benefit.

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CDFW-16

Response CDFW-16:

See response to Comment CDFW-15. The environmental baseline of the project study area includes some riparian habitat that occurs along relatively narrow corridors in several locations (see DEIR page 4.5-60). Creating, restoring, and enhancing riparian habitats in the study area, including along the Tule Canal, would expand the amount of riparian habitat available within the study area.

Comment CDFW-17:

from the project.

County Road 124 not visible on map.

Maybe consider a change of colors to highlight placement of new road. Clarify if the new road is on the levee top, or if on bottom of landside levee.

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CDFW-17

Response CDFW-17:

Figures 3-2 through 3-5 have been updated to more clearly identify the location of relocated roads after project implementation.

Comment CDFW-18:

O&M Access Corridors - O&M roads will be vectors for invasive weeds. Weed management plan should be developed. Management should be annual and ongoing.

Add section detailing effort to reduce weeds brought in via access roads.

CDFW-18

Response CDFW-18:

As described on page 4.5-24 in Section 4.5, “Biological Resources – Vegetation and Wildlife,” revegetation of the project site would be done in compliance with Federal Executive Order 13112, and an invasive plant management plan would be implemented to monitor and control noxious weeds.

The following text has been added on page 3-39 in Chapter 3, “Alternatives,” in response to this comment:

O&M activities will be consistent with the CVFPP Conservation Strategy Appendix E. *Invasive Plant Management Plan*.

O&M BMPs to reduce the likelihood of introducing invasive species via O&M activities may include:

- Providing annual environmental awareness training by a qualified biologist to all maintenance personnel and to new field-based personnel before engaging in maintenance activities. Environmental awareness training will include descriptions of all special-status wildlife species potentially occurring in the project area (or maintenance activity area for activity specific training), their habitats, and methods of identification, including visual aids as appropriate. Training will inform staff on weed biology, identification, and invasive plant prevention. The training will also describe activity specific measures that will be followed to avoid impacts. The measures will be provided to the Maintenance Yard Supervisor, crew leader, and any contractors participating in maintenance activities.
- To minimize the potential for invasive plants to be introduced or spread during maintenance activities, a qualified biologist will work with maintenance yard staff as needed to develop and implement an invasive species management plan that will include invasive plant prevention Best Management Practices (BMPs), based on Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers (Cal-IPC, 2012).

Comment CDFW-19:

Setback levees to create floodplain habitat - While this does allow for potentially being used as rearing habitat for fish, it is not guaranteed to be used as such. The topography of the floodplain will be of importance to prevent potential fish stranding when waters recede, and the way the way the property is managed will also have an impact on the use of the area for fish rearing or other ecosystem benefits of floodplain inundation.

Please revise description of benefit to clarify that simply creating an area that can be inundated does not necessarily mean it will also serve to improve fish rearing within the bypass.

CDFW-19

Response CDFW-19:

The section to which this comment refers states that increasing the amount of floodplain area subject to periodic inundation has the potential to benefit native fish species. By referring to this as a “potential” benefit, the statement acknowledges that floodplain expansion alone may not improve fish rearing. However, increasing floodplain areas and aquatic habitat diversity (by retaining remnant levees) are typically believed to be beneficial for fish rearing, in general. No change to the EIS/EIR has been made in response to this comment.

Comment CDFW-20:

Wildlife Friendly Ag. - There are no guarantees that the agricultural operations will be wildlife friendly. This benefit is based off of a wide range of variables that are outside the control of DWR as a project proponent, and should not be considered as positives.

It is important to consider that as project proponents, that DWR will have no control over private agriculture. So, this will be difficult to guarantee. Please revise to clarify that there are many variables at play, and that this is not a certain outcome.

CDFW-20

Response CDFW-20:

This section of the project description identifies Ecosystem Project Elements which would be implemented as part of the project. As described in the response to Comment CDFW-11, DWR will implement easements as required to comply with the project’s mitigation obligations.

Comment CDFW-21:

Remnant Levee Habitat - Remnant levees should not be subject to Flood Maintenance. Expanding the floodplain means expanded capacity. Expanded capacity will allow for vegetation to remain unchecked on the remnant levees and truly act as refugia for wildlife.

In order to obtain the maximum ecosystem benefit from this action, CDFW recommends that the remnant levees are not actively maintained. Instead of rip-rap, CDFW recommends the consideration of using environmental-based engineering concepts with large woody debris or other methods of stabilization would allow for better wildlife refugia.

CDFW-21

Response CDFW-21:

Specific maintenance procedures and requirements for the remnant levees have not yet been determined. DWR will consider engineering concepts with reduced maintenance for the remnant levees but final designs must comply with Central Valley Flood Protection Board and USACE requirements.

Comment CDFW-22:

Establish Native Grasslands - Mowing for SWHA. Dates needed. Growing season co-insides with nesting season for ground nesting birds. Mowing could have negative effects on other wildlife.

Add dates and verbiage to consider mowing timing and effects to ground nesting birds. June 15 would be a compromise start date.

CDFW-22

Response CDFW-22:

Impacts BIO-5 and BIO-6 (pages 4.5-48 through 4.5-57) address the potential impacts of O&M activities (e.g., mowing, vegetation management) on ground-nesting birds, including burrowing owl (BIO-5) and northern harrier (BIO-6). Mitigation Measures BIO-5a, BIO-5b, BIO-6b, and BIO-6c identify mechanisms to avoid and minimize adverse effects to nesting ground birds.

Comment CDFW-23:

Huge variation in acreage. Map and explanation needed for the variation

Include map and explain why the variation is so high.

CDFW-23

Response CDFW-23:

Specific restoration and mitigation design for the project has not been finalized. The EIS/EIR takes a conservative position, evaluating the greatest impacts that could reasonably occur (for instance, impacts related to conversion of agricultural land for habitat restoration), while assuming smaller benefits. Zero acreage is presented as part of the range because of the possibility that no new habitat of a particular type (in this case, open water or freshwater emergent marsh) would be created. The EIS/EIR was prepared with the best data available at the time of preparation. As additional details of restoration and mitigation planning are finalized, these details will be shared and reflected in DWR’s permit applications to CDFW and others. In addition to information available to the public on DWR’s website, DWR also provides routine project updates to the CVFPB as informational items, and information about the progress on project design is included in DWR’s monthly board reports to the CVFPB, available on the CVFPB website. No change to the EIS/EIR is proposed in response to this comment.

Comment CDFW-24:

"Studies in the Yolo Bypass also indicate that managed inundation of rice fields may provide valuable nursery habitat; juvenile salmon reared in rice fields purposely flooded in winter exhibited rapid growth and high survival rates (Katz et al. 2013)."

This reference is mistaken. Katz 2013 states, "Overall survival was variable between [flooded agriculture] fields and experiments. Free-swimming survival ranged with fields from 0% to 29.3%". Several other studies have found that fish feed well while exposed to flooded ag land, however Katz found fish exposed to flooded ag land could have poor to no survival. Please revise this section based on this information.

CDFW-24

Response CDFW-24:

The EIS/EIR text immediately following the sentence quoted in the comment acknowledges the cited study indicates that rates of avian predation on juvenile salmon can be high in flooded rice fields and that high predation rates were observed in 2013. No text has been added to the EIS/EIR in response to this comment. However, the following edit has been made to the second paragraph on page 4.4-2 to eliminate any perceived contradiction:

Studies in the Yolo Bypass also indicate that managed inundation of rice fields may provide valuable nursery habitat; juvenile salmon reared in rice fields purposely flooded in winter exhibited rapid growth and high survival rates (Katz et al. 2013).

Comment CDFW-25:

4.4-24, "... a key component of the project is continued agricultural production. As a result, the set back area would be designed and graded appropriately to facilitate future agricultural use, ..." Earlier in the document, chapter 4.4-2, "(Katz et al. 2013). This research also indicated that rates of avian predation on juvenile salmon can be high in flooded rice fields, depending on habitat conditions. For example, high predation rates were observed in 2013, when very little aquatic habitat other than the experimentally inundated rice fields was available in the region and water depth in the fields was relatively shallow. These two factors appear to have resulted in a high concentration of piscivorous birds foraging in the experimental fields."

Project components and reference appear to be contrary. According to the cited research by Katz et al. 2013, predation of juvenile salmonids on flooded ag land with little habitat complexity is intense; therefore alternatives 2-5 will impact listed species. Listed salmonids are likely to be present whenever the yolo bypass becomes an active floodplain. Stating that this project impact is less than significant is inaccurate, based on information presented at this time. CDFW suggests the addition of mitigation measures to offset this impact or O&M that includes managing the land similar to Sacramento Refuge; not as active ag land, but constantly fallow, graded appropriately to drain toward the toe drain with complex habitat when flooded. Otherwise rearing benefits for juvenile salmonids as discussed in this EIR/EIS are not realistic. Please revise analysis accordingly.

CDFW-25

Response CDFW-25:

The impact discussion referenced by the comment states the setback area would be designed and graded to facilitate drainage following floodplain inundation and minimize potential for fish stranding, including integrating with the Bypass drainage system (i.e., Tule Canal and the Toe Drain). Therefore,

the request to grade the area appropriately to drain toward the Toe Drain is already addressed in the project description.

The cited study suggests the high predation rates were a result of artificially flooding the experimental fields at a time when little aquatic habitat was present elsewhere. Habitat complexity within the flooded fields in this study may have reduced effectiveness of the avian predators and improved juvenile salmonid survival rates, because the fields in the study were isolated flooded areas potentially drawing increased numbers of predators (rather than parts of a larger floodplain with wider distribution of predators, as would be the case during flooding of the project site as part of the broader inundation of the bypasses). These data, however, do not support an overall conclusion that predation of juvenile salmonids on flooded agricultural land with little habitat complexity is intense. In addition, flooded agricultural land in the proposed setback area is unlikely to experience higher predation than flooded agricultural habitat elsewhere in the Bypass, and implementing the project is unlikely to increase predation of juvenile salmonids. Because the setback area would be graded to drain as floodwaters recede, the project would not result in remnant aquatic habitat where predation rates would likely be higher than similar habitat elsewhere in the Bypass. Therefore, the conclusion that potential for fish stranding would be less than significant is appropriate, and no change to the EIS/EIR has been made in response to this comment.

Furthermore, predation rates and conditions reported in the referenced study (Katz et al. 2013) are not an appropriate surrogate nor are they applicable to the proposed project. The study was conducted in a closed environment with no escape routes or access to deep water refugia. The replicate field treatments in the study were of uniform size, shallow (less than 1.5 feet), and screened with mesh to retain fish. This means the fish had no escape from avian predation. During times of inundation, the proposed project will maintain connectivity with the deeper waters of the Tule Canal, which would act as depth refugia. Juvenile salmonids using the project area as rearing habitat would have the ability to volitionally move to appropriate habitat to avoid predation.

The proposed project would only inundate during naturally high-flow events when the regional availability of open-water habitat is relatively high. This regional abundance of open-water habitat with the addition of the proposed project's floodplain area could help disperse avian predators and reduce mortality on listed fish species in the project area. Study results clearly show increased growth rates and food web benefits associated with inundating floodplain habitats. The proposed project would allow juvenile salmonids to experience the benefits of increased growth with the ability to avoid predation through use of the Tule Canal. The combination of these two factors could likely increase survival of juvenile salmonids through the Bypass as a whole. Therefore, no change to the EIS/EIR has been made in response to this comment.

Comment CDFW-26:

"In addition, the setback area drainage system would be designed to minimize attraction of fishes into dead-end drainage and irrigation infrastructure that could interfere with fish movements, impede passage, or increase stranding potential. To further minimize potential for fish stranding, portions of Tule Canal and the canal along the waterside toe of the Sacramento Bypass North Levee also could be altered if their existing conditions represent a fish-stranding hazard."

Current dead-ends drainages in the immediate area include the Sacramento Weir splash basin and depressions within the Sacramento Bypass. Thousands of fish become stranded in these areas after every weir spill event, including listed adult and juvenile Central Valley salmonids. Over time, flows may create depressions in the project area due to scour. Mitigation or the O&M for the project should include descriptions of maintenance over time to fill new scour holes/stranding sites in the project area. Another mitigation consideration for this project could include fixing the Sacramento Weir apron and other depressions in the Sacramento Bypass to reduce/eliminate fish stranding; this would work toward satisfying "NMFS RPA 1.7 to Reduce Migratory Delays and Loss of Salmon, Steelhead and Sturgeon at Fremont Weir and Other Structures in the Yolo Bypass".

CDFW-26

Response CDFW-26:

The project description has been augmented to address the potential for fish-stranding features to develop over time. The last paragraph on page 3-25 of the EIS/EIR has been augmented as follows:

Agricultural fields would be graded so that they drain from north to south and east to west to avoid fish-stranding. Irrigation and/or drainage ditches would be configured to avoid fish-stranding to the greatest extent feasible. It is anticipated that any depressions or scour holes from inundation would be filled through standard farming practices and land management which would minimize stranding potential.

Comment CDFW-27:

"Benefits of this floodplain expansion for larval and juvenile salmonids could be maximized if habitat complexity is provided, such as diversity in water temperature, refugia from swift water, and cover and structure for predator avoidance. The extent to which such components would be incorporated into the project is not known at this time, but expanding the floodplain and increasing the amount of aquatic habitat is likely to result in some degree of beneficial effects compared to the existing conditions, regardless of the resulting habitat complexity."

Expanding complex habitat is an excellent component, while expanding fish exposure to predation in flooded ag land is not. CDFW does not consider it a beneficial impact to have natural origin Central Valley salmonids exposed to increased predation. CDFW suggests that habitat complexity components be incorporated into the project description, or provide mitigation assurances to offset impacts accordingly. Currently there are no mitigation measures provided for this component of the document.

CDFW-27

Response CDFW-27:

The comment suggests that without incorporating habitat complexity components described as potential project features (e.g., diversity in water temperature, refugia from swift water, and cover and structure for predator avoidance), Central Valley salmonids would be exposed to increased predation in the proposed setback area. See response to Comment CDFW-25 for additional discussion regarding predation rates.

Without additional habitat complexity features, habitat conditions in the setback area would be similar to other agricultural lands currently present in the Bypass. Therefore, it is not clear why predation rates would be higher in the setback area than elsewhere in the Bypass where similar conditions exist. It is speculative to conclude that expanding the floodplain would result in higher predation rates, compared to existing conditions, and it is not necessary to provide mitigation to offset exposure to predation rates that would likely be similar to agricultural habitat elsewhere in the Bypass floodplain. It is, however, possible that increasing the amount of agricultural floodplain habitat without providing additional habitat complexity may not necessarily benefit Central Valley salmonids. Therefore, the significance conclusion for this impact (FISH-5: Increases in Aquatic Habitat Associated with Expanded Floodplain Area) has been changed in the EIS/EIR on page 4.4-25 from beneficial to potentially beneficial.

Comment CDFW-28:

Wildlife present or known to exist - this should also include turkey, ring-necked pheasant, mallard and wood duck.

Please add these species to those known to occur in the area.

CDFW-28

Response CDFW-28:

The following sentence has been added to the end of the second full paragraph on page 4.5-5 to include the species identified:

CDFW has also indicated the presence of wild turkey (*Meleagris gallopavo*), ring-necked pheasant (*Phasianus colchicus*), mallard (*Anas platyrhynchos*), and wood duck (*Aix sponsa*) in the vicinity of the project site.

Comment CDFW-29:

For Northwestern Pond Turtles, consider addition of the mitigation measure: Utilize limbs from cut vegetation to create basking sites to offset loss of basking sites and habitat. Please add mitigation measure.

CDFW-29

Response CDFW-29:

The main intent of the measures identified under Mitigation Measure BIO-4 are to avoid construction-related impacts (e.g., death, injury) to pond turtle, rather than to improve habitat for the turtle in the vicinity of construction activities. There would be potential temporary impacts on pond turtles during construction only, and the measures identified under Mitigation Measure BIO-4 avoid and minimize these impacts. No change to the EIS/EIR is proposed in response to this comment.

Comment CDFW-30:

It is unclear what is meant by: "...future agricultural use in the project footprint could also be designed to be compatible with fish habitat..." Please elaborate on how agricultural use in the project footprint can be designed to be compatible with fish habitat.
The first sentence in the Yolo Bypass paragraph: "The Yolo Bypass is inundated approximately once every 3 years with floodwaters from the Sacramento"

CDFW-30

Response CDFW-30:

The text in question summarizes the potential for agricultural land conversion. Although the portions of the project site within the Yolo and Sacramento Bypasses would be designed and graded to avoid creating new fish stranding hazards, no other specific fish habitat components are proposed within areas intended for future agricultural use at this time. If such components are included in the project prior to construction, easements and similar mechanisms would be used to ensure continued agricultural use.

Comment CDFW-31:

approximately once every 3 years with floodwaters from the Sacramento River and Sutter Bypass." Further up in the document (pp.197) it is stated that the Yolo Bypass floods in about 70% of years. Does once every 3 years refer to a full (levee to levee) inundation? Please clarify the statement throughout the document.

CDFW-31

Response CDFW-31:

The reference in this section regarding bypass inundation has been updated to a more recently published source regarding the frequency with which Fremont Weir spills and also to match information presented in Section 4.4, "Aquatic Resources." Clarifying text has been added to state "Fremont Weir spills" rather than "bypass inundation" since the Fremont Weir spills fairly often but there are varying levels and extents of inundation within the bypass that occur and a weir spill does not guarantee a full, levee-to-levee inundation of the bypass. The text on page 4.22-1 has been edited as follows:

The Yolo Bypass is inundated in approximately 70% of years, and Fremont Weir overtops with floodwater from the Sacramento River and Sutter Bypass, joining flows from western tributaries

within the Bypass. In approximately 10% of years, localized flooding is due to western tributary contributions only (Reclamation and DWR 2012) approximately once every 3 years with floodwaters from the Sacramento River and Sutter Bypass. When flooded floodwaters are present, the Yolo Bypass is considered a Delta waterway and water quality conditions reflect those of the Sacramento River and Sutter Bypass, except along the western margin of the Bypass.

Additionally, the text on page 4.14-2 has been edited as follows:

The Yolo Bypass has received floodwaters from the Sacramento River and Sutter Bypass due to overflows at Fremont Weir in approximately 70% of years, joining flows from western tributaries. In approximately 10% of years, localized flooding is due to western tributary contributions only (Reclamation and DWR 2012) 53 of the last 74 years. In the absence of spills at the Fremont and Sacramento Weirs, the hydrology of the Yolo Bypass is dominated by inflows from Knights Landing Ridge Cut, Cache Creek, Willow Slough, and Putah Creek. Base flow discharges from these tributaries may be important sources of water for irrigation supply and to maintain aquatic and riparian habitats along the waterways. Moderate or high flows from the tributaries can cause localized flooding. During non-flood periods, surface water flows from west to east through a network of channels that cross the Yolo Bypass and discharge into the Tule Canal, an artificial channel that follows the toe of the east side levee along the entire length of the Bypass. In winter, low flow in the northern half of the Yolo Bypass consists primarily of base flow discharges from Cache Creek and Willow Slough. In summer, flows are dominated by irrigation deliveries and return flows diverted from Cache Creek, the Knights Landing Ridge Cut, and the Sacramento River, as well as discharges from the Woodland wastewater treatment plants (Yolo County 2005). All waterways in the project vicinity are tributary to the Sacramento River, as the Yolo Bypass drains floodwater back into the river at the southern end of the Bypass.

Comment CDFW-32:

Tule Canal: text edit needed, text in parentheses should read as: "... (below the City of West Sacramento)." edit text

West Sacramento Regional Trails Initiative: CDFW should be consulted. The proposed trail

CDFW-32

Response CDFW-32:

The text on page 4.18-2 has been edited as follows:

The Tule Canal runs along the east side of the Yolo Bypass and forms the western boundary of the project site. It discharges into the Toe Drain (below the City of West Sacramento), and thence to Prospect Slough and Cache Slough, and ultimately to Delta channels.

Comment CDFW-33:

utilizes the already overtaxed parking area on Tule Lake Rd.. This facility is used to access SBWA for Wildlife Oriented Recreation. Any additional use will create additional management considerations for CDFW. The parking facility cannot handle the additional traffic. Any use of this facility will need substantial investment from DWR and consultation with CDFW to reduce management conflicts.

Create larger parking lot; consult with CDFW on proposed trail.

CDFW-33

Response CDFW-33:

The following text has been added before the last paragraph on page 3-20:

When the existing Sacramento Bypass North Levee is degraded and County Road 126 is realigned approximately 0.37 mile to the north (on the north side of the Sacramento Bypass North Levee setback), parking for recreationists using the Sacramento Bypass Wildlife Area would be consistent with existing parking conditions on the County Road 126 road shoulder.

The Regional Trails Initiative is outside the scope of this project.

Comment CDFW-34:

West Sacramento Regional Trails Initiative: Trail should include access for hunters and anglers.

Add hunting and fishing as proposed uses of the trail.

CDFW-34

Text Edit and clarification: YBWA and SBWA are not comparable. SBWA is open for all legal

Response CDFW-34:

The West Sacramento Regional Trails Initiative information was included in the EIS/EIR to provide public information concerning potential recreation plans in the vicinity of the project site and is not part of the proposed project analyzed in this EIS/EIR. DWR recommends that CDFW make trail usage suggestions to the Lower Sacramento/Delta North Regional Flood Management Plan team.

Comment CDFW-35:

Text Edit and clarification: YBWA and SBWA are not comparable. SBWA is open for all legal species, excluding big game every day of the year free of charge. YBWA is open 3 days a week, for game birds only (primarily waterfowl) and charges a fee. In addition, SBWA is very popular for fishing. YBWA does not offer a comparable experience or opportunity.

Edit to reflect species that are hunted at SBWA and clarify in text.

CDFW-35

Response CDFW-35:

The clarifications identified by the commenter related to the opening times and fees associated with usage of the two areas are already reflected in the referenced text. No change is proposed in response to this comment.

Comment CDFW-36:

Because YBWA and SBWA are not comparable as stated impacts to loss of fishing and hunting opportunities needs to be changed to Potentially Significant and mitigation needs to be implemented.

CDFW advises this be changed to potentially significant and mitigation be proposed to reduce the level of significance.

CDFW-36

Response CDFW-36:

DWR disagrees with the commenter's conclusion based on the data and analysis presented in the EIS/EIR. Project construction would occur over one to two construction seasons, with most activity occurring in the existing Lower Elkhorn Basin (borrow and grading activities, construction of the setback levee and associated structures), followed by degrading the existing Sacramento Bypass North Levee (adjacent to the Sacramento Bypass Wildlife Area) after the new setback levee has been constructed. About 5-7 miles of levee would be set back and reconstructed, of which approximately 1.5 miles are on the Sacramento Bypass North Levee and located in proximity to the Sacramento Bypass Wildlife Area. Some access points to the Sacramento Bypass Wildlife Area would be disrupted during

portions of the construction, and there would be the potential for nearby construction noise and dust to affect the recreation experience in the Sacramento Bypass. However, construction would not occur within the Sacramento Bypass Wildlife Area itself, and the full suite of recreational activities in the Sacramento Bypass Wildlife Area would be available during project construction. As described and analyzed in the EIS/EIR, the project would not significantly impact recreational opportunities in the Sacramento Bypass Wildlife Area during construction.

Comment CDFW-37:

REC 2 does not adequately mitigate for loss of parking, REC section explains the parking and access from CR 126 but does not adequately mitigate or address in REC 2.

Add creation of parking lot or designation of parking to REC 2.

⊥
CDFW-37

Response CDFW-37:

As described in the EIS/EIR, Mitigation Measure REC-2 requires that access be provided between CR-126 and the Sacramento Bypass Wildlife Area. There are currently no formal parking areas along the roadway and visitors currently park along the roadway shoulder. The future roadway profile for CR-126 would be similar to the existing profile. The existing conditions related to the availability of parking would not change with the proposed project.

Comment CDFW-38:

Sacramento Bypass Wildlife Area text edit, should be revised to read as: "... is approximately 360-acres and provides important..."

edit text as proposed

⊥
CDFW-38

Response CDFW-38:

The text of the last bullet on page 5-5 has been edited as follows:

Sacramento Bypass Wildlife Area – The approximately 360-acre Sacramento Bypass Wildlife Area ~~is an approximately 360-acre area preserve, providing~~ provides important cover and feeding areas for wildlife during late fall, winter, and early spring. Vegetation varies throughout the preserve, from mature cottonwood trees to willows and valley oaks.

Comment CDFW-39:

Sacramento Bypass Wildlife Area: CDFW Land Managers are not adequately consulted in vegetation maintenance activities.

Edit to show CDFW is not currently consulted. CDFW requests better coordination going forward.

⊥
CDFW-39

Response CDFW-39:

DWR is obligated to perform vegetation management in the Sacramento Bypass to maintain the Bypass's capacity to convey flood flows, and will continue to do so as required.

Text on Page 8-5, under "Fish and Wildlife Coordination Act of 1958, as amended, 16 USC 661, et seq." has been edited as follows:

The Fish and Wildlife Coordination Act (FWCA) ensures that fish and wildlife receive consideration equal to that of other project features for projects that are constructed, licensed, or permitted by Federal agencies. FWCA requires that all Federal agencies consult with USFWS, NMFS, and the affected State wildlife agency for activities that affect, control, or modify surface waters, including wetlands and other waters, and give full consideration to the views and recommendations of these agencies. FWCA requires that the views of USFWS, NMFS, and the applicable State fish and wildlife agency (CDFW) be considered when effects are evaluated and mitigation needs are determined. NMFS and USFWS are Cooperating Agencies under NEPA for this project, and USACE has engaged NMFS and USFWS throughout development of the EIS. CDFW provided comments on the DEIS/DEIR, and is involved in discussions of mitigation for project impacts on state-listed species.

Comment CDFW-40:

The agricultural crossing (AG4) over the Tule Canal owned by Swanston properties (located immediately south/west of Sacramento Bypass) will not be modified in 2017 and a NEPA/CEQA document for this project has not yet been prepared.

Please change language so that Agricultural Road Crossing 4 is not described as being part of the Fremont Weir Adult Fish Passage Project

CDFW-40

Response CDFW-40:

Text in Chapter 5, “Cumulative Impacts,” had been modified to clarify information regarding the agricultural crossings and anticipated schedule, as follows:

Fremont Weir Adult Fish Passage Modification Project – Future

The Fremont Weir Adult Fish Passage Modification Project would widen and deepen the existing fish ladder at the Fremont Weir to improve adult fish passage at the Fremont Weir and along the Tule Canal. The maximum target flow through the fish passage structure would be limited to approximately 1,100 cubic feet per second. The upstream and downstream adjoining channels would be reconfigured to accommodate migratory fish passage. ~~Two~~ One existing earthen agricultural road crossing would be replaced by ~~two~~ a permanent crossing, either railcar bridges or large fish-friendly box culverts, to allow for clear passage of migratory fish. ~~One agricultural crossing would be eliminated.~~ The Fremont Weir is owned by the Sacramento-San Joaquin Drainage District. The agricultural crossing ~~are~~ is owned by ~~Knaggs Ranch and Swanston Properties.~~ Planning and design began in 2016, ~~A joint NEPA/CEQA document is anticipated in early 2017.~~ and construction is anticipated to start in ~~late 2017~~ 2019.

Comment CDFW-41:

The descriptions of notch locations are inaccurate. Proposed Fremont Weir inundation structure alternatives (notch concepts) all go through Fremont Weir on either the West side, East side or central location of Fremont Weir. (lines #1-15)

Please correct the description of notch alternatives.

CDFW-41

Response CDFW-41:

Text has been added to Chapter 5, “Cumulative Impacts,” to present an updated description of the Fremont Weir notch alternatives, as discussed in the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project EIS/EIR. The text on page 5-32 has been modified as follows:

Central Fremont Weir Gated Notch

The Central Fremont Weir Gated Notch would provide a new gated notch through Fremont Weir near the center of Fremont Weir. This location is on an outside bend of the river. Studies have indicated that juvenile fish may be found in greater numbers on the outside edge of river bends. The new gated notch would allow flow to pass into the Yolo Bypass at lower river elevations than under existing conditions, where flows only enter the Yolo Bypass when Fremont Weir overtops. Also, there is the consideration of including Central Multiple Gated Notches, with the goal of increasing the number of out-migrating juvenile fish that enter the Yolo Bypass. Trapezoidal channels create some limitations for fish passage because they have smaller flows at lower river elevations (because the channel is smaller at this elevation) when winter-run Chinook salmon are out-migrating. This alternative includes multiple gates so that the deeper gate could allow more flow to enter the bypass when the river is at lower elevations. Flows would move to other gates when the river is higher to control inflows while maintaining fish passage conditions.

West of Fremont Weir ~~Inundation Structure~~ Gated Notch

The West Fremont Weir Gated Notch would have an invert elevation of 16.1 feet because the river is higher at this location. The western location is on the outside of a river bend but would be easier to access for O&M than a central location. The new gated notch would allow flow to pass into the Yolo Bypass at lower river elevations than under existing conditions where flows only enter the Yolo Bypass when Fremont Weir overtops. There is also the possibility of a West Side Gated Notch – Managed Flow, that would have a smaller amount of flow entering the Yolo Bypass through the gated notch in Fremont Weir than the other alternatives, but it would incorporate water control structures to maintain inundation in defined areas for longer periods of time within the northern Yolo Bypass. Additionally, this project is also considering a Large Gated Notch, that would allow flows up to 12,000 cfs to enter the Yolo Bypass. It was designed with the goal of entraining more fish while allowing more flow into the bypass when the Sacramento River is at lower elevations. Typically, winter-run Chinook salmon move downstream during the first high-flow event of the season. This flow event is sometimes not high enough to result in what would be considered substantial flows into the bypass. The gated notch could allow more flow to enter during winter-run Chinook salmon out-migration, potentially maximizing fish entrainment. This alternative would include a supplemental fish passage facility on the eastern side of Fremont Weir. ~~BiOp planning efforts are considering a stand-alone inundation notch located to the west of Fremont Weir. This location is not concurrent with the existing weir, but allows for hydrologic benefit by capturing flood flows along the river at an earlier point with no impact to the existing Fremont Weir structure. Flood flows would be introduced on the west side of the Bypass.~~

East of Fremont Weir ~~Inundation Structure~~ Gated Notch

The East Fremont Weir Gated Notch would allow increased flow from the Sacramento River to enter the Yolo Bypass through a gated notch on the east side of Fremont Weir. The gated notch would create an opening in Fremont Weir that is deeper than Fremont Weir, with gates to control water going through the facility into the Yolo Bypass. Water would be able to flow through the notch during periods when the river elevations are not high enough to go over the crest of Fremont Weir (at an elevation of 32 feet). ~~BiOp planning efforts are considering a stand-alone inundation notch located to the east of Fremont Weir. This location is not concurrent with the existing weir but allows~~

~~for hydrologic benefit by capturing flood flows along the river at an earlier point with no impact to the existing Fremont Weir structure. Flood flows would be introduced on the east side of the Bypass.~~

LSDN Lower Sacramento Delta North Region

Comment LSDN-1:

Re: Comments on the Lower Elkhorn Basin Levee Setback Project Draft Environmental Impact Statement/Environmental Impact Report

Dear Ms. Toland and Ms. Brehmer:

The Lower Sacramento/Delta North Region appreciates the opportunity to present comments on the Lower Elkhorn Basin Levee Setback Project Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR).

We appreciate the California Department of Water Resources (DWR) ongoing support for our Regional Flood Management Planning efforts. Through these efforts, the six local agency partners, which include Solano County, Yolo County, Solano County Water Agency, West Sacramento Area Flood Control Agency, Sacramento Area Flood Control Agency, and Reclamation District 2068, are able to identify potential issues of concern early in flood protection project planning and to work with DWR and the U.S. Army Corps of Engineers (Corps) to identify locally-supportable solutions.

This letter was prepared by representatives of the six local agency partners (Partners) to express our joint comments on the Draft EIS/EIR. By their nature, these comments represent the broad interests of the Partners. However, the project has specific localized impacts that are of concern to individual Partners. For this reason, individual local agencies may be submitting their own comment letters. The Partners fully support the need and desire for individual local agencies to submit separate comment letters.

The following are the Partners' comments on the Draft EIS/EIR:

Describe Land Disposition Process - The Draft EIS/EIR lacks a clear description of how the lands that will not be retained by DWR following project implementation will be disposed of and managed over the long term. The Final EIS/EIR should include a detailed description of the land disposition process and should identify a long-term land management strategy that ensures that the flood conveyance improvements, as well as other multi-benefit project actions such as ecosystem restoration and recreation, will be maintained.

LSDN-1

Response LSDN-1:

See response to Comment CDFW-11 for a discussion of future property ownership.

Comment LSDN-2:

Integrate Recreational Components into Project Design Consistent with CVFPP Objectives - The Draft EIS/EIR Recreation Section references the Regional Trails Initiative and promptly dismisses it because a Notice of Preparation has not been prepared. As it applies to the Lower Elkhorn Basin, the Regional Trails Initiative includes potential trail alignments identified by the Lower Sacramento/Delta North Partners. The alignments were intended to identify a variety of ways that recreational components could be integrated into the action alternatives consistent with the multi-benefit recreational objectives of the 2017 Update to the Central Valley Flood Protection Plan (CVFPP). The Partners submitted five alternative alignments to DWR in May 2017, which are identified in Appendix J of the Draft EIS/EIR, with the hope that DWR would seriously consider integrating recreational components into the proposed project alternatives. These alternative trail alignments were not intended as a separate project requiring their own Notice of Preparation, they were intended to identify opportunities for improving the action alternative designs and achieving CVFPP multi-benefit recreational objectives. The Partners also submitted comments on the Notice of Preparation requesting that

LSDN-2

recreational components be integrated into the project design. It is disappointing to see that these recommendations were effectively dismissed. The Draft EIS/EIR states that DWR will coordinate with the City of West Sacramento and the Regional Flood Management Team to support recreational opportunities. The Partners strongly support continued local collaboration in an effort to identify locally-supportable recreational components that could be integrated into the selected alternative.

cont.
LSDN-2

Response LSDN-2:

The project will construct new roadways that provide improved opportunities for biking. As stated in Mitigation Measure REC-2, “In consultation with CDFW, DWR will identify an access route or routes from County Road 126 to the Sacramento Bypass Wildlife Area to allow continued recreational access to this facility.” This comment does not identify any issue related to the environmental analysis presented in the EIS/EIR. No change to the EIS/EIR is proposed in response to this comment.

Comment LSDN-3:

Clarify Land Use Assumptions in Expanded Sacramento Bypass – The discussion of agricultural resources appears to underestimate the actual impacts. In the Draft EIS/EIR, the lands within the Sacramento Bypass setback area are assumed to be privately owned and put into rice production following project implementation (see Footnote 1 in Table 4.5-9, page 4.13-31, and page 4-14-36). However, in the Agricultural Impact Appendix (Appendix H), these lands are assumed to be converted to native vegetation. Appendix H assumes that 492 acres of agricultural land would be lost due to the levee footprint and 222 acres would be lost due to conversion to native vegetation within the Sacramento Bypass expansion area.

The summary of socioeconomic impacts identified in Table 4.19-9 identifies a reduction of 492 acres of agricultural land with implementation of Alternative 2, which solely represents the agricultural lands within the setback levee footprint. The impact is identified as an associated reduction in agricultural revenue of \$1,275,199. No discussion is provided in this section regarding the 222 acres that would be converted to native lands in the expanded Sacramento Bypass. If this land is assumed to be converted to native vegetation, then the discussion of agricultural impacts appears to underestimate the true acreage loss and the associated socioeconomic impacts. The Final EIS/EIR needs to clarify the future land uses within the Sacramento Bypass setback area and identify any impacts on agricultural resources that may have been omitted from the Draft EIS/EIR.

LSDN-3

Response LSDN-3:

See responses to Comments Yolo-40 and Yolo-61.

Comment LSDN-4:

Clarify Flood Stage Reduction Comparisons - Figure 4.14-2a shows a reduction in flood stage for the No Action Alternative although the text states that the No Action Alternative is the same as the existing condition. The Final EIS/EIR needs to clarify what the reduction in flood stage for the existing condition is being compared to.

LSDN-4

Response LSDN-4:

A reduction in flood stage is shown under the No Action Alternative in Figure 4.14-2 for a few reasons. For hydraulic modeling purposes, the *Existing Conditions* model scenario represents conditions in the system on the date the NOP was issued. However, the NEPA No Action Alternative is most accurately represented by the *Future Without-Project* hydraulic model scenario, which also includes the ARCF GRR Sacramento Bypass Levee Setback and Sacramento Weir widening to provide additional hydraulic

specificity since both the ARCF GRR and the project have the Sacramento Bypass Levee Setback as a common feature. The inclusion of these two ARCF GRR features and their respective changes to the overall flood system account for a reduced flood stage, for certain index points, under the No Action Alternative in Figure 4.14-2.

In order to present the most accurate hydraulic analysis and accommodate modeling efforts that were ongoing for the Yolo Bypass at the time the EIS/EIR was initiated, the No Project Alternative (represented by the *Future Without-Project* hydraulic model scenario) offers a more precise representation than simply using the existing conditions under CEQA since system improvements are constantly planned and initiated by the State and various Local Maintaining Agencies (LMAs). There are two reasons for this additional specificity:

- 1) The existing conditions under CEQA are normally established at the time of the NOP release, thus the existing conditions for the hydraulics analysis represent existing conditions within the flood management system as of September 2016 and also take into account results from all projects detailed in Section 3.5.1, “Existing Conditions Scenario,” of Appendix G to the Draft EIS/EIR, also listed below:
 - Authorized and funded projects (Early Implementation Project [EIP] funded by Propositions 1E and 84 and represented in the 2017 CVFPP Update system analysis), including:
 - Folsom Dam Joint Federal Project: Includes water control manual update considering Folsom Dam raise and forecast-based operations as of December 2016.
 - Hamilton City Flood Damage Reduction and Ecosystem Restoration Project Phase 1: This USACE project is located on the west levee of the Sacramento River at Hamilton City. The project is a 6.8-mile setback levee to provide flood risk reduction to the community and agricultural areas. The setback and levee raise has been applied to the Existing Condition geometry from Sacramento River Mile (RM) 200.782 to RM 198.262.
 - Feather River Levee Improvement Project: Feather River East Levee was setback from RM 104.85 to RM 97.50.
 - Star Bend Levee Setback Project: Feather River West Levee was setback at RM 98.6 for 0.75 Mile.
 - Bear River Levee Setback Project: Bear River North Levee was setback from RM 3.4 to RM 1.43.
 - Natomas Levee Improvement Program (NLIP).
 - Sacramento River East Levee Project: The Sacramento River East Levee was raised from RM 78.933 to RM 67.132.
 - Natomas Cross Canal South Levee: This levee was raised from RM 5.162 to RM 0.154.
 - Pleasant Grove Canal South Levee: This levee was raised from RM 0.55 to RM 0.

- Southport Levee Improvement Project: Sacramento River West Levee was set back from RM 56.8 to RM 52.6.
 - American River Common Features Project 1996/1999 sites.
 - Marysville Ring Levee.
 - Sutter Basin Project – Feather River West Levee Project.
- 2) Under NEPA, the No Action Alternative indicates that no action related to the proposed LEBLS project would occur but does not represent a condition under which no action or improvements of any kind within the system would occur.

DWR relied upon ongoing modeling efforts (modeling to support the 2017 CVFPP Update was ongoing at the time the NOP was released) to quantify impacts for the proposed project. To most accurately represent the No Action Alternative for hydraulic analysis, DWR developed the Future Without-Project scenario, as described on page 4.14-6 of the Draft EIS/EIR and Page G-6 of Appendix G.

This Future Without-Project Scenario represents future system conditions without the proposed project and is the same as the Existing Conditions Project scenario, with the addition of the features in the USACE American River Common Features General Reevaluation Report (ARCF GRR) recommended plan. Those features include widening the Sacramento Bypass by approximately 1,500 feet and extending the Sacramento Weir by the same length. The Sacramento Bypass setback levee alignment is consistent with the proposed project alignment except for the tie-in connection with the existing Sacramento Bypass Levee (instead of at the extended weir).

The stage reduction shown for the index points on Figure 4-14.2 for the No Action Alternative is a comparison between stage under Existing Conditions and stage under the Future Without-Project Conditions Scenario. This information shown for No Action in Figure 4-14.2 directly corresponds to the *Future Without-Project vs. Existing Conditions Change in Stage* column in Tables 4.14-3 and 4.14-4. This difference in stage is the result of the inclusion of the USACE American River Common Features General Reevaluation Report (ARCF GRR) recommended plan elements in the Future Without-Project Scenario

Language has been added to Section 4.14, “Hydrology, Hydraulics, and Flood Risk Management,” to clarify that the stage reduction under the No Action Alternative represents a comparison between Existing Conditions and Future Without-Project Conditions. The text on page 4.14-12 has been edited as follows:

The No Action Alternative subject to hydraulic analyses ~~differs from~~ is more specific than the No Action Alternative as described in Chapter 3, “Alternatives.” Under NEPA, the No Action Alternative indicates that no action related to the proposed project will occur but does not represent a condition under which no action within the system will occur. DWR relied upon ongoing modeling efforts (part of the ongoing 2017 CVFPP Update) to quantify impacts for the proposed project. To most accurately represent the No Action Alternative for hydraulic analysis, DWR developed the

Future Without-Project model scenario, in consultation with USACE, as described on page 4.14-6 of the Draft EIS/EIR and Page G-6 of Appendix G.

This Future Without-Project Scenario represents future system conditions without the proposed project and ~~is the same as the Existing Conditions model scenario, with~~ includes the addition of the features in the USACE American River Common Features General Reevaluation Report (ARCF GRR) recommended plan. Those features include widening the Sacramento Bypass by approximately 1,500 feet and extending the Sacramento Weir by the same length. ~~There would be no changes under the No Action Alternative compared to the Existing Conditions scenario; for hydraulic analyses, they are identical.~~

Additionally, the modeling scenarios were determined based on discussions with USACE, Sacramento District. The hydrologic and hydraulic system performance analysis was consistent with guidance for Section 408 projects (Engineering Circular 1165-2-216). For the Section 408 submittal, DWR analyzed additional Future With-Project conditions, which included other planned future projects in the Yolo Bypass. These other conditions were not presented as part of the Draft EIR/EIS because the projects are neither authorized nor funded; however, they do demonstrate how implementation of the CVFPP performs as a system of cumulative improvements.

Comment LSDN-5:

Clarify Future Condition Flood Stage Analysis - The Future condition is described as only including Sacramento Weir widening yet Table 4.14-3 concludes that the Future with Project condition would result in a reduction in flood stage in the Yolo Bypass at Interstate 5 (I-5). The With Project condition is -0.71 and the Future with Project condition is -0.72. The stage benefit in the Yolo Bypass at I-5 should decrease as a result of putting more water in the Yolo Bypass with the Sacramento Weir widening. The Final EIS/EIR needs to clarify these results.

LSDN-5

Response LSDN-5:

As described by the commenter, the Future With-Project condition does divert higher flows into the Lower Yolo Bypass via the extended Sacramento Weir. However, the weir extension also reduces stages in the Sacramento River up to the Fremont Weir; this results in lower flows spilling over the Fremont Weir into the upper Yolo Bypass. The lower flows over the Fremont Weir contribute to the reduced benefit for the Future With-Project condition at the Yolo Bypass Upstream of Interstate 5 (Index Point 24).

Comment LSDN-6:

Consider Alternative Crop Yield Reduction Assumptions to more Accurately Model Agricultural Impacts - The Draft EIS/EIR states that identifying economic losses based on potential planting delays due to inundation of the new lands placed in the bypasses would be too speculative for meaningful consideration. This conflicts with the 10 percent crop yield reduction assumed in Appendix H due to more frequent flooding of these fields. Lands within the Yolo Bypass that are subject to inundation are understood to have a lower productivity than similar agricultural lands located directly outside of the Yolo Bypass. DWR has conducted detailed analysis on this topic in developing the Yolo Bypass Salmonid Fish Restoration and Fish Passage Project. In addition, Yolo County prepared a detailed study on this specific topic in April 2013 (Agricultural and Economic Impacts of the Yolo Bypass Fish Habitat Proposals, Howitt et al.). Assuming either no reduction in yield or an arbitrary 10 percent crop yield reduction is not appropriate considering the detailed study that has gone into this issue. The Final EIS/EIR needs to fully acknowledge the adverse effects on agricultural productivity experienced by the lands that will be put into the two bypasses and to ensure identified mitigation measures effectively offset these impacts. The Final EIS/EIR also needs to acknowledge the indirect economic effects and any induced economic effects anticipated with implementation of the action alternatives.

LSDN-6

Response LSDN-6:

See response to Comment Yolo -7.

Comment LSDN-7:

Identify Consistent Cumulative Assumptions - Several projects are listed in the Cumulative Section (Chapter 5) as being part of the Future conditions that were not described in Section 4.14, Hydrology, Hydraulics and Flood Risk Management, as being part of the Future conditions. For example, the Folsom Dam Raise is included in Chapter 5, but not described in the text on page 4.14-6. The Final EIS/EIR needs to clarify the assumptions used to develop the Future conditions and ensure those assumptions are consistent throughout the document.

LSDN-7

Response LSDN-7:

The second bullet on page 5-4 in Chapter 5, “Cumulative Impacts,” has been modified as follows in response to this comment:

Hydrology, Hydraulics, and Flood Risk Management—local (drainage systems affected within and downstream of individual improvement sites), and regional (Sacramento River Flood Control System). The modeling conducted in support of the analysis in Section 4.14, “Hydrology, Hydraulics, and Flood Risk Management,” used parameters for the existing and future conditions that were established by USACE and DWR for use in evaluating DWR’s application under Section 408 of the Rivers and Harbors Act. The list of projects used for hydraulic modeling is described in Section 4.14, “Hydrology, Hydraulics, and Flood Risk Management,” and in Appendix G, “Lower Elkhorn Basin Levee Setback Project Hydraulic Analysis Report.” The list of projects used in the hydraulic analysis varies from the list of projects identified in this chapter to evaluate cumulative impacts more generally.

Comment LSDN-8:

Identify Consistent No Action Assumptions - The definition of what is in the Existing condition and the No Action condition is inconsistent in the LEELS Project Hydraulic Impact Analysis (Appendix G). All authorized projects should be in the No Action condition, which would include the Sacramento Weir and Bypass widening and the Folsom Dam Raise. NEPA has been completed for these projects and they have been authorized by Congress. At a minimum, both projects should be modeled the same. A bigger concern, and what is not presented in the document is displaying to the public and flood managers how the cumulative effects of implementation of actions since the passage of Proposition 1E perform together as a system of improvements. Regardless of what it's called, a profile of the conditions that existed in 2006 should be provided and then the subsequent actions should be modeled cumulatively. As presented, the With Project and Future With Project conditions show an increase in water surface in the Yolo Bypass and the reader cannot easily tell how the improvements at Folsom Dam offset this increase. While this type of analysis may not easily fit into NEPA and CEQA categories, it is relevant from a Rivers and Harbors Act Section 408 and Central Valley Flood Protection Board (CVFPB) standpoint to understand how implementation of the Central Valley Flood Protection Plan (CVFPP) performs as a system being implemented in increments compared to a baseline that should be based on conditions that existed prior to implementation of the projects that occurred after passage of Proposition 1E and adoption of the CVFPP. This type of analysis is what was adopted by the Corps and CVFPB in the "Ground Rules" for the Section 408 permissions associated with the large urban improvement projects that were implemented after passage of Proposition 1E.

LSDN-8

Response LSDN-8:

See the discussion of No Action Alternative details in the response to Comment LSDN-4. The No Action Alternative includes the Sacramento Weir extension, Sacramento Bypass expansion, and Folsom Dam raise.

Comment LSDN-9:

Acknowledge Downstream and Cumulative Impacts - The Draft EIS/EIR assumes that the action alternatives would provide additional habitat for listed fish species, which would ultimately increase listed fish species in the Cache Slough Complex. The project also has the potential to increase organic carbon in the water flowing south in the Tule Canal/Toe Drain, which ultimately enters the Cache Slough Complex. Due to the number of municipal and agricultural water intakes within the Cache Slough Complex, any degradation of water quality or restrictions on pumping would adversely affect local interests. Also, the combination of this project with other initiatives in the Yolo Bypass, including the Salmonid Habitat Restoration and Fish Passage Project, could exacerbate these issues. The Final EIS/EIR needs to fully acknowledge the range of downstream impacts and cumulative effects anticipated with project implementation.

LSDN-9

Response LSDN-9:

The project will provide additional habitat for listed species; however, the commenter assumes this increased habitat will increase the abundance of listed species in the Cache Slough Complex. The increase in floodplain habitat will not inherently increase the number of special-status fish, timing of their presence, or the overall abundance. However, the proposed project may provide improved rearing habitat upstream of the Cache Slough Complex, primarily for emigrating juvenile salmonids. The likely result would be an increase in the body size of emigrating juvenile salmonids through the Cache Slough Complex. Information has been added to Section 4.4, "Biological Resources- Aquatic" (page 4.4-14) to address this comment:

Addition of Habitat for Listed Fish Species— The project will provide additional habitat for listed species; however, this increased habitat is not certain to increase the abundance of listed species in the Cache Slough Complex. The increase in floodplain habitat will not inherently increase the number of special-status fish, timing of their presence, or the overall abundance.

However, the proposed project may provide improved rearing habitat upstream of the Cache Slough Complex, primarily for emigrating juvenile salmonids. The likely result would be an increase in the body size of emigrating juvenile salmonids through the Cache Slough Complex. Therefore, potential for such impacts from the project is speculative and not analyzed further in this EIS and the EIR.

During non-flood conditions, water quality including Dissolved Organic Carbon (DOC) within and downstream of the project area would not be affected. Any potential impacts associated with the proposed project would occur during periods in which the project-related floodplain habitats are inundated (i.e., high-flow events) which, based on historical hydrology, would be approximately once every 3 years, the same frequency with which the existing bypass is inundated. Ecosystem Project Elements would be constructed in the footprint of the existing levee and a 150-foot-wide vegetative buffer area along the waterside toe of the proposed setback levee, which represents only a small area as compared to the present size of the Yolo Bypass. The footprint of the project alternatives {2,000-2,600 acres} represents 3-4% of the total 59,000-acre Bypass and the Ecosystem Project Elements portion of the project would encompass approximately 1% of the total bypass acreage. Additionally, the Ecosystem Project Elements are designed for short-term, partial inundation during some flood conditions but are not designed to promote long-term inundation or to hold water in portions of the setback area. The effect of the setback area on DOC is expected to be minimal, due to the small size of the project area compared to the whole Yolo Bypass.

Recent studies (DWR 2016 and USGS 2002) have generally characterized DOC dynamics in the Yolo Bypass. During flood conditions, as stated in Section 4.22, "Water Quality," water chemistry within the Yolo Bypass is driven by water quality of the Sacramento River (as it spills over the Fremont Weir and Sacramento Weirs) except along the western margin of the bypass where influences of local stream inflow is evident. When flow over Fremont Weir stops, floodwaters drain from the Yolo Bypass, and then local streams are the major discharges as the floodwaters receded eventually to the perennial Tule Canal/Toe Drain along the lower elevation, eastern margin of the Bypass. After the initial draining of the Bypass, chemical concentrations at sites along the Tule Canal/Toe Drain show strong influences from inflows from Cache Creek and Knights Landing Ridge Cut, which are sources of nutrients and contaminants. Runoff from spring storms increased flow in the perennial channel and flushed accumulated nutrients and organic matter to the tidal river far downstream.

During flood conditions, DOC at Yolo Bypass sample sites was lowest during the flood inundation period, and then increased later in the spring to values that were relatively stable for the remainder of the study. This sequence suggests that DOC in the Bypass is primarily driven by upstream inputs and from Cache Creek and Knights Landing Ridge Cut. Of the westside streams, DOC was generally highest in Knights Landing Ridge Cut and lowest in Cache Creek.

Drainage within the setback area would be designed to approximate current conditions, which drain to the Tule Canal/Toe Drain, thus internal drainage during flood and non-flood conditions would not substantially change due to the project. Based on the USGS and DWR studies, periodic inundation of the setback area is not likely to increase DOC within the bypass or downstream. DOC levels are shown to be lower in the bypass during inundation from flood waters, and the only time the setback area would be inundated is during flood flows.

Assumed restrictions on pumping for water users is speculative and outside the area of analysis for the project. No restrictions on pumping for agricultural or municipal waters users are proposed as part of the

proposed project. Pumping according to existing water rights and agreements would continue after project implementation under the existing regulatory framework. Information has been added to Section 4.22, “Water Quality” (page 4.22-6) to address this comment.

YOLO County of Yolo

Comment YOLO-1:

Dear Ms. Brehmer:

Yolo County appreciates the opportunity to provide comments on the Lower Elkhorn Basin Levee Setback Project Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR). In providing these comments, we acknowledge the strong working relationship that has formed between the California Department of Water Resources project implementation team (DWR team) and Yolo County staff during the development of this important flood protection project. We also appreciate the extensive outreach that has occurred with the affected landowners and the flexibility of the DWR team in addressing issues of concern to the County.

Our key issues of concern with the Draft EIS/EIR are summarized below. More detailed comments are provided in the attached table.

1. Few details are available regarding the disposition process for the excess lands within the setback area that will not be retained by DWR following project implementation. The Final EIS/EIR should include a detailed description of the land disposition process and should identify a long-term land management strategy that ensures that the flood conveyance improvements associated with the action alternatives are maintained. These are also important matters to describe because agriculture, habitat restoration, and other proposed uses of affected lands will succeed only if the disposition process and land management strategy is implemented effectively.

YOLO-1

Response YOLO-1:

See response to Comment CDFW-11.

Comment YOLO-2:

2. The Draft EIS/EIR states that following the completion of material excavation, the excavation sites within the setback area would be degraded to depths appropriate for future agricultural use. However, no information is included regarding what elevations would be appropriate for agricultural uses or whether sufficient fill material from the existing levee would be available to meet these required elevations. A more detailed discussion should be included in the Final EIS/EIR regarding how top soil will be stockpiled and reused, what elevations are anticipated to be achieved within the borrow areas following fill and topsoil placement, any measures that will be implemented if the proposed conversion to rice production is unsuccessful, and how much of the restored land is

expected to be used for grazing versus the production of rice or other agricultural commodities. These details are essential to a proper evaluation of assumptions regarding future agricultural and other uses and the net loss of farmland due to the project.

YOLO-2
cont.
YOLO-2

Response YOLO-2:

Field testing has indicated that there is no distinctive topsoil layer to restore. It is anticipated that the land surface will be sloped in such a way for correct drainage and farmed in rice after the project is complete. Final surface elevations have not been determined.

Comment YOLO-3:

3. The Draft EIS/EIR states that the project is consistent with the flood risk reduction approach reflected in the 2017 Update of the Central Valley Flood Protection Plan that calls for implementing multi-benefit flood risk reduction projects, which include flood risk reduction, ecological restoration and recreational components. However, the discussion that follows includes no reference to recreational uses and the action alternatives are devoid of recreational components. The Draft EIS/EIR to a large degree dismisses the multi-benefit approach advocated in the CVFPP in relation to recreation and provides no discussion on how recreational trail alignments identified by the Lower Sacramento/Delta North Regional Flood Management Team, of which Yolo County is a member, could be integrated into the action alternatives. The Final EIS/EIR needs to consider the recreational objectives of the CVFPP and to discuss how recreational components could be integrated into the action alternative designs.

YOLO-3

Response YOLO-3:

See response to Comment LSDN-2.

Comment YOLO-4:

4. Both the federal and state governments have extensive investments in the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) and common interests in ensuring its success. In light of this, the Biological Resources chapters of the Draft EIS/EIR need to be revised to include a complete analysis of the potential for the action alternatives to conflict with the Yolo HCP/NCCP. If adequate coordination occurs with the Yolo Habitat Conservancy, the selected project could be compatible with the Yolo HCP/NCCP and may even contribute to implementation of its conservation strategy. One avenue of coordination could include further exploration of using the Yolo HCP/NCCP incidental take permits from the USFWS and the CDFW to mitigate for impacts to species covered by the Yolo HCP/NCCP, such as giant garter snake, Swainson's hawk, and valley elderberry longhorn beetle. DWR should promptly coordinate with the Yolo Habitat Conservancy and update the mitigation measures in the Final EIS/EIR to reflect the potential to use the Conservancy's permits.

YOLO-4

Response YOLO-4:

Impact BIO-10, "Conflict with Provisions of an Adopted HCP/NCCP," has been added to the biological resources section on page 4.5-64. Because the project is not identified as a Covered Activity in the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP)," and it already has a Federal lead agency to facilitate Section 7 consultation with USFWS, DWR does not intend to use the Yolo HCP/NCCP incidental take permits from USFWS and CDFW to mitigate for impacts to species covered by the Yolo HCP/NCCP.

DWR does not foresee any conflicts with the Yolo HCP/NCCP as DWR will coordinate with CDFW, USFWS, and NMFS to assure compliance with ESA and CESA and will be consistent with the CVFPP Conservation Strategy. Conservation Strategy habitat types and conservation measures will be consistent with DWR's Environmental Permitting for Operations and Maintenance (EPOM).

Comment YOLO-5:

- 5. The proposed land use within the Sacramento Bypass setback area is identified in different areas of the Draft EIS/EIR as including either rice production or native vegetation. If this land is assumed to be converted to native vegetation, then the discussion of agricultural impacts appears to underestimate the true acreage loss and the associated socioeconomic impact. The Final EIS/EIR needs to clearly describe the uses for those lands within the Sacramento Bypass setback area following project implementation and identify any impacts on agricultural resources that may have been omitted from the Draft EIS/EIR.

YOLO-5

Response YOLO-5:

The analysis of agricultural resources in Impact AG-1 on pages 4.15-14 through 4.15-17 addresses the potential that some areas within the expanded levee setback would be taken out of agricultural use and replaced with restored habitat or natural vegetation. The acreage affected by both habitat restoration and the footprint of the setback levee is identified by alternative and presented in Tables 4.15-2 and 4.15-3. Additional areas of the setback could be used for grazing, depending on soil conditions.

Comment YOLO-6:

- 6. The Draft EIS/EIR states that the analysis does not identify economic losses based on potential planting delays due to continued inundation of the bypasses because inundation is difficult to predict, and therefore, would be too speculative for meaningful consideration. It is well understood that the lands within the Yolo Bypass subject to inundation have a lower productivity than similar agricultural lands located directly outside of the Yolo Bypass and that these lands are not planted at times due to the inability to get farm equipment onto the fields following late season flooding. The Final EIS/EIR needs to fully acknowledge the adverse effects (including cumulative effects, taking into consideration the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project and other probable future projects) on agricultural productivity that will be experienced by the lands that will be put into the two bypasses and to ensure identified mitigation measures effectively offset these impacts. The Final EIS/EIR also needs to acknowledge the indirect

YOLO-6

economic effects and any induced economic effects anticipated with implementation of the action alternatives.

cont. YOLO-6

Response YOLO-6:

The first paragraph on page 4.19-11 of the EIS/EIR has been edited as follows in response to this comment:

The analysis evaluates economic losses based on potential delays due to continued inundation of the Yolo Bypass as described in Appendix H. The analysis does not identify economic losses based on potential planting delays due to continued inundation of the Bypasses, because such inundation is difficult to predict, and therefore too speculative for meaningful consideration. The analysis also does not identify potential indirect economic effects of these agricultural uses. The analysis also evaluates potential indirect economic effects of these agricultural uses as described in Appendix H.

Please refer to the responses to Comments Yolo-52 and Yolo-53 for a discussion of the cumulative impacts of the project, including agricultural impacts.

Comment YOLO-7:

7. The description of the expected annual flood losses in Appendix H states that a 10 percent reduction in yield is used to calculate the impacts of putting agricultural lands into the two bypasses. The selection of this percentage is arbitrary. The hydrologic history of the bypasses is well known and DWR has conducted detailed analysis on this topic in developing the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project. In addition, Yolo County prepared a detailed study on this specific topic in April 2013 (Agricultural and Economic Impacts of the Yolo Bypass Fish Habitat Proposals, Howitt et al.). The Final EIS/EIR needs to, at a minimum, conduct a sensitivity analysis to determine how different reduced-yield assumptions would affect the impact conclusions.

YOLO-7

Yolo County truly appreciates the detailed level of engagement conducted by the DWR team with the County on this important project. Thank you for the opportunity to provide these comments. We look forward to working closely with the DWR team to resolve any outstanding issues associated with project implementation.

Response YOLO-7:

In response to this comment, DWR has conducted a sensitivity analysis to test the sensitivity of the analysis to the 10% percent average annual reduction in yield assumption used to calculate the impacts of putting agricultural lands into the Yolo Bypass. Other average annual yield reduction assumptions evaluated included 0%, 20%, 30%, 40% and 50%. The results of this sensitivity analysis have been added to Appendix H in a new Table 15:

Table 15. Alternative 2 Average Annual Rice Yield Reduction Sensitivity Analysis (\$2016)

<u>Rice Average Annual Yield Reduction Assumptions¹</u>	<u>Rice Net Revenue Without Delay²</u>	<u>Rice Net Revenue With Delay</u>	<u>Difference</u>	<u>Alternative 2 Average Annual Impacts</u>
0%	\$172,235	\$172,235	\$0	-\$307,497
10%	\$172,235	\$155,011	-\$17,223	-\$324,721
20%	\$172,235	\$137,788	-\$34,447	-\$341,944
30%	\$172,235	\$120,564	-\$51,670	-\$359,168
40%	\$172,235	\$103,341	-\$68,894	-\$376,391
50%	\$172,235	\$86,117	-\$86,117	-\$393,615

Notes:

Average annual rice yield reductions caused by late planting in Yolo Bypass due to prolonged inundation.

Net revenue of rice planted in the Yolo Bypass.

Comment YOLO-8:

Page 3-18	Text inconsistency	Figure 3-7 is inconsistent with the description of the levee design included on page 3-28. The text on page 3-28 states that the slope on the landside would be 3:1, whereas Figure 3-7 identifies the slope as 4:1. The Final EIS/EIR should clarify this discrepancy.
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YOLO-8

Response YOLO-8:

The text on page 3-28 describes Title 23 standards for levees rather than the slopes planned for the proposed project. To avoid confusion, the following sentence has been added following the second sentence in the first paragraph of Section 3.4.11 on page 3-28:

The new levees would have a 4H:1V slope on the landside slopes as well as waterside slopes.

Comment YOLO-9:

Page 3-19	Recreational access restrictions	The last paragraph states that the 20-foot wide O&M easements on both sides of the setback levee would be gated and signed to limit access. DWR should consider whether this gating would unduly limit recreational access along the new levee crown. As noted in the Recreation Section of the Draft EIS/EIR (second paragraph, page 4.18-2), the existing levee crown is currently used as a pedestrian and bicycle trail.	YOLO-9
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Response YOLO-9:

Gating and signage would be similar to existing gates and signage along the existing levee, which is primarily intended to prevent vehicular access to the levee or parked vehicles obstructing access for maintenance or emergency response vehicles. The potential recreational use of the levees after implementing the project would be similar to existing conditions.

The following text change has been made to the last paragraph on page 3-19:

A 20-foot-wide permanent O&M access corridor would be established adjacent to the landside toe of the setback levee and seepage berm. Any relocated power poles and other utility infrastructure serving adjacent properties would be located outside this easement. The landside O&M corridor would include an all-weather road surface for ease of access. A 20-foot-wide O&M easement would also be established adjacent to the waterside toe of the setback levee. The landside and waterside O&M corridors would be constructed and maintained free of woody vegetation. The O&M easements would be gated and signed to limit vehicular access.

Comment YOLO-10:

Page 3-20	Insufficient detail regarding the land disposition process and long-term land management strategy	The discussion of land acquisition under heading 3.4.7 acknowledges that DWR will be required to purchase approximately 2,000 acres of land to implement the proposed project and that following construction, the State would retain fee-title ownership of the setback levee footprint. However, no discussion is provided regarding how DWR will dispose of the excess land within the Yolo Bypass and Sacramento Bypass. The discussion should clarify whether the lands within the setback area are proposed to be returned to private ownership, and if so, exactly how this will occur. For example, will the existing landowners have first right of refusal? How will land prices be determined? Because the existing parcels will be fractured and more difficult to manage due to their location within the flood bypasses following project implementation, has combining the remnant parcels been considered to facilitate land management? Will the setback lands adjacent to the Sacramento Bypass become part of the Sacramento Bypass Wildlife Area? The Final EIS/EIR should include a detailed description of the land disposition process, particularly related to the questions above, and should identify a long-term land management strategy that ensures that the flood conveyance improvements associated with the action alternatives are maintained.
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YOLO-10

Response YOLO-10:

See response to Comment CDFW-11.

Comment YOLO-11:

Page 3-20	Text inconsistency	Table 3-1 states that Alternatives 2 and 3 would require 2,600 acres of land acquisition. However, the paragraph under heading 3.4.7 on this same page states that the project requires DWR to
		acquire approximately 2,000 acres of real estate. The Final EIS/EIR should clarify this discrepancy.

YOLO-11

cont.
YOLO-11

Response YOLO-11:

Text in the first paragraph on page 3-20 has been edited in response to this comment:

The project requires that DWR acquire approximately 2,000 to 2,600 acres of real estate, depending on action alternative (Table 3-1).

Comment YOLO-12:

Page 3-21	Clarification needed regarding levee degrade sequencing	The second bullet states that the existing levee degrade would generally occur after the construction of the setback levee to avoid an interim increase in flood risk. However, the fourth bullet states that fill material available for setback levee construction may also include materials salvaged during the degrade of the existing Yolo Bypass East Levee and the Sacramento Bypass North Levee. The Final EIS/EIR should clarify how materials from these levee degrades could be used to construct the new levee without increasing flood risk.	YOLO-12
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Response YOLO-12:

Material from the existing levee could be used in construction of the landside seepage berm on the proposed setback levee. The existing levee would not be degraded prior to completion of the setback levee.

Comment YOLO-13:

Page 3-21	Lack of information regarding restoration of agricultural uses	The last full paragraph states that following the completion of material excavation, the excavation sites within the setback area would be degraded to depths appropriate for future agricultural use. However, no information is included regarding what elevations would be appropriate for agricultural uses or whether sufficient fill material from the existing levee would be available to meet these required elevations. Also, no information is included regarding whether agriculture would actually be viable following excavation, considering that topsoil will be scrapped off of the land and reapplied post construction, and that the ground surface will be much closer to groundwater. Also, no information is provided regarding what percentage of the land will be committed to rice production and what percentage will be used for grazing. A more detailed discussion should be included in the Final EIS/EIR regarding how top soil will be stockpiled and reused, what elevations are anticipated to be achieved within the borrow areas following fill and topsoil placement, any measures that will be implemented if the proposed conversion to rice production is unsuccessful, and how much of the restored land is expected to be used for grazing.	YOLO-13
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Response YOLO-13:

See response to Comment YOLO-2.

Comment YOLO-14:

Page 3-21	Levee design details needed	The last full sentence on this page states that to maximize use of local borrow sites, levee slope angles may be less steep. Using a less-steep slope angle would expand the width of the setback levee, which would require that additional land be committed to the levee footprint. If the project alternatives will include less-steep slope angles, the additional land necessary to accommodate these wider levees should be described in the Final EIS/EIR.	YOLO-14
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Response YOLO-14:

Although levee slopes have been designed at up to a 4:1 horizontal to vertical ratio, the footprint of the levee improvements as designed is within the envelope identified in Chapter 3, “Alternatives,” of the EIS/EIR. The footprint evaluated in the EIS/EIR includes a wider seepage berm on the landside of the levee than what is proposed in association with the shallower levee slopes, and even with shallower levee slopes, the overall footprint of the levee is anticipated to be smaller than the conservative footprint analyzed in the EIS/EIR.

Comment YOLO-15:

Page 3-22	Need for water import	The reference to importing water in the last paragraph before section 3.4.9 should be clarified. Will large volumes of water	YOLO-15
		need to be imported to the site, and if so, how much water will be needed and for what purposes?	Cont. YOLO-15

Response YOLO-15:

The commenter refers to text discussing materials which may be brought onsite as part of construction activities. This list includes water; however, only small volumes of water would be transported via truck for dust suppression activities at the site.

The following edit is proposed to the last paragraph before Section 3.4.9 in response to this comment:

Other construction materials that would need to be imported to the project site would include (but are not limited to) water (for dust suppression); bentonite; cement; lime (dry quicklime, dry hydrated lime, or lime slurry); incidental construction support materials; aggregate base rock; asphalt; concrete; hydroseed; riprap; willow plantings; container plants; and coir fabric. Borrow material of poor quality that is not able to be used on-site would be hauled off-site to a permitted disposal site within 50 miles of the project site.

Comment YOLO-16:

Page 3-25	Lack of CVFPP multi-benefit objective recreational component	The first paragraph states that the project is consistent with the flood risk reduction approach reflected in the 2017 Update of the Central Valley Flood Protection Plan that calls for implementing multi-benefit flood risk reduction projects, which include flood risk reduction, ecological restoration and recreational components. However, the discussion that follows includes no reference to recreational uses and the action alternatives are devoid of recreational components. The Draft EIS/EIR to a large degree ignores the multi-benefit approach advocated in the CVFPP in relation to recreation and provides no discussion on how recreational trail alignments identified by the Lower Sacramento/Delta North Regional Flood Management Team could be integrated into the action alternatives. Although the Draft EIS/EIR states on page 4.18-5 that DWR will coordinate with the Regional Flood Management Team to support recreational opportunities, it seems all coordination ceased regarding the integration of recreational components once the trail alignments were submitted to DWR by the Team in May 2017 and no consideration was given to making the action alternatives multi-benefit regarding recreation. The Final EIS/EIR needs to consider the recreational objectives of the CVFPP and to discuss how recreational components could be integrated into the action alternative designs.	YOLO-16
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Response YOLO-16:

See response to Comment LSDN-2.

Comment YOLO-17:

Page 3-27	Lack of commitment to habitat restoration	Table 3-3 indicates that in some cases, no open water or freshwater emergent marsh habitat would be created with implementation of the action alternatives. For alternative 2, the open water habitat ranges from 0 to 13 acres and the freshwater emergent marsh habitat ranges from 0 to 24 acres. Without a specific commitment to habitat restoration, it is difficult to know if the action alternatives will actually be mitigating their habitat impacts and/or providing restoration benefits. The Final EIS/EIR should clarify why a range of habitat acreages are identified in Table 3-3 and why zero restoration is included as an option in these ranges. Because the Draft EIS/EIR includes a preferred alternative, more clarity is needed regarding the proposed restoration acreages in order for the public and decision makers to clearly understand what is being considered for approval.	YOLO-17
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Response YOLO-17:

See response to Comment CDFW-23.

Comment YOLO-18:

Page 3-28	Definition of term needed	The document should define the term “frac-out” plan identified in the third paragraph.	YOLO-18
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Response YOLO-18:

Text has been added to the glossary on page xvii as follows:

frac-out plan: A “frac-out” is the unintentional return of drilling fluids to the surface during certain construction activities. A “frac-out” plan defines actions to be taken to reduce or avoid environmental effects in the event of a “frac-out.

Comment YOLO-19:

Page 3-32	New pumping station details needed	The pumping station relocation discussion states that pumping would be necessary at two locations but indicates that only one new pumping station would be constructed. The discussion states that the location of this new pumping station has not been determined. It is difficult to understand if the new pumping station will be sufficient to meet the pumping needs within the Lower Elkhorn Basin when its location has not been determined and few other details regarding its operations are provided. The Final EIS/EIR should more thoroughly describe the pumping station details.	YOLO-19
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Response YOLO-19:

In Section 4.21.3, the EIS/EIR states the location and the scenarios for each alternative. It reads as follows: “Three pump stations (maintained and used by RD 537, RD 785, and RD 827) are located along the existing levee alignment. Two of these pump stations (under Alternatives 4 and 5) or all three pump stations (under Alternatives 2 and 3) would be combined into one station, to be located near the landside toe of the Yolo Bypass East Levee at its junction with the Sacramento Bypass North Levee.” As additional details of the new pumping station are finalized, these details will be shared. No change to the EIS/EIR is proposed in response to this comment.

Comment YOLO-20:

Page 3-32	Details needed regarding riparian plantings	The discussion of Riparian Plantings describes the techniques that may be used to implement the planting but no information is provided regarding where riparian plantings will occur. Without such detail, it is difficult to understand how these plantings could affect flood flows in the Yolo Bypass or whether they will be sufficient to offset the impacts of project construction.	YOLO-20
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Response YOLO-20:

See response to Comment CDFW-23.

Comment YOLO-21:

Page 3-32	Details needed regarding on-site warehousing	The discussion of construction equipment should clarify what is meant by the term warehousing. Are warehousing facilities intended to be constructed on the site, and if so, what is the scale of these facilities?	YOLO-21
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Response YOLO-21:

The use of “warehousing” in this paragraph refers to temporary storage of construction materials during construction. No permanent storage structures would be erected. Text on the first paragraph under “Construction Equipment” on page 3-33 has been edited as follows:

Contractor plant equipment could include construction office and equipment trailers, ~~warehousing~~ and equipment storage and maintenance facilities, a batch plant, and fuel pumps and fuel storage tanks.

Comment YOLO-22:

Page 3-37	Insufficient detail regarding the land disposition process	More clarity should be provided in the Operations and Maintenance discussion regarding land ownership after project construction, as discussed in the page 3-20 comment above.	YOLO-22
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Response YOLO-22:

See response to Comment CDFW-11.

Comment YOLO-23:

Page 3-43	Clarity needed regarding action alternatives objectives	The description of the No Action Alternative states that without implementation of the identified flood system improvements, a 200-year level of flood risk reduction would not be achieved for urban areas in the Lower Sacramento Basin, including portions of the Cities of Sacramento, West Sacramento, and Woodland. However, specifically achieving 200-year flood risk reduction for these cities is not identified in the project purpose and need, or in the project objectives. The Final EIS/EIR should clarify whether the purpose of the action alternatives is truly to achieve 200-year flood protection for portions of these cities.	YOLO-23
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Response YOLO-23:

The project will not achieve 200-year flood protection for portions of the cities of Sacramento, West Sacramento, and Woodland, but will contribute to 200-year protection for these cities. The project is part of a package of improvements to the flood risk reduction system presented in the 2012 and 2017 CVFPP (please refer to Appendix B, “Project Background and Context,” particularly Section B.6, “Description of the Project in the Context of Systemwide Improvements”). In the absence of the project’s reduction in the stage of the Sacramento River during flood events, the improvements needed to provide 200-year flood protection would likely include increases to existing levee heights throughout the system. These

increased heights would likely have greater impacts to urban residents living along the levees, would be much more costly to construct, and would present a higher risk of failure.

The second paragraph of Section 3.5.2, “No Action/No Project Alternative Description” on page 3-40 of the EIS/EIR has been edited as follows in response to this comment:

Under the No Action Alternative, DWR would not conduct any work to improve flood system capacity and conveyance in the Yolo Bypass and Sacramento Bypass or to address levee seepage, slope stability, and erosion concerns that have been identified in the Yolo Bypass or the Sacramento Bypass Levees. Because the capacity of the bypasses would not be increased, the stage in the Sacramento River would not be reduced, and ~~a 200-year level of flood risk reduction would not be achieved for urban areas in the Lower Sacramento Basin, including portions of the Cities of Sacramento, West Sacramento, and Woodland.~~ Approximately 780,000 people in the Lower Sacramento River Basin area would continue to be subject to an unacceptable high risk of levee failure and subsequent catastrophic flooding, defined as a risk of flood in excess of the state’s 200-year standard for urban areas (DWR 2012a, DWR 2016a), because the system capacity would not be increased and flood stages would not be reduced. Achieving 200-year flood risk reduction for these urban areas without the project could require much more costly and higher risk options. These options might include increasing the height of levees in other parts of the system, which could be substantially more costly and with greater impacts to urban residents living along the levees.

Comment YOLO-24:

Page 4.3-17	Inappropriate impact analysis deferral	Mitigation Measure AIR-1d states that if project construction-related emissions exceed the NOx or ROG significance threshold based on an equipment inventory that will be prepared prior to construction, DWR will contribute to SMAQMD’s off-site mitigation fee program. However, it is unclear why this mitigation measure is contingent upon a future equipment inventory when an equipment inventory was	YOLO-24 ↓
		presumably used to prepare the emission estimates included in Tables 4.3-5a and 4.3-5b. Mitigation measures are intended to avoid, minimize, reduce, eliminate or compensate for project impacts. They should not defer the actual impact evaluation and mitigation calculation to a later date. The Final EIS/EIR should identify the specific offsets that are required to be purchased based on the estimated emissions included in Tables 4.3-5a and 4.3-5b. These offsets need to be sufficient to ensure that the residual impacts are reduced to less-than-significant levels.	↑ cont. YOLO-24

Response YOLO-24:

Air quality mitigation offset fees are calculated based on the actual operation of specific pieces of equipment, not estimates presented in the EIS/EIR. The EIS/EIR estimates emissions based on conservative assumptions related to the number and type of equipment that will be required for estimated durations for particular construction activities. However, mitigation offset fees will be calculated based on the actual pieces of equipment used in the field. For example, the EIS/EIR estimates that 10 dump trucks will be used for site preparation on 60 days during the first year of construction.

However, the mitigation offset fees will be assessed based on the actual use of specific dump truck vehicles (including what emission control equipment is associated with each specific truck) on actual days of work. This level of detail cannot be provided until a construction contract has been let and detailed construction planning has occurred. No changes to the EIS/EIR document are proposed in response to the comment.

Comment YOLO-25:


Page 4.3-18	Inappropriate impact analysis deferral	Mitigation Measure AIR-1e inappropriately defers the impact analysis to a later date for PM10 emissions. Similar to Mitigation Measure AIR-1d, its implementation is contingent upon the preparation of an equipment inventory prior to construction. Based on the outcome of that inventory, the mitigation measure then requires additional impact analysis through dispersion modeling to determine whether an impact would actually occur. However, the air quality analysis in the Draft EIS/EIR already concludes that PM10 emissions will substantially exceed significance thresholds. Therefore, it is inappropriate to defer the analysis and the estimation of required mitigation to a later date.	YOLO-25
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Response YOLO-25:

See response to Comment Yolo-24. Like the calculation of emission offset fees, the final calculation of PM₁₀ emissions requires details of the specific vehicles to be used during construction that are not available at the time of preparation of the EIS/EIR. No changes to the EIS/EIR document are proposed in response to the comment.

Comment YOLO-26:

Page 4.3-18	Clarification needed regarding potentially significant and unavoidable air emission impact	Table 4.3-5a indicates that prior to the implementation of the identified mitigation measures, Alternative 2 would generate 1,072.4 tons of PM10 emissions during the first year of construction. With mitigation implementation, this alternative is estimated to generate 295.2 tons of PM10 during the first year of construction, which represents a 72 percent reduction. Assuming construction occurs 6 days per week between April 15 and October 31, as stated in the Draft EIS/EIR, construction activities would occur for approximately 175 days during the first year. Dividing the annual emissions by the number of days of construction results in an average generation of 1.68 tons of PM10 per day. This equates to 3,373 pounds of PM10 per day after implementation of the identified mitigation measures, which substantially exceeds the 80 pounds per day threshold. Acknowledging that the emissions were conservatively estimated by multiplying the maximum daily emissions by the number of work days per phase, as specified in footnote 1 of Table 4.3-5a, they would still represent a staggering exceedance of the significance threshold even if they were reduced by 50 or 75 percent. Therefore, it is unclear how the Draft EIS/EIR can conclude, as it does on page 4.3-22, that this impact will be reduced to a less-than-significant level with implementation of	YOLO-26
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	Mitigation Measures AIR-1a and AIR-1b. The Final EIS/EIR should clarify this conclusion or acknowledge that this adverse air quality impact is significant and unavoidable.	 cont. YOLO-26
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Response YOLO-26:

Although the initial estimates of particulate matter with diameters less than 10 micrometers (PM₁₀) emissions are substantially higher than the YSAQMD threshold, it is anticipated that the actual equipment lists and construction schedule, in combination with implementing the mitigation measures and potentially dispersion modeling, will demonstrate that PM₁₀ emissions do not exceed Federal or State air quality standards.

The following changes to Mitigation Measure AIR-1d in the EIS/EIR have been made in response to this comment:

Mitigation Measure AIR-1d: Use the Yolo-Solano Air Quality Management District’s Off-site Mitigation Fee to Reduce NO_x and ROG Emissions, and Pay Associated Fees.

Pursuant to YSAQMD’s significance thresholds, if the projected construction-related emissions exceed the NO_x or ROG significance threshold based on the equipment inventory, DWR will contribute to YSAQMD’s off-site mitigation fee program sufficiently to offset the amount by which the project’s NO_x or ROG emissions exceed the threshold of 10 tons per year. The determination of the final mitigation fee will be conducted in coordination with YSAQMD before any ground-disturbance occurs for any phase of project construction. If NO_x emissions exceed the general conformity *de minimis* thresholds, DWR will contribute to an eligible YSAQMD’s off-site mitigation fee program to offset emissions as required by the general conformity regulations. In the event that PM₁₀ emission reduction measures and dispersion modeling do not reduce PM₁₀ emissions below the threshold of significance, DWR will contribute to YSAQMD’s off-site mitigation fee program for PM₁₀ emissions in excess of the threshold. DWR will coordinate fee payment so that emissions offsets are committed prior to or concurrent with emissions for YSAQMD thresholds and as required by General Conformity regulations if *de minimis* thresholds are exceeded. If there are changes to construction activities (e.g., equipment lists, increased equipment usage or schedules), DWR will work with YSAQMD to ensure emission calculations and fees are adjusted appropriately.

The estimated cost of NO_x offsets based on current offset pricing are included in Appendix D1 and range from \$5.5 million to \$8.4 million, after implementation of Mitigation Measure AIR-1c under the long-haul scenario. Under the reuse scenario with lower levels of material hauling the estimated cost of NO_x offsets after implementation of Mitigation Measure AIR-1c range from \$2.1 million to \$3.8 million. The fees will be recalculated postconstruction to ensure that the correct payment(s) had been made, based on actual construction emissions.

Timing: Prior to construction activities.

Responsibility: California Department of Water Resources.

The following changes to the final paragraph on page 4.3-21 of the EIS/EIR have been made in response to this comment:

Because PM emissions would exceed the YSAQMD significance thresholds under all action alternatives, this would be a **potentially significant** impact. Mitigation Measures AIR-1a, AIR-1b, AIR-1d, and AIR-1e, described below, have been identified to address this impact.

DWR anticipates that the control measures described in Mitigation Measures AIR-1a and AIR-1b, and dispersion modeling described in Mitigation Measure AIR-1e, will be adequate to reduce PM₁₀ exposure below the level of significance. However, if these measures do not reduce emissions as expected, payment of emission fees will reduce the impact to a less-than-significant level.

Comment YOLO-27:

Page 4.3-24	Clarification needed regarding potentially significant and unavoidable air emission impact	The significance conclusion states that the identified mitigation measures would reduce NO _x emissions below the General Conformity <i>de minimis</i> threshold. However, this conclusion conflicts with the results included in Tables 4.3-5a and 4.3-5b. These tables indicate that NO _x emission levels after implementation of the identified mitigation measures would continue to exceed the <i>de minimis</i> thresholds. For example, according to Table 4.3-5a, in the first year of construction, Alternative 2 would generate 249 tons per year of NO _x emissions prior to mitigation implementation and 244.9 tons per year after mitigation implementation. The identified <i>de minimis</i> threshold for NO _x is 25 tons per year. Because the mitigated level of NO _x emissions is nearly 10 times the <i>de minimis</i> threshold, it appears this impact would remain significant and unavoidable. The Final EIS/EIR should clarify this conclusion or acknowledge that this adverse air quality impact is significant and unavoidable.	YOLO-27
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Response YOLO-27:

Although emissions of NO_x would exceed both YSAQMD and General Conformity *de minimis* thresholds, Mitigation Measure AIR-1d requires payment of offset fees in accordance with YSAQMD and General Conformity requirements. These offset fees would be calculated based on actual emissions during construction and would be used to create verifiable reductions in NO_x emissions elsewhere in the Sacramento region. These offset fees would effectively pay for reductions equivalent to those necessary to produce project emissions below the level of significance. See response to Comment USEPA-5.

Comment YOLO-28:

Page 4.4-2	Inadequate description of uncertainty associated with fish benefits	The analysis of potential habitat benefits needs to include adequate discussion of uncertainty associated with those benefits, including sensitivity analysis. Such analysis helps ensure full understanding of the tradeoffs associated with proposed projects, which may include impacts on terrestrial species habitat and agriculture. As Yolo County has pointed out in comments on the Yolo Bypass Salmonid Project Draft EIS/EIR, there is uncertainty associated with the fish benefits of additional inundation in the Yolo Bypass, depending on the management of the floodplain and other management considerations. Some discussion of this uncertainty in this section should be provided, based on the information provided in the Potential Fish Benefits Associated with Yolo Bypass Salmonid Habitat Restoration and Fish Passage Proposals Final Technical Memorandum (Quinones, R. et al., April 2017). The Draft EIS/EIR discusses impacts on terrestrial species and agriculture, but does not discuss the uncertainty associated with fish benefits. The analysis would be strengthened with the addition of this discussion, per Quinones, R. et al.	YOLO-28
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Response YOLO-28:

The following text has been added as the third full paragraph on page 4.4-2 of the EIS/EIR to address this comment:

Although multiple studies have demonstrated the benefits of Yolo Bypass floodplain habitat for juvenile salmonids and other fishes, Quinones and Lusardi (2017) highlight uncertainty regarding the magnitude of inundation required to achieve significant biological benefits for salmonids. They suggest, based on overall population estimates and density estimates for juvenile salmonids, a relatively small inundation footprint within the Yolo Bypass could provide significant biological benefits for covered fish species. The key point is that habitat availability does not necessarily equate to habitat quality. Therefore, environmental conditions, such as water temperature, dissolved oxygen, prey availability, and potential predation effects, are important factors that contribute to floodplain habitat value for juvenile salmonids.

Comment YOLO-29:

Page 4.4-14	No analysis of consistency with Yolo HCP/NCCP	The U.S. Fish and Wildlife Service published a Notice of Availability of the Final EIS and Final Yolo HCP/NCCP in the Federal Register on April 30, 2018 and all six local permittees have adopted the Yolo HCP/NCCP as of June 5, 2018. The local permittees, including the Yolo Habitat Conservancy, Yolo County, and four cities, expect issuance of final permits from the federal and state agencies in August 2018. Both the federal and state governments have extensive investments in this plan and common interests in ensuring its success. In light of this, the Biological Resources chapters of the Draft EIS/EIR need to be revised to include a complete analysis of the potential for the action alternatives to conflict with the Yolo HCP/NCCP. Also, the Yolo County HCP/NCCP Joints Powers Authority needs to be correctly referenced throughout the document as the Yolo Habitat Conservancy.
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YOLO-29

Response YOLO-29:

See response to Comment Yolo-4.

Comment YOLO-30:

Pages 4.5-36 to 4.5-55	Use of Yolo Habitat Conservancy incidental take permits issued consistent with the Yolo HCP/NCCP	As a result of the lack of analysis of conflict with the Yolo HCP/NCCP, it's difficult to tell whether this project is compatible with the HCP/NCCP. The presence of multiple environmental components suggests the project could be compatible with the Yolo HCP/NCCP if adequate coordination occurs with the Yolo Habitat Conservancy. One avenue of coordination could include further exploration of using the Yolo HCP/NCCP incidental take permits from the USFWS and the CDFW to mitigation for impacts to species covered by the Yolo HCP/NCCP, such as giant garter snake, Swainson's hawk, and valley elderberry longhorn beetle. DWR should coordinate with the Yolo Habitat Conservancy and update the mitigation measures in the Final EIS/EIR to reflect the potential to use the Conservancy's permits.
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YOLO-30

Response YOLO-30:

See response to Comment Yolo-4.

Comment YOLO-31:

Page 4.7-5	Climate change significance determination	The Basis of Significance discussion states that the action alternatives would result in a significant climate change impact if they would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The discussion then identifies thresholds identified by several agencies that might be used to determine what level of GHG emissions would constitute a significant impact. All of these thresholds are 25,000 MT CO ₂ e or less. Table 4.7-2 on page 4.7-9 then identifies the GHG emissions for each of the action alternatives. For all but two of the	YOLO-31
		alternative scenarios, the GHG emissions are in excess of 25,000 MT CO ₂ e. For the long-haul scenario of Alternative 2, a total of 112,735 MT CO ₂ e are estimated to be generated. Because the mitigated level of GHG emissions is more than 4 times the highest identified threshold, it appears this impact would remain significant and unavoidable. The Final EIS/EIR should clarify this conclusion or acknowledge that this adverse climate change impact is significant and unavoidable.	

Response YOLO-31:

As described in the EIS/EIR analysis, to the extent that GHG emissions thresholds have been set by local air districts and other jurisdictions, these thresholds are designed to address stationary source impacts and land use or development-related impacts. These thresholds are not readily applied to projects such as the Lower Elkhorn Levee Setback project, which is a large infrastructure project intended in part to provide increased climate resiliency for the Sacramento region. The EIS/EIR concludes that the GHG emissions impacts of the project would be less than significant because the benefits accruing from this emission would accrue over the estimated 50-year lifespan of the project infrastructure. Furthermore, the potential for flooding during a 50-year period without the project (No-Action Alternative) is greatly increased and any level of flooding would likely cause substantial increases in GHG emissions because of the resulting clean-up and construction activities, depending on the level of flooding. No change to the analysis presented in the EIS/EIR is proposed in response to this comment.

Comment YOLO-32:

Page 4.7-5	Analysis of consistency with applicable climate change policies and plans	The Basis of Significance discussion states that the action alternatives would result in a significant climate change impact if they would conflict substantially with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. However, no discussion is provided in the impact analysis related to the consistency of the action alternatives with applicable plans, policies, or regulations. The Final EIS/EIR should address this issue including whether the project would be consistent with the relevant GHG policies included in the Yolo County General Plan.	YOLO-32
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Response YOLO-32:

As discussed in the response to Comment Yolo-31, the applicable statewide GHG reduction plans are generally focused on stationary source emissions, and land use/development/transportation-related impacts, rather than large-scale infrastructure projects like the proposed project. The impact analysis for Impact GHG-1 broadly addresses the consistency with the DWR GHG Reduction Plan, which is most applicable to the project. The commenter specifically mentions the Yolo County General Plan GHG reduction policies. The policies in the Yolo County General Plan are not directly applicable to the project, since the lead agency under CEQA for the proposed project is DWR, a State agency.

Comment YOLO-33:

Page 4.11-2	Use of poor quality soils in levee construction	The discussion of soils states that five of the seven soil types on the site are rated by NRCS as very limited for use in levees. The remaining two soil types are rated in Table 4.11-2 as somewhat limited. These soils are identified as the source for much of the levee material, yet no discussion is provided in this chapter regarding the impacts of using poor quality soils to construct the proposed setback levee. The Final EIS/EIR should discuss whether the use of this soil material will have any impacts on the long-term integrity of the setback levee.	YOLO-33
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Response YOLO-33:

Although the Natural Resources Conservation Service (NRCS) has made general conclusions about the soil characteristics present on the project site, DWR’s design for the project has included detailed geotechnical analysis and soil sampling to determine site-specific characteristics and soil requirements for the levee.

Geotechnical studies performed on available borrow sites within the project area indicate onsite soils are predominantly high plasticity clays with Liquid Limits as high as 85, and an average of approximately 65. Use of onsite borrow is the most economical and the environmentally preferred approach to construct the project due to the substantial air quality, noise, and traffic impacts associated with transporting levee materials to the site from other locations. The geotechnical team has recommended Special Construction Details in accordance with Title 23, Section 120, Paragraph 12, where soil properties required by California Code of Regulations Title 23 (i.e., Liquid Limits <50) are not readily attainable. Special Construction Details include:

- 4H:1V slopes for both waterside and landside slopes; the less steep slopes improve stability allowing the use of locally sourced borrow materials that have higher Liquid Limits and Plasticity Indexes.
- 28-foot-wide crown to provide resiliency against potential seasonal shrinkage, cracking, and potential slope creep along the levee crest shoulder areas, thereby ensuring a minimum required 20-foot-crown width is maintained over time.
- Establish native grass vegetation with deep root structures to reduce potential for surficial slope creep.

With the use of these Special Construction Details, which have been incorporated into the project design, the soil limitations identified by the commenter would not reduce the integrity of the levee proposed for construction. No changes to the EIS/EIR document are proposed in response to the comment.

Comment YOLO-34:

Page 4.14-13	Clarity needed regarding existing condition flood stage analysis	Figure 4.14-2a shows a reduction in flood stage for the No Action Alternative although the text states that the No Action Alternative is the same as the existing condition. The Final EIS/EIR needs to clarify what the reduction in flood stage for the existing condition is being compared to.	YOLO-34
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Response YOLO-34:

See response to Comment LSDN-4.

Comment YOLO-35:

Page 4.14-15	Clarity needed regarding future condition flood stage analysis	The Future condition is described as only including Sacramento Weir widening yet Table 4.14-3 concludes that the Future with Project condition would result in a reduction in flood stage in the Yolo Bypass at Interstate 5 (I-5). The With Project condition is -0.71 and the Future with Project condition is -0.72. The stage benefit in the Yolo Bypass at I-5 should decrease as a result of putting more water in the Yolo Bypass with the	YOLO-35
		Sacramento Weir widening. The Final EIS/EIR needs to clarify these results.	

Response YOLO-35:

See response to Comment LSDN-5.

Comment YOLO-36:

Page 4-15.16	Soil mining	The text indicates that surface mining is a conditionally permitted compatible use under the Yolo County Code and “is also considered a compatible use with Williamson Act contracts.” While the County notes that the text indicates a 2012 County source for this information, the problem with this discussion is that it ignores the County’s regulatory scheme for soil mining by assuming that it is regulated in the same manner as gravel mining (the primary focus of the County’s surface mining regulations). The County Code strictly regulates soil mining and prohibits it in all but the most narrow circumstances (see Yolo County Code Title 10, Chapter 8). Compatibility with Williamson Act contracts is a distinct issue that must be analyzed by reviewing the County’s Williamson Act Guidelines and the provisions of individual contracts on affected parcels. This analysis does not appear in the Draft EIS/EIR.	YOLO-36
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Response YOLO-36:



The text identified by the commenter describes temporary construction impacts on agricultural uses related to use of soil borrow from within the project site. As described in Chapter 3, “Alternatives,” future land elevations would be established at levels suitable for agricultural use. Existing soil conditions on the project site are poor, with soil amendments required on much of the project site to support irrigated agriculture under existing conditions. Although project construction would temporarily take land out of agricultural use (including land under Williamson Act contracts), this impact is considered less than significant because the soil profile at the project site does not generally include a distinction between topsoil and subsoils, and the soils would be graded for agricultural use after construction and borrow activities.

Text on page 4.15-16 has been edited in response to this comment as follows:

Constructing the proposed flood risk reduction facilities would require a substantial amount of borrow material. As described in greater detail in Chapter 3, “Alternatives,” most of the borrow material would be obtained from within the setback area, from degrading the existing levees, and potentially from the RD 785 and RD 537 cross levees. In the setback area, ~~existing top soil would be scraped and set aside and then~~ borrow material would be excavated and stockpiled using bulldozers. Following the completion of each of the two construction seasons, borrow sites would be hydroseeded with native grasses to reduce erosion during winter and to encourage their continued use as upland habitat. At the completion of material excavation, excavation sites within the setback area would be graded to depths appropriate for future agricultural use. The short-term and temporary on-site borrow activities would be conducted within Prime Farmland and may be conducted on land held under Williamson Act contracts. However, ~~the borrow areas are designated by the Yolo County 2030 General Plan as Agriculture and are zoned A-N (Agricultural Intensive) (Yolo County 2009a). Surface mining is considered a conditionally permitted compatible use with the A-N zoning under the Yolo County Zoning Code (Yolo County 2015: Table 8-2.304[d]) and is also considered a compatible use with Williamson Act contracts (Yolo County 2012). Furthermore, the topsoil at borrow sites in the setback area would be removed and set aside prior to commencement of borrow activities, and the topsoil would be replaced and~~ and the soil profile at the project site does not generally include a distinction between topsoil and subsoils, and agricultural uses would resume at the conclusion of borrow activities. Therefore, this project component would have a temporary, short-term less-than-significant impact.

Further, with regard to the Williamson Act, as set forth in Mitigation Measure AG-1b, DWR will comply with all applicable provisions of California Government 51290 *et seq.* (See response to Comment YOLO-37).

Comment YOLO-37:

MM AG-1a	Agricultural productivity	<p>The County has several concerns with this proposed measure:</p> <ul style="list-style-type: none"> • It summarily dismisses conservation easements and the County’s agricultural mitigation ordinance. An analysis of the possibility of using conservation easements as mitigation is required. While Mitigation Measure AG-1c suggests the possibility of mitigation through conservation easements, the County has other concerns with that measure as indicated below. • Though offered as potential mitigation for significant impacts arising from the permanent conversion of farmland, many of the specific measures listed in bullets on pp. 4.15-18 and -19 of this discussion do not mitigate the loss of agricultural resources. Instead, they focus on the economic productivity of the farmland that will remain after project completion—an important consideration, but also one that DWR carefully distinguishes from the loss of agricultural resources elsewhere in the document. • Many of the bullets suggest measures for reducing the conversion of farmland that should already have been considered in formulating the project alternatives (e.g., the second bullet, reading “[s]ite the project and project footprint to minimize the permanent conversion of Important Farmland to nonagricultural uses if feasible”). Project siting is already comprehensively addressed in 	 <p>YOLO-37</p>
		<p>the description of project alternatives. Hence, it is difficult to see how these components of the Mitigation Measure will be effective at addressing the impact.</p> <ul style="list-style-type: none"> • Altogether, this Mitigation Measure improperly defers the formulation of mitigation because it lacks performance standards and does not describe or commit DWR to implement actions that will reduce the impact at issue. It is not clear whether DWR has committed itself to implement effective mitigation for the impact or, even if it has, whether the mitigation will occur concurrently with project construction or many years later. 	 <p>cont. YOLO-37</p>

Response YOLO-37:

Section 4.15, “Land Use and Planning, and Agricultural and Forestry Resources,” has been edited to clarify that DWR will implement appropriate conservation and other mitigation measures where potentially significant agricultural land use impacts remain after implementation of Mitigation Measures AG-1a and AG-1b. These measures include supporting agricultural land trusts, participating in habitat conservation plans or natural community conservation plans that include conservation of agricultural lands, and the purchase and/or establishment of agricultural conservation easements. DWR will consult with Yolo County regarding easements, and the mitigation ratio for easements relative to conversion of Important Farmland will not be less than 1:1. The following changes were made to Mitigation Measures AG-1a, AG-1b, and AG-1c:

Mitigation Measure AG-1a: Preserve Agricultural Productivity of Important Farmland to the Extent Feasible.

In a May 4, 2005, memorandum to California Resources Agency departments, boards, and commissions, the Secretary stated that “in selecting and developing resource-related projects, departments under the Resources Agency should consider ways to reduce effects on productive agricultural lands” and encouraged departments to incorporate, where appropriate, the strategies identified in the CALFED Bay-Delta Program (CALFED) EIR to reduce the impact of the CALFED Ecosystem Restoration Program on agricultural land and water use.

The measures listed below include the applicable strategies identified in the CALFED EIR and some additional measures. These measures are also reflective of the mitigation strategy included in the 2012 Central Valley Flood Protection Plan (CVFPP) (DWR 2012a), the 2015 Bay-Delta Conservation Plan (DWR and U.S. Bureau of Reclamation 2015), and DWR’s Agricultural Land Stewardship Framework and Strategies (DWR 2014). Not all measures listed below may be applicable for the project. Rather, these measures serve as an overlying framework to be used for specific discussions regarding mitigation between DWR and Yolo County. The applicability of measures listed below would vary based on input to DWR from Yolo County, as well as the location, timing, and nature of levee setback construction and operation. To the extent that these measures do not reduce the impact on agricultural land, Mitigation Measure AG-1c will apply.

Yolo County has an Agricultural Land Conservation and Mitigation Program (Yolo County Code Section 8-2.404) that specifies the types and ratios of mitigation for conversion of agricultural land that are to be applied to projects. However, the requirements of this program are not applicable to DWR.

DWR will ensure that the measures listed below are implemented as applicable ~~and feasible~~ to minimize effects and preserve agricultural productivity on Important Farmland, in addition to those measures included in Mitigation Measures AG-1b and AG-1c.

- ~~▪ Coordinate with Yolo County to receive input regarding the nature and types of measures that could be implemented to reduce the project’s conversion of agricultural land to nonagricultural uses.~~
- ~~▪ Site the project and project footprint to minimize the permanent conversion of Important Farmland to nonagricultural uses if feasible.~~
- ~~▪ Identify and implement feasible project design features that balance benefits from flood risk reduction, agriculture, and natural resources.~~
- ~~▪ Minimize the splitting or fragmentation of parcels that are to remain in agricultural use, when selecting the site(s) for the flood control facilities.~~
- ~~▪ Maximize contiguous parcels of agricultural land of a size sufficient to support their efficient use for continued agricultural production.~~
- ~~▪ Maintain a means of reasonably convenient access to these agricultural properties as part of project design, construction, and implementation, where the construction or operation of the project could limit access to ongoing agricultural operations.~~
- ~~▪ Remove and stockpile, at a minimum, the upper 1 foot of topsoil of borrow sites and replace the topsoil after project completion as part of borrow site reclamation. Borrow site~~

reclamation for agricultural production will also take into account the potential unique characteristics of soils to produce certain crops (e.g., clay pan soils for rice).

- ~~Make topsoil available in areas permanently disturbed by project activities, and where topsoil is removed as part of project construction (e.g., stripping topsoil under a levee foundation) and not reused as part of the project. The topsoil will be made available to less productive agricultural lands that could benefit from the introduction of good quality soil. By agreement between DWR and the recipient(s) of the topsoil, the recipient(s) would use the topsoil for agricultural purposes.~~
- Relocate and/or replace wells, pipelines, power lines, drainage systems, and other infrastructure that are needed for ongoing agricultural uses and would be affected by project construction or operation.
- Minimize disturbance of Important Farmland and continuing agricultural operations during construction by implementing the following measures:
 - Locate construction laydown and staging areas on sites that are fallow, already developed or disturbed, or to be discontinued for use as agricultural land, to the extent possible.
 - Use existing roads to access construction areas to the extent possible.
 - Coordinate with growers to develop appropriate construction practices to minimize construction-related impairment of agricultural productivity. Practices may include coordinating the movement of heavy equipment and implementing traffic control measures.
 - Support the testing and application of alternative crops (i.e., agroforestry or energy crops) on idle farmland.

Timing: Before, during, and after project construction activities.

Responsibility: California Department of Water Resources.

Mitigation Measure AG-1b: Minimize Impacts on Williamson Act-contracted Lands, Comply with California Government Code Sections 51290–51293, and Coordinate with Landowners and Agricultural Operators.

DWR will ~~consider~~ implement the measures described below ~~and implement them~~, as applicable, to reduce effects on lands under Williamson Act contracts.

- DWR will comply with applicable provisions of California Government Code Sections 51290–51295 with regard to acquiring lands under Williamson Act contract. Sections 51290(a) and 51290(b) specify that State policy, consistent with the purpose of the Williamson Act to preserve and protect agricultural land, is to avoid locating public improvements and any public utilities improvements in agricultural preserves, whenever practicable. If such improvements must be located within a preserve, they will be located on land that is not under contract, if practicable.

- ~~More specifically,~~ DWR will comply with the following ~~basic~~ requirements ~~stated in~~ of the California Government Code:
 - Whenever it appears that land within a preserve or under contract may be required for a public improvement, DOC and Yolo County will be notified (Section 51291[b]).
 - Within 30 days of being notified, DOC and Yolo County must forward comments, which will be considered by DWR (Section 51291[b]).
 - A public improvement may not be located within an agricultural preserve unless findings are made that (1) the location is not based primarily on the lower cost of acquiring land in an agricultural preserve, and (2) for agricultural land covered under a contract for any public improvement, no other land exists within or outside the preserve where it is reasonably feasible to locate the public improvement (Sections 51291[a] and 51291[b]). If the land is acquired for the purpose of flood damage reduction measures, DWR is exempt from the findings required in California Government Code Section 51292 (Section 51293[e][1]).
 - The contract is normally terminated for lands acquired by eminent domain or in lieu of eminent domain (Section 51295).
 - DOC will be notified within 10 working days upon completion of the acquisition (Section 51291[c]).
 - DOC and Yolo County will be notified before completion of any proposed work of any significant changes related to the project (Section 51291[d]).
 - If, after acquisition, DWR determines that the acquired property would not be used for the proposed flood control facilities, DOC and Yolo County will be notified before the land is returned to private ownership. The land will be reenrolled in a new contract or encumbered by an enforceable restriction at least as restrictive as that provided by the Williamson Act (Section 51295).
- DWR will coordinate with landowners and agricultural operators to sustain existing agricultural operations, at the landowners' discretion, until the individual agricultural parcels are needed for project construction.

Timing: Before, during, and after project construction activities.

Responsibility: California Department of Water Resources.

Mitigation Measure AG-1c: Establish Conservation Easements Where Potentially Significant Agricultural Land Use Impacts Remain after Implementation of Mitigation Measures AG-1a and AG-1b.

As discussed in Mitigation Measure AG-1a, in general, where there is a reduction or termination of agricultural activities to undertake flood risk reduction, environmental protection, or other conservation measures, DWR will consider other ~~measures~~ factors before ~~considering~~ purchasing

conservation easements or other measures of compensation (collectively referred to as “easements” below). The following factors will be considered when determining whether effects on agricultural land warrant purchase of an easement or other compensatory measures:

- Whether the change would affect the use of the land for agricultural purposes (i.e., ceasing agricultural activities and allowing land to be fallowed or be used for resource restoration in such a way that land could be returned to agricultural production).
- Whether the change would permanently take land out of production (i.e., construction of a new facility such that the land could no longer be farmed).
- Whether the land could be used for agricultural production but has not been or is not likely to be able to be used for such purposes because of flooding, bad soils, lack of dependable water supplies, or other reasons.
- Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of the project, but the project would provide benefits to nearby or other land that could be or is being used for agricultural purposes.
- Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of physical changes brought about by the project, and the land is Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.
- Whether the land would be converted to a use that would reduce ancillary environmental benefits.

Appropriate conservation measures may include but are not limited to establishing agricultural conservation easements, paying in-lieu fees toward agricultural conservation easements, supporting agricultural land trusts, and participating in habitat conservation plans or natural community conservation plans that include conservation of agricultural lands. The appropriate ratio of purchase or establishment of agricultural conservation easements relative to conversion of Important Farmland will be established by DWR following consultation with Yolo County, but in no event will it be less than 1:1.

If after implementing all other applicable measures such as those listed above in Mitigation Measure AG-1a, the project could still result in a ~~potentially~~-significant environmental impact, property interests in agricultural land (e.g., conservation easements) easements will be considered purchased requiring the preservation and/or enhancement of other land of similar agricultural quality and acreage, either directly or indirectly, to mitigate for permanently converted Important Farmland. As part of Mitigation Measure AG-1**cb**, DWR will consult with Yolo County regarding the potential for easements. Where feasible, the agricultural conservation easements should be acquired in the county in which the conversion would take place, Yolo County. If there is not a sufficient supply of similar Important Farmland where the conversions would occur, the agricultural conservation easements may be obtained in a different county. Where conservation easements are established by DWR, they may be held by land trusts, local governments, or other appropriate agencies that are responsible for ensuring that these lands will

be maintained in agricultural use. ~~Where easements are applicable, the factors listed below will be considered.~~

Where easements are considered for other resources such as terrestrial biological resources, purchase of easements ~~should~~ will be coordinated where possible so that agricultural resources are also addressed. For example, if it were determined that the project would permanently terminate agricultural activities on a piece of land that served as Swainson's hawk foraging habitat, if an easement on another property were determined appropriate to address losses of Swainson's hawk foraging habitat, the replacement land could also support the same kind of agricultural activity as the original converted property.

- ~~▪ Applicable methods established in the area of the specific project activity will be considered. Methods for compensation may include but are not limited to establishing agricultural conservation easements, paying in lieu fees toward agricultural conservation easements, supporting agricultural land trusts, and participating in habitat conservation plans or natural community conservation plans that include conservation of agricultural lands. The appropriate ratio of purchase or establishment of agricultural conservation easements relative to conversion of Important Farmland will be established by DWR following consultation with Yolo County. Depending on the specifics of the impact, available agricultural conservation programs in various locations, and local or regional regulatory standards, there are some circumstances where less than a 1 to 1 compensation ratio may be appropriate, and other circumstances where greater ratios may be required. Where conservation easements are established by DWR, they may be held by land trusts, local governments, or other appropriate agencies that are responsible for ensuring that these lands are maintained in agricultural use.~~

~~When determining whether effects on agricultural land warrant purchase of an easement, the factors below will be considered.~~

- ~~▪ Whether the change would affect the use of the land for agricultural purposes (i.e., ceasing agricultural activities and allowing land to be fallowed or be used for resource restoration in such a way that land could be returned to agricultural production).~~
- ~~▪ Whether the change would permanently take land out of production (i.e., construction of a new facility such that the land could no longer be farmed).~~
- ~~▪ Whether the land could be used for agricultural production but has not been or is not likely to be able to be used for such purposes because of flooding, bad soils, lack of dependable water supplies, or other reasons.~~
- ~~▪ Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of the project, but the project would provide benefits to nearby or other land that could be or is being used for agricultural purposes.~~
- ~~▪ Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of physical changes brought about by the~~

~~project, and the land is Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.~~

- ~~▪ Whether the land would be converted to a use that would reduce ancillary environmental benefits.~~

Timing: Before, during, and after project construction activities.

Responsibility: California Department of Water Resources.

Significance after Mitigation: Implementation of Mitigation Measures AG-1a, AG-1b, and AG-1c would reduce permanent long-term effects on conversion of Important Farmland to a nonagricultural use and conversion of land under Williamson Act contracts to an inconsistent use under all action alternatives. The impacts related to Williamson Act contracts would be less than significant. However, the permanent long-term effects on conversion of Important Farmland to nonagricultural, under each action alternative, would be a potentially **significant and unavoidable** impact. Even with the implementation of Mitigation Measures AG-1a, AG-1b, and AG-1c, some agricultural lands ~~likely~~ will be taken out of production permanently within the footprints of the new setback levees and likely cannot be fully mitigated.

Comment YOLO-38:

MM AG-1c	Conservation Easements	<p>The County is encouraged to see a discussion of agricultural conservation easements as a potential means of mitigation. However, this measure is flawed in at least the following respects:</p> <ul style="list-style-type: none"> • Like MM AG-1a, it lacks performance standards or other criteria to guide its implementation. It is unclear when, if at all, agricultural conservation easements will be considered and implemented. The following language is illustrative: “If after implementing all other applicable measures such as those listed above in Mitigation Measure AG-1a, the project could still result in a potentially significant environmental impact, easements will be considered.” How will DWR determine if the project could still result in such an impact? What thresholds will it use? Will its process be transparent and/or open to public input? • The discussion of “coordinating” easements for habitat and agriculture appears to rely on the premise that a habitat mitigation easement can also be counted as mitigation for the loss of farmland. While there may be unique situations where this is the case (federal wildlife refuge system easements may be an example), more often the preservation of agricultural resources is entirely incidental to the conservation of land for habitat. And as the Draft EIS/EIR notes, habitat easements often restrict farming activities and thus tend to compromise agricultural productivity to varying degrees. For these reasons, easement “stacking” is often ineffective mitigation for the conversion of farmland. • The bulleted factors on p. 4-15.21 that are offered to aid in “determining whether effects on agricultural land warrant purchase of an easement” appear to be simply
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YOLO-38



		<p>metrics for determining the severity of impacts on farmland (for example, whether it is being converted to non-agricultural use) in the first instance. It is hard to determine whether these bulleted factors are of any relevance to the implementation of this mitigation measure, as they instead appear fundamental to the impact analysis itself (i.e., is farmland being converted).</p> <ul style="list-style-type: none"> • Finally, it is unclear whether this measure truly commits DWR to implement mitigation that addresses the impact at issue. The timeframe for action is unclear, similar to MM AG-1a, and the measure otherwise seems to defer the formulation of mitigation to some future point in time without any meaningful performance standards or other criteria.
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cont. YOLO-38

Response YOLO-38:

See response to Comment Yolo-37 above.

Comment YOLO-39:

Page 4.18-5	Multi-benefit recreational components dismissed	<p>The Recreation Chapter references the Regional Trails Initiative and promptly dismisses it because a Notice of Preparation has not been prepared. As it applies to the Lower Elkhorn Basin, the Regional Trails Initiative includes potential trail alignments identified by the Lower Sacramento/Delta North Regional Flood Management Team, of which Yolo County is a member. The alignments were intended to identify a variety of ways that recreational components could be integrated into the action alternatives consistent with the multi-benefit recreational objectives of the 2017 Update to the Central Valley Flood Protection Plan (CVFPP). The Regional Flood Management Team submitted five alternative alignments to DWR in May 2017, which are identified in Appendix J of the Draft EIS/EIR, with the hope that DWR would seriously consider integrating recreational components into the proposed project alternatives. These alternative trail alignments were not intended as a separate project requiring their own Notice of Preparation, they were intended to identify opportunities for improving the action alternative designs and achieving CVFPP multi-benefit recreational objectives. It is disappointing to see that these recommendations were effectively dismissed. The text on this page states that DWR will coordinate with the City of West Sacramento and the Regional Flood Management Team to support recreational opportunities. However, it is difficult to understand how this support will occur considering none of the trail alignments were even discussed as possible project components in the Draft EIS/EIR. The Final EIS/EIR should</p>	YOLO-39 
		clarify how the CVFPP multi-benefit recreational objectives will be achieved with project implementation.	cont. YOLO-39 

Response YOLO-39:

See response to Comment LSDN-2.

Comment YOLO-40:

Page 4.18-11	Clarity need regarding future land uses in the Sacramento Bypass Setback Area	The discussion on this page regarding the relocation of County Road 126 seems to be indicating that the new land that will be included within the Sacramento Bypass setback area following the northern levee setback will be privately owned and will include agricultural uses. This conclusion is supported by the first footnote to Table 4.5-9, which states that in borrow areas, upland agriculture would be converted to rice. In addition, the text in the first full paragraph on page 4.13-31 states that rice production would likely occur on some or all of the project site south of the proposed Sacramento Bypass North Levee Setback (see also the second full paragraph on page 4-14-36). However, this conclusion is contradicted by statements in Appendix H (including in the third paragraph of page H-6 and the first paragraph on page H-15) indicating that 222 acres of these lands would be converted to native vegetation. The description of alternatives included in Chapter 3 needs to clearly articulate the expected land uses for those lands within the Sacramento Bypass setback area following project implementation. If these lands will be converted to native vegetation, then the agricultural impact conclusions identified in Sections 4.15 and 4.19 need to recognize this fact. Table 4.19-9 identifies a reduction of 492 acres of agricultural land with implementation of Alternative 2, which solely represents the agricultural lands within the setback levee footprint and does not include agricultural lands that may be converted to native vegetation within the expanded Sacramento Bypass. Therefore, this table underestimates the agricultural revenue changes that would be anticipated with the action alternatives. A similar misrepresentation occurs in Table 4.15-2, which identifies the estimated acreage of agricultural land conversion in levee setback corridors for all of the action alternatives. For Alternative 2, this table identifies 494.3 acres but includes no reference to the agricultural lands within the expanded Sacramento Bypass. Finally, if some or all of these lands are to remain uncultivated, the Final EIS/EIR should describe how and by whom they will be managed.
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YOLO-40

Response YOLO-40:

After the preparation of the Draft EIS/EIR, land use estimates for Alternative 2 were updated to reflect both a smaller levee footprint and an increased area that would not be returned to agricultural use within the expanded Sacramento Bypass. As a result of these changes, the revised analysis in Appendix H evaluated the removal of an estimated 422 acres of land within the levee footprint and the Sacramento Bypass from agricultural use (compared to 492 acres in the draft version of Appendix H which accompanied the Draft EIS/EIR).

The agricultural revenue impacts analyzed in Appendix H and summarized in Section 4.19, “Socioeconomics,” were computed assuming that 193 acres of land within the Sacramento Bypass expansion that are currently cropped area would be converted to native vegetation under Alternative 2. An additional 249 acres of land that is currently planted with crops would be within the levee footprint, accounting for the 442 acres of land removed from cultivation used in the calculation of economic impacts. Table 4.19-9 has been revised to reflect the change in Alternative 2 footprints, and changes to

the flood damage calculations for all alternatives as described below in the response to Comment Yolo-70. A revised Table 4.19-9 is included below.

Table 4.19-9. Agricultural Revenue Changes, All Action Alternatives

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Change from Existing Agricultural Acreage	--	(442)	(663)	(490)	(484)
Total Crop Revenue	\$11,464,183	\$10,339,249	\$9,430,086	\$9,931,352	\$10,359,570
Change from Existing	--	(\$1,124,934)	(\$2,034,163)	(\$1,532,831)	(\$1,104,614)
Net Crop Revenue	\$2,934,139	\$2,609,618	\$2,454,560	\$2,457,582	\$2,476,058
Change from Existing	--	(\$324,721)	(\$479,779)	(\$476,757)	(\$458,281)

Note: All totals may not add to 100 percent due to rounding. Revised smaller footprint was evaluated for Alternative 2, but revised footprints were not developed for Alternatives 3 through 5.

Source: Data provided by California Department of Water Resources in 2018

Table 4.15-2, and the analyses in Section 4.15, consider the area of prime farmland, unique farmland, and farmland of statewide importance that would be converted to non-agricultural use as a result of the project (rather than the acreage of land presently under cultivation as evaluated in the economic analysis). The acreage totals presented in Table 4.15-2 and discussed in Section 4.15, “Land Use and Planning, and Agricultural and Forestry Resources,” therefore differ slightly from those presented in Section 4.19, “Socioeconomics,” and Appendix H.

The comment also references text on pages 4.13-31 and 4.14-36. The referenced text in Section 4.13 states that some or all of the land that would be placed in the Yolo and Sacramento Bypasses would be placed in rice cultivation, potentially leading to increased inundation and potential for mosquito-related hazards. Similarly, the referenced text in Section 4.14 includes analysis of potential water supply impacts and assumes rice cultivation to estimate future agricultural water use. As described in the project description and the response to Comment LSDN-1, the final land use and ownership has not yet been determined. In both these analyses, rice cultivation was assumed to ensure that a conservative scenario was evaluated, and that potential impacts were not inappropriately minimized. See response to Comment CDFW-11 for a discussion of future land ownership and management.

Comment YOLO-41:

Page 4.18-11	Clarity needed regarding recreation mitigation implementation	Impact REC-2 acknowledges that all of the project alternatives will cause a substantial long-term disruption of institutionally recognized recreational activities. This includes a loss of parking along County Road 126 and a loss of direct access to the Sacramento Bypass Wildlife Area. The mitigation for this significant impact includes the identification of an access route	YOLO-41
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		<p>from County Road 126 to the wildlife area but no mitigation is provided for the loss of parking. By not addressing the loss of parking, the public's ability to use the wildlife area as they currently do will be substantially diminished and this long-term recreational impact will remain significant and unavoidable. The Final EIS/EIR needs to expand Mitigation Measure REC-2 to include a parking solution, which could include the construction of a gravel parking lot within the Sacramento Bypass with an access ramp that would extend down from the new northern levee. As an alternative, the proposed reconstruction of County Road 126 could be designed to include sufficient parking capacity to accommodate recreational users. The Final EIS/EIR should also identify the proposed access route mentioned in Mitigation Measure REC-2 to ensure it can be feasibly implemented. In addition, for this mitigation measure to be effective, it requires that DWR commit to constructing the access route, not just identifying it in consultation with CDFW and installing signage.</p>
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cont.
YOLO-41

Response YOLO-41:

See response to Comment CDFW-37.

Comment YOLO-42:

Page 4.19-12	Inconsistency in approach to analyzing agricultural impacts in the bypasses	<p>The first paragraph states that the analysis does not identify economic losses based on potential planting delays due to continued inundation of the bypasses. The rationale for this approach is that the inundation is difficult to predict, and therefore, would be too speculative for meaningful consideration. It is difficult to understand how the impact of placing agricultural lands within flood bypasses alternatives would be speculative when the hydrologic history of the bypasses is well known and DWR has conducted detailed analysis on this topic in developing the Yolo Bypass Salmonid Fish Restoration and Fish Passage Project. This statement specifically conflicts with the agricultural impact analysis included in Appendix H, which identified a 10 percent reduction in agricultural production for those lands that will be placed within the bypasses. In addition, Yolo County prepared a detailed study on this specific topic in April 2013 (Agricultural and Economic Impacts of the Yolo Bypass Fish Habitat Proposals, Howitt et al.). It is well understood that the lands within the Yolo Bypass subject to inundation have a lower productivity than similar agricultural lands located directly outside of the Yolo Bypass and that these lands are not planted at times due to the inability to get farm equipment onto the fields following late season flooding. The Final EIS/EIR needs to fully acknowledge the adverse effects on agricultural</p>
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YOLO-42

		<p>productivity that will be experienced by the lands that will be put into the two bypasses and to ensure identified mitigation measures effectively offset these impacts.</p>
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cont.
YOLO-42

Response YOLO-42:

See response to Comment Yolo-6.

There is a 2013 report by Howitt et al. which includes an analysis as described by the commenter, but DWR was informed by the authors that the report information was outdated and would not be appropriate to use (MacEwan Pers. Comm. 2017). Given the lack of better existing information, DWR used the 10% yield reduction assumption. However, a sensitivity analysis was conducted to test the sensitivity of the analysis to the 10% percent average annual reduction in yield assumption used to calculate the impacts of putting agricultural lands into the Yolo Bypass. Other average annual yield reduction assumptions evaluated included 0%, 20%, 30%, 40% and 50%. The results of this sensitivity analysis have been added to Appendix H.

Comment YOLO-43:

Page 4.19-12	Inconsistency in approach to analyzing indirect and induced impacts	The first paragraph also states that the analysis does not identify potential indirect economic effects of the agricultural uses that would be lost with implementation of the action alternatives. No justification is provided for ignoring these indirect economic effects, which are described in some detail in Appendix H. The Final EIS/EIR should acknowledge these indirect economic effects, as well as any induced economic effects that would be anticipated with implementation of the action alternatives.	YOLO-43
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Response YOLO-43:

See response to Comment Yolo-6.

Comment YOLO-44:

Page 4.20-1	Reconstruction of unimproved portions of County Road 124 needed	Alternative 2 leaves a 9,000 foot portion of County Road 124 unimproved between two reconstructed sections. This section will need to be reconstructed as the construction traffic on this road will be significant.	YOLO-44
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Response YOLO-44:

See response to Comment Yolo-48. As described in Mitigation Measure TR-1, DWR will assess and document pre- and post-construction conditions of roadways used for construction traffic, and restore roadways to pre-project conditions.

Comment YOLO-45:

Page 4.20-1	County easement needed	All relocated County roads will need a road and utility easement granted to the County for future maintenance.	YOLO-45
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Response YOLO-45:

All relocated County roads and utility corridors will be provided easements for future maintenance.

Comment YOLO-46:

Page 4.20-1	Roadway structural requirements	Reclamation Districts are authorized to close Old River Road/County Road 22 during flood stage on the Sacramento River, to safely maintain the levee in accordance with DWR guidelines. During these closures, County Roads 124 and 126 will serve as the bypass route when that closure occurs, or if Monument Bend fails and County Road 22 is compromised. The structural section of the reconstructed/realigned portions of County Roads 124 and 126 needs to match or be equal to that of County Road 22 for the traffic that will be rerouted. A 2011 County Road 22 rehabilitation project from just south of Monument Bend to County Road 126 was designed to a Traffic Index of 9.	YOLO-46
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Response YOLO-46:

DWR is designing the roadway sections for the relocated CR-124 and CR-126 in accordance with Yolo County standards for Rural Streets. DWR understands that Yolo County determines where to route traffic during high flood stages when Old River Road is closed for maintenance and flood fighting on the Sacramento River. CR-124 and CR-126 are not recommended routes, by DWR, since they are within a deep flood plain that is protected by the same levee that protects Old River Road. A more suitable routing would be on roadways that are not in a deep floodplain, such as I-5 and I-80. This comment does not identify any issue related to the environmental analysis presented in the EIS/EIR. No change to the EIS/EIR is proposed in response to this comment.

Comment YOLO-47:

Page 4.20-1	Review of design plans	The Community Services Department commented on the 65% design plans but has not had the opportunity to review the next plan revision. Please forward the next plan revision to the County when it is available.	YOLO-47
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Response YOLO-47:

DWR will continue to provide design plans to the County for review as they are available.

Comment YOLO-48:

Page 4.20-8	County consultation in Traffic Control	Several Yolo County roads will receive a significant amount of construction traffic with project construction, which will create congestion and damage to the road system. Mitigation Measure	YOLO-48
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	and Road Maintenance Plan preparation	TR-1 states that a Traffic Control and Road Maintenance Plan will be implemented by DWR to prevent congestion and maintain the roadways during construction to repair all project related potholes, fractures, or other damages to pre-project conditions. The Yolo County Department of Community Services will need to be consulted in the preparation and implementation of the Traffic Control and Road Maintenance Plan to ensure that its interests and the interests of the local residents are heard.	cont. YOLO-48
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Response YOLO-48:

Text in the first paragraph of Mitigation Measure TR-1 (on page 4.20-8) has been modified as follows:

Before the start of project-related construction activities, DWR will prepare and implement a plan to manage expected construction-related traffic to the extent feasible, and to avoid and minimize potential traffic congestion during project-related construction. The traffic control plan will outline the phasing of activities and the use of specific routes to and from the work site and borrow site locations to minimize the daily amount of traffic on individual roadways. This plan will be prepared in consultation with the City of West Sacramento and Yolo County. The items listed below will be included as terms of the construction contracts.

Comment YOLO-49:

Page 4.22-4	Mercury methylation impacts not addressed	The Draft EIS/EIR mentions the Delta Mercury TMDL but includes no analysis of the potential for the action alternatives to increase mercury methylation within the bypasses and Delta. The wetting of additional lands that will be placed within the bypasses with all of the action alternatives will directly contribute to this impact. The Final EIS/EIR needs to include some analysis on how the action alternatives could affect mercury methylation and whether implementation of the project would make it more difficult to achieve the Delta Mercury TMDL.	YOLO-49
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Response YOLO-49:

Cache Creek is the major source of mercury to Yolo Bypass and the Delta. The creek has its mouth at the Yolo Bypass a short distance upstream of the project site, and mercury from the creek moves through the Yolo Bypass to reach the Delta.

Areas within the Yolo Bypass are inundated only occasionally and exposed to the atmosphere for at least part of the year. These alternating wet and dry periods are conducive to the formation of methylmercury. The Yolo Bypass essentially acts as a seasonal wetland, with periodic flows of shallow, slow-moving water over vegetated soils.

Mercury is mainly transported bound to sediment particles, and the amount of sediment in water entering the bypass is a critical determinant of the load of mercury. The highest sediment loads typically occur during periods of high runoff when floodwaters are entering the Yolo Bypass. When flood-conditions are not present, concentrations of sediment-bound contaminants such as mercury would be lower. The proposed project would not affect operations of the Fremont or Sacramento weirs (i.e., would

not change the volume or timing of floodwaters entering the bypass) and would not change operations of the Cache Creek Settling Basin where most mercury in the Yolo Bypass originates. Thus, the project would not change the sediment load coming into the bypass, and subsequently would not change the total amount of sediment-bound mercury entering the Yolo Bypass.

Theoretically, mercury methylation could increase due to seasonal inundation of slightly larger areas within the Yolo Bypass, although the additional area inundated by flood flows with the project would be equivalent to approximately 3-4% of the total Yolo Bypass area and would be wetted only during short periods of time during high flows. However, it is more likely that methylmercury production would not increase, since the total load of mercury entering the Yolo Bypass in sediment-laden floodwaters would not be affected by project construction or operation, and the frequency of alternating wet and dry periods conducive to methylation would not increase. Because the total inflow of sediment-bound mercury carried by floodwaters from the Sacramento River and Cache Creek into the Yolo Bypass would not be increased by the proposed project and the project would not increase the frequency of wet/dry cycles, methylmercury concentrations would likely remain similar to existing conditions, with the main impact being expansion of the area in which mercury methylation could potentially occur.

In compliance with the Delta Mercury Control Program and the monitoring provisions of the Total Maximum Daily Load (TMDL), DWR is conducting a tidal wetlands methylmercury study and an open water habitat study in conjunction with the Open Water Workgroup. Reports from these studies are due in December 2019. The tidal wetlands study is assessing methylmercury concentrations and loads in existing tidal wetlands to inform planning for future tidal wetland restorations. The open water habitat study combines field data, laboratory work, and modeling in the Delta and Yolo Bypass regions to evaluate the potential effects of operational changes on mercury cycling and methylmercury in Delta channels. Additionally, DWR is conducting a number of field and laboratory studies in the Cache Creek Settling Basin and the Yolo Bypass to provide information for the Yolo Bypass Dynamic Mercury Cycling Model that is being developed to fulfill Phase 1 open water requirements of the Delta Mercury Control Program. DWR has also already completed the sampling of one small wetland in the Bypass (at the confluence of Putah Creek and the Toe Drain) as part of a multiple wetland study to determine if tidal wetlands are sources or sinks for mercury and methylmercury in the Delta.

In the absence of more and higher-quality data (which are being collected as part of the Delta Mercury Control Program), determining the direction and magnitude of changes in methylmercury production in the Yolo Bypass based solely on the anticipated changes associated with implementation of the proposed project is difficult and highly speculative. As described previously, mercury levels in the Yolo Bypass are driven mainly by the transport of sediment-bound mercury in floodwaters from the Sacramento River and Cache Creek and these flows will not increase in frequency or volume due to the project. Additionally, the project will not increase the frequency of wetting and drying of soils in the bypass or create a substantial increase in inundated area. Information has been added to Section 4.22, "Water Quality" (page 4.22-7) to address this comment.

Comment YOLO-50:

Page 5-29	Future Condition clarification needed	Several projects are listed in this section as being part of the Future conditions that were not described in Section 4.14, Hydrology, Hydraulics and Flood Risk Management, as being part of the Future conditions. For example, the Folsom Dam Raise is included in Chapter 5, but not described in the text on page 4.14-6. The Final EIS/EIR needs to clarify the assumptions used to develop the Future conditions and ensure those assumptions are consistent throughout the document.
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YOLO-50

Response YOLO-50:

See response to Comment LSDN-7.

Comment YOLO-51:

Generally	Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project	Throughout the document, little attention is given to the potential for cumulative effects of the construction and operation of the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project. The potential for cumulative effects of this project and LEBLS needs to be augmented substantially, including in the following specific areas: <ul style="list-style-type: none"> • Cumulative construction impacts need to be fully evaluated, including but not limited to impacts in the areas of noise, air quality, and transportation. Both projects appear to be on roughly the same construction timeframe (starting in approximately 2020 per p. 4-1.7 (LBELS Draft EIS/EIR) and the discussion in various
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YOLO-51

		sections of Chapter 2 of the Salmonid Habitat Restoration EIS/EIR). The omission of this analysis is a significant flaw in the Draft EIS/EIR.
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cont. YOLO-51

Response YOLO-51:

The comment specifically identifies cumulative air quality, noise, and traffic impacts as being of concern. The air quality analyses provided in the EIS/EIR are based on regional modeling and compliance with regional planning efforts and standards. The discussion of cumulative air quality impacts on pages 5-39 and 5-40 of the EIS/EIR includes a list of projects which would be constructed around the time of construction of the proposed project, and identifies the environmental commitments included in all of those projects which require emission reductions below levels to cause a significant cumulative effect. In response to this comment, text on page 5-40 has been edited to include the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project as the second-to-last bullet in the bullet list, as shown below:

2020/2021 – Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project.

The existing analysis in this section remains valid with the inclusion of this additional construction project in the list.

With respect to noise and traffic impacts, the only overlap in the construction traffic routes identified for the two projects is at Exit 531 from Interstate 5, including the immediately adjacent segments of CR-22 and CR-118. As described in the cumulative noise analysis on page 5-56 and the cumulative traffic impact on page 5-58, the preparation and implementation of traffic management plans for the project (in consultation with Yolo County) is expected to avoid significant cumulative impacts related to traffic or traffic noise.

Comment YOLO-52:

		<ul style="list-style-type: none"> Hydraulic modeling for LBELS within the Yolo Bypass needs to include the Salmonid Habitat Restoration project for the purpose of an accurate analysis of cumulative hydraulic conditions. Understanding how the construction and operation of both projects will affect Bypass hydrology is important for several reasons, including the need to ensure both projects operate as intended and do not have any unanticipated consequences for flood conveyance. It is difficult to understand why, as indicated on p. 5-15, this modeling has not been performed. And as noted on p. 5-52, the potential for such effects is evidenced by the discussion of how LBELS will modify existing drainage patterns at and near the project site. Necessarily, the operation of the Salmonid Habitat Restoration project will be affected as a result. 	YOLO-52
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Response YOLO-52:

The Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project would increase the duration of water flow through the Yolo Bypass by increasing non-peak flows. The proposed project would provide additional capacity to convey peak flows, reducing stage during these times. By increasing the area of floodplain in the Yolo Bypass, the proposed project would potentially reduce stages slightly, reducing the length of time that areas of the bypass would be “wet” after implementation of the Yolo Bypass Salmonid Habitat Restoration Project. However, the comment does not identify any impact that the commenter believes would be more severe or cumulatively significant when considering the effects of both projects together, and no additional hydraulic modeling or change to the EIS/EIR is proposed in response to this comment.

Comment YOLO-53:

		<ul style="list-style-type: none"> • Cumulative effects on agricultural resources, including agricultural economics (discussed in Section 5.13.18), need to be analyzed and described more comprehensively. The current discussion of cumulative agricultural conversion and related economic impacts notes that by itself, the LBELS project will cause significant and unavoidable revenue losses due to the loss of farmland and shifts to lower-value crops on land brought within the expanded Bypass (p. 5-58). The following paragraph summarily concludes that “at least some other projects . . . would also likely contribute to the loss of agricultural productivity,” resulting in a “cumulatively considerable incremental contribution to this significant cumulative effect.” Much more detail is needed for a proper presentation and analysis of this issue. 	YOLO-53
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Response YOLO-53:

The EIS/EIR provides substantial evidence to support the conclusion that the proposed project would make a cumulatively considerable incremental contribution to a significant cumulative effect related to agricultural conversion and agricultural revenue losses. It is unclear what additional detail is requested, or how the commenter believes that this additional detail would alter the conclusion of the EIS/EIR. The EIS/EIR incorporates all feasible mitigation measures to reduce or avoid agricultural effects, as identified in Section 4.15, “Land Use and Planning, and Agricultural and Forestry Resources.”

Comment YOLO-54:

Page G-5	Definitions of project conditions inconsistent	The definition of what is in the existing condition and the No Action condition is inconsistent in this section. All authorized projects should be in the No Action condition, which would include the Sacramento Weir and Bypass widening and the Folsom Dam Raise. NEPA has been completed for these projects and they have been authorized by Congress. At a minimum, both projects should be modeled the same. A bigger	YOLO-54
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		<p>concern, and what is not presented in the document is displaying to the public and flood managers how the cumulative effects of implementation of actions since the passage of Proposition 1E perform together as a system of improvements. Regardless of what it's called, a profile of the conditions that existed in 2006 should be provided and then the subsequent actions should be modeled cumulatively. As presented, the With Project and Future With Project conditions show an increase in water surface in the Yolo Bypass and the reader cannot easily tell how the improvements at Folsom Dam offset this increase. While this type of analysis may not easily fit into NEPA and CEQA categories, it is relevant from a Rivers and Harbors Act Section 408 and Central Valley Flood Protection Board (CVFPB) standpoint to understand how implementation of the Central Valley Flood Protection Plan (CVFPP) performs as a system being implemented in increments compared to a baseline that should be based on conditions that existed prior to implementation of the projects that occurred after passage of Proposition 1E and adoption of the CVFPP. This type of analysis is what was adopted by the U.S. Army Corps of Engineers and CVFPB in the "Ground Rules" for the Section 408 permissions associated with the large urban improvement projects that were implemented after passage of Proposition 1E.</p>	<p>cont. YOLO-54</p>
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Response YOLO-54:

See response to Comment LSDN-4.

Comment YOLO-55:

Page H-3	Sensitivity analysis needed to justify annual flood loss estimates	<p>The description of the expected annual flood losses states that crops to be located on the water side of the proposed levee setback will be subject to more frequent flooding within the Yolo Bypass, which may delay planting and reduce yields and crop revenue. It further explains that these flood losses are a function of crop type, planting window, and last date wet assumptions but then states on page H-6 that a 10 percent reduction in yield due to late rice planting is used to calculate impacts. The selection of this percentage is arbitrary and detracts from the credibility of results and the input for IMPLAN. The hydrologic history of the bypasses is well known and DWR has conducted detailed analysis on this topic in developing the Yolo Bypass Salmonid Fish Restoration and Fish Passage Project. In addition, Yolo County prepared a detailed study on this specific topic in April 2013 (Agricultural and Economic Impacts of the Yolo Bypass Fish Habitat Proposals, Howitt et al.). The Final EIS/EIR needs to, at a minimum, conduct a sensitivity analysis to determine how</p>	<p>YOLO-55</p>
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		<p>different reduced-yield assumptions would affect the impact conclusions.</p>	<p>cont. YOLO-55</p>
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Response YOLO-55:

The annual yield reduction should be based on simulated hydrologic conditions over multiple periods to better predict annual flood losses. See response to Comment Yolo-42.

Comment YOLO-56:

Page H-4	Data consistency needed	The data sources for employment from the cost and return studies may differ from those in IMPLAN. The same applies for crop expected damage and annual flood losses in crop revenues with respect to the Yolo County Agricultural Crop Reports. The inconsistencies in these sources might affect the calculations of economic impacts. The Final EIS/EIR should discuss potential biases in the use of these data sources.	YOLO-56
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Response YOLO-56:

Because of the different impacts evaluated in this analysis, many data sources (Federal, State, county, and local) have been used. However, it is recognized that there will likely be inconsistencies in these data sources when applied to a specific study area such as the Lower Elkhorn Basin. Where significant inconsistencies are expected to occur, they have been identified in the analysis, including employment and property tax impacts derived from IMPLAN vs. county information. Additional information describing the LEBLS impact analysis data sources has been added to Appendix H on page H-4 as a new Section 3.3, as follows:

3.3 Data Sources

The data sources underlying the estimation of the primary and secondary impacts described above are very diverse and are derived from local, state, and/or national sources. For example:

- Historical crop acreages were derived from DWR Yolo County land use surveys over several years. However, the 2020 crop projections were estimated after discussions with growers in the study area. Growers were asked about crop yield, price, and employment information, but they recommended using Yolo County crop reports and UC Cooperative Extension crop budgets.
- The Yolo County crop reports annually collect acreage and prices received information from countywide growers and other local sources.
- The UC Cooperative Extension crop budgets are for regions within the State (e.g. Sacramento Valley) or individual counties, depending upon the crop. These crop budgets are based on hypothetical farm operations, production practices, overhead, employment, etc., and calculations relevant for the crop and region are developed for specified base years. Most crop budgets used for this analysis are for the Sacramento Valley for different base years.
- The crop expected annual flood damage/acre estimates described in HAV are based (in part) on information from crop budgets within the entire Central Valley for specified

crops. Monthly flood frequency information was developed by the US Army Corps of Engineers Sacramento District.

- IMPLAN’s data sets are constructed annually from national, state, and county sources. For example, for employment data, the Bureau of Labor Statistics Quarterly Census of Employment and Wages (CEW) data provide county-level industry structure for the IMPLAN database. However, because much farm employment is self-employment, CEW data has limited farm coverage.

Because of the different impacts evaluated in this analysis, all of the above data sources have been used. However, it is recognized that there will be inconsistencies in these data sources when applied to a specific study area such as the Lower Basin and where significant potential inconsistencies are expected to occur they are identified in the analysis. Two of these potential inconsistencies include employment and property tax impacts described below.

Comment YOLO-57:

Page H-4	Better information needed regarding flood damage calculation assumptions	The description of crop expected annual flood losses in the 3 rd bullet on this page indicates that the flood losses are based on published information (crop budgets, presumably from UC Extension Budgets, and Howitt et al. [2013]). On page H-6 of the report it is stated that a 10 percent reduction in yield would be expected due to late rice planting. However, there is no reported connection between the published reports and the 10 percent reduction in yield assumption. This raises the concern that the results are ‘speculative’ given no substantiation is provided for the 10 percent assumption. The Final EIS/EIR needs to provide clear guidance on how this 10% is derived. Alternatively, a projection of flood risk over time based on historical data needs to be developed and then simulated over multiple periods to better predict annual flood losses.	YOLO-57
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Response YOLO-57:

See response to Comment Yolo-42.

Comment YOLO-58:

Page H-4	Better description of secondary economic impacts needed	The description of secondary economic impacts could give the false notion that downstream sectors such as processing are included in the analysis. Indirect effects from crop revenue losses do not include the effects of shipping its products to markets or other firms for future processing. This is a forward linkage and not a standard analysis in IMPLAN. This description should be revised in the Final EIS/EIR to avoid mischaracterization.	YOLO-58
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Response YOLO-58:

The wording describing secondary economic impacts in Appendix H has been revised to indicate that for indirect effects, IMPLAN does not estimate the impacts of firms shipping their products to other firms for final processing (forward linking effects) Text on page H-4 has been edited as follows in Section 3.2, “Secondary Economic Impacts:”

- Indirect effects. Indirect effects are the interindustry linkages resulting from a firm (i) purchasing inputs to produce its products (backward linking effects) and (ii) then shipping its products to markets or to other firms for further processing (forward linking effects). Examples of interindustry effects in an agricultural economy include the purchases of farm products (e.g., seed and fertilizer) required to grow the crops and expenditures by mills to process the farm products for final consumption.
- Induced effects. Induced effects occur when employees and business proprietors spend their income (e.g., wages and profits) in other businesses in the region (e.g., going out to a restaurant).
- Total effects. Total effects are the sum of the direct, indirect, and induced effects.

An input-output (I/O) analysis is used to evaluate secondary economic impacts and IMPLAN is a recognized model for conducting these analyses. For the Lower Basin analysis a subscription was purchased for on-line access to a Yolo County 2015 IMPLAN model. For each of the effects described above (except indirect forward linking effects), IMPLAN estimates output, value added, and employment effects.

Comment YOLO-59:

Page H-5	Sources for 2020 projection needed	The existing conditions are based on data and grower input. These conditions are then used to derive a baseline. However, it is unclear how the data and grower input are used to derive the 2020 projections, as there is no clear linkage between the data and the results. This lack of clarity reduces the credibility of the report results. The Final EIS/EIR should describe how the different sources were used to come up with the 2020 projection and how the data and grower input were obtained.	YOLO-59
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Response YOLO-59:

Historical cropping patterns from 2008 through 2016 were identified based on DWR land use surveys and other information. To develop the 2020 projections, DWR staff met with growers to (a) confirm the accuracy of the historical cropping patterns and make changes where necessary, and (b) discuss on a crop-by-crop basis where growers expected changes to occur from 2016 to 2020 based on expected future market and other conditions. A description of this process has been added to Appendix H and footnotes added to Tables 1 and 2 indicating that the 2020 conditions were developed based on grower input. Text on page H-6 under Section 4.2, “Future Conditions,” has been edited as follows:

Because project construction is scheduled for 2020, a likely without-project “future year” cropping pattern for 2020 was developed with grower input. Study staff met with growers to (a)

confirm the accuracy of the historical cropping patterns and make changes where necessary and (b) discuss on a crop-by-crop basis where growers expected changes to occur from 2016 to 2020 based on expected future market and other conditions. Table 1 also shows the projected 2020 Lower Basin summer cropping pattern and Table 2 shows projected Lower Basin winter land use for 2020. The 2020 cropping pattern will be the baseline used for comparison with the with-project conditions described below. Figure 3 shows changes in summer cropping patterns from 2014 through 2016 as well as projected changes to 2020. Between 2014 and 2020 there are expected increases of deciduous crops (primarily walnuts) and truck crops (primarily processing tomatoes) with expected decreases in grain and hay crops.

Comment YOLO-60:

Page H-5	Baseline concerns	The use of data from 2012 through 2016 to develop the baseline conditions could raise concerns over baseline cropping decisions made while California was enduring a multi-year drought. The Final EIS/EIR needs to discuss potential biases in the quantification of direct impacts from crop revenue losses as a result of using this baseline.	YOLO-60
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Response: YOLO-60

Although historical cropping patterns information was collected from 2008 through 2016, this information was not used as the baseline. Instead, grower input was obtained to understand how these historical cropping patterns might change for 2020 and revise those cropping patterns accordingly for the analysis 2020 baseline. Presumably the growers took into consideration not only potential changes in markets but also water supply conditions in recommending cropping pattern changes for 2020. See response to Comment Yolo-59.

Comment YOLO-61:

Page H-8	Text inconsistency	In the last sentence on this page, the text states that 22 acres would be converted to native habitat whereas on page H-7, the text states that 222 acres would be in native vegetation. The Final EIS/EIR needs to clarify this discrepancy and clarify if this conversion of agricultural land to native habitat was considered in the agricultural impact conclusions.	YOLO-61
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Response YOLO-61:

The comment correctly identifies a typographic error in the draft Appendix H. However, subsequent to the publication of the Draft EIS/EIR, DWR prepared an updated land use summary for Alternative 2 because of a smaller levee footprint. These changes resulted in a total of 264 acres in the Sacramento Bypass expansion area, of which 193 are currently in crops. However, land use summaries for Alternatives 3-5 were not updated, so the original estimate of 222 total acres is assumed for the Sacramento Bypass expansion area for those alternatives. Appendix H text and tables have been revised accordingly – please refer to Appendix H; due to the comprehensive edits to tables in this appendix,

changes are not shown here. As described in the response to Comment Yolo-40, the impact conclusions in the EIR consider the conversion of agricultural land to native habitat.

Comment YOLO-62:

Page H-9	Explanation needed regarding why two discount rates used	No explanation is provided for why two separate discount rates are used in the analysis, as referenced in the fourth paragraph on this page. The Final EIS/EIR should clarify why this approach was used and discuss any implications it has on the analysis.	YOLO-62

Response YOLO-62:

Two discount rates (3% and 6%) were used to show the sensitivity of the present value analysis to different discount rates. DWR has historically used a 6% discount rate but this is believed to be too high for current conditions. The California Water Commission (CWC) is currently using 3% for its Water Supply Implementation Program and USACE is currently using 2.75%. Text has been added to Appendix H stating that two discount rates are used for sensitivity analysis and the 3% discount rate is the recommended rate consistent with the CWC. Text on page H-12 of Appendix H has been edited as shown:

The present value of these annual net revenue impacts is shown in Table ~~4-16~~16. Present value was computed over a 50-year analysis period (2020-2070) using discount rates of 3% and 6% for a sensitivity analysis. However, the 3% discount rate is the recommended rate consistent with current California Water Commission use for the Water Supply Implementation Program. For Alternative 2, the present value with a 3% discount rate is about ~~\$11.9~~8.4 million, ~~and about \$7.3 million with a 6% discount rate.~~ Table ~~4-14~~14 also summarizes the primary annual employment impacts for each alternative. These were estimated using labor hours/acre estimates from UC Extension ~~Crop Budgets~~crop budgets for the various crops. These are expressed as the number of full-time jobs although it is recognized that agricultural employment is likely to include both full-time and part-time employees. The impacts range from -1.6 (Alternatives 5) to -7.0 (Alternative 3), with ~~-4.8~~3.6 for Alternative 2.

Comment YOLO-63:

Page H-9	Sensitivity analysis needed	The impact analysis should include a sensitivity analysis to determine how changes in assumptions would affect the impact conclusions reported in the last paragraph on this page.	YOLO-63

Response YOLO-63:

Many assumptions underlie this analysis, including but not limited to projected 2020 cropping patterns, historical yields and prices on a crop-by-crop basis, crop flood damage per acre estimates, crop yield percent reductions, and discount rates. To do sensitivity analysis on all of these assumptions would be an extensive process, especially given the number of permutations of assumptions paired with different assumptions (for example, changes in prices vs. yields). Thus, the sensitivity analysis has been limited to the 10% yield reduction and discount rates. The comment does not identify any specific additional

sensitivity analyses that should be conducted, or offer information indicating that the existing assumptions are not valid. Also see response to Comment Yolo-42.

Comment YOLO-64:

Page H-10	Sources needed	The land side market values are presented in the third bullet on this page without identifying the source for these values or whether these represent land prices. Mention is made that these prices may be different from assessed value. The Final EIS/EIR should clearly identify the land value sources and assessed values.	YOLO-64
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Response YOLO-64:

In response to this comment, DWR revised the property tax impact estimates using assessed values provided by Yolo County. The text and tables in Appendix H have been revised accordingly. Please refer to Appendix H; due to the comprehensive edits to tables in this appendix, changes are not shown here.

Comment YOLO-65:

Page H-15	Improved clarity needed	The presentation of results on this page is confusing. The conclusions included in the Final EIS/EIR should be rewritten to improve clarity.	YOLO-65
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Response YOLO-65:

The referenced conclusions discussion on page H-15 of Appendix H has been comprehensively rewritten for clarity in response to this comment. The new text is shown below:

This agricultural economic impact analysis evaluates the primary and secondary annual agricultural economic impacts resulting from changes in agricultural land use (crops) caused by proposed levee setbacks along the Yolo Bypass and Sacramento Bypass (north levee) in the Lower Basin. Some crops currently protected by the existing Yolo Bypass levee would be located inside the Yolo Bypass and subject to more frequent flooding because of the levee setback. It is anticipated that these crops would be converted to a different crop (rice) compatible with more frequent flooding. Existing crops within the Sacramento Bypass would be converted to native habitat (about 193 acres for Alternative 2). The remaining crops behind both levee setbacks would have improved flood protection. Finally, some crops would be displaced by the proposed levee setback footprints (about 249 total acres for Alternative 2). Thus, for Alternative 2, a total of 442 crop acres would be removed from production.

The primary (direct) average annual total crop revenue impacts range from about -\$1.1 million (Alternatives 2 and 5) to about -\$2.0 million (Alternative 3) in 2016 dollars. The associated primary (direct) average annual net crop revenue impacts range from about -\$479.8 thousand (Alternative 3) to about -\$324.7 thousand (Alternative 2). Alternative 2 is the preferred alternative and its lower average annual net crop revenue impact reflects a more refined analysis of the levee footprint resulting in a smaller footprint and associated impacts than estimated in the

DEIR/DEIS (-\$464.1 thousand). This more refined analysis of levee footprints was not done for Alternatives 3-5.

The range of net crop revenue impacts includes an assumed average annual yield reduction of 10% for the rice that is expected to be planted within the Yolo Bypass and therefore subject to more frequent flooding. For Alternative 2, a sensitivity analysis was done to evaluate a range of average annual rice yield reductions—0, 10, 20, 30, 40, and 50%. The resulting range of average annual net crop revenue impacts for Alternative 2 is about -\$307.5 thousand (0% average annual rice yield reduction) to -\$393.6 thousand (50% average annual rice yield reduction). With the 10% average annual rice yield reduction the average annual net crop revenue impact is about -\$324.7 thousand. For Alternative 2, the present value of the average annual net crop revenue impact over a 50-year analysis period (2020-2070) with a 3% discount rate is about -\$8.4 million.

For comparison, the total gross value of Yolo County 2015 agricultural production was about \$661.8 million. The average annual total crop revenue impact for Alternative 2 is about \$1.1 million, or about 0.2% of the total 2015 county agricultural production, which does not appear to be a significant annual impact from a countywide perspective.

Secondary “ripple” economic impacts were also estimated. These are the changes in values that accrue to persons other than those primarily affected by the project (i.e., the growers), including indirect (interindustry linkages), induced (household spending), and total (direct, indirect, and induced) effects which were estimated using a Yolo County 2015 IMPLAN model. Based on the average annual total crop revenue (output) impacts described above, IMPLAN estimates the annual indirect, induced, and total impacts for output (gross revenue), value added (the difference between the value of goods produced and the cost of materials and supplies used in producing them), and employment. For Alternative 2, the annual total output impact (direct, indirect, and induced) is about -\$1.8 million. However, value added is the preferred metric because it excludes the costs of intermediary products used in production but it includes employee compensation, proprietor income, and taxes on production and imports. For Alternative 2, the total (direct, indirect, and induced) annual value-added effect is about -\$1.0 million.

Included in the value-added impacts are changes in local taxes such as county production-related sales taxes and property taxes. The total (direct, indirect, and induced) production-related annual tax effect is about -\$2.9 thousand, including about -\$2.2 thousand in property taxes. However, changes in property taxes were also estimated outside of IMPLAN using specific project information regarding loss of crop acreages resulting from the levee footprints, Sacramento Bypass expansion, and changes in crop types and assessed values on the water side of the new Yolo Bypass levee setback. Using this method, the estimated annual property tax impact is about -\$27.3 thousand for Alternative 2.

Other impacts (benefits) associated with the levee setback were qualitatively described, including impacts resulting from construction expenditures within the county, consolidated number of reclamation districts, reduced long-term OMRR&R costs, improved non-agricultural flood protection inside and outside the Lower Basin, improved roads and traffic flow patterns within the Lower Basin, remediated operation of the Bryte landfill, and potential for recreation and ecosystem restoration opportunities at the project site.

Comment YOLO-66:

Page H-15	Better explanation of revenue losses needed	The Final EIS/EIR should explain what causes the additional losses in net crop revenue impact seen under Alternative 2 other than from the levee footprint. The Final EIS/EIR should specifically clarify what caused the difference between the -\$464,074 overall net revenue impact and the -\$253,813 for the levee footprint under Alternative 2.	YOLO-66
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Response YOLO-66:

The comment identifies an error in the computation in the draft Appendix H, because the crops removed within the Sacramento Bypass expansion area were excluded. Including these crops results in a negative revenue impact of approximately \$379,000. However, this is offset by the improved land side flood damage reduction benefits (approximately \$95,000) resulting in a negative net revenue impact of approximately \$284,000 attributable to the levee foot prints and Sacramento Bypass expansion area. In addition, approximately \$40,000 is attributable to the change to rice on the water side within the Yolo Bypass including the reduced yield. Thus, the overall net revenue impact for Alternative 2 has been revised to -\$324,721 because of the smaller levee footprints. The results presented in the Final EIS/EIR are described in more detail in the response to Comment Yolo-40. Please also refer to Appendix H for changes; due to the comprehensive edits to tables in this appendix, changes are not shown here.

Comment YOLO-67:

Page H-15 and H-17	Better referencing and listing of	The presentation of results of the impact analysis has poor referencing and listing of assumptions and databases employed. This undermines replicability of the study and transparency.	YOLO-67
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	assumptions needed	IMPLAN databases and estimated multipliers can change from year to year. Also, the matching between crop categories in the analysis and crop sectors in IMPLAN can make a difference in the results. Assumptions regarding the connections between the estimated changes in crop revenues and IMPLAN sectors should be discussed. Also, the IMPLAN database employed and any customizations should be listed or described in the Final EIS/EIR for improved clarity. Providing brackets for these impacts would be beneficial and improve transparency in the robustness of results.	cont. YOLO-67
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Response YOLO-67:

DWR’s analysis used the IMPLAN Industry Sector 10 (All Other Crop Farming). DWR used the change in the change in agricultural total output to run IMPLAN. The change in agricultural total output is a net analysis between crops being displaced by the project (i.e., field, grain, truck, and deciduous crops) and those being added by the project (i.e., rice). IMPLAN has other crop industry sectors (for example Sector 2, Grain; Sector 3, Vegetable and Melon Farming; and Sector 5, Tree Nut Farming) that could be used as separate inputs in the analysis, but a separate sector for rice was not available. Thus, a more customized individual crop sector analysis could not be completed and the IMPLAN analysis was conducted using the All Other Crop Farming sector. Although the commenter suggests providing

brackets for results, DWR’s sensitivity analysis includes the 10% yield reduction assumption and discount rates. See responses to Comments Yolo-56 and Yolo-63.

Comment YOLO-68:

Page H-18	Better explanation of future crop assumptions needed	Table 1 shows noticeably different numbers for 2020 projections than seen in prior years. The Final EIS/EIR should explain this discrepancy.	YOLO-68
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Response YOLO-68:

See response to Comment Yolo-59. Also, as described in the response to Comment Yolo-40, the land use for Alternative 2 was updated to reflect smaller levee footprints. In addition, the study area boundary changed slightly as the existing Yolo Bypass levee footprint was added. This resulted in a change in the total study area acreage from 5,874 to 6,018 acres which was then used through 2020. However, the 2008 land use estimates were not updated, and instead were deleted from Table 1 to avoid confusion. This change does not affect the results of the analysis. Please refer to Appendix H; due to the comprehensive edits to tables in this appendix, changes are not shown here.

Comment YOLO-69:

Page H-20	Better explanation of future crop assumptions needed	Table 2 shows noticeably different numbers for 2020 projections than seen in prior years. The Final EIS/EIR should explain this discrepancy.	YOLO-69
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Response YOLO-69:

See responses to Comments Yolo-59 and Yolo-68.

Comment YOLO-70:

Page H-27	Table inconsistencies	Table 7 lists an average damages for field crops that is larger than each of the average individual field crops listed. It also appears to use an un-weighted average for truck crops. The workbook shows line item data for corn in field crops that would explain averages seen in Table 7. Furthermore, these averages are not weighted by acreage and thus the averages are not reflective of a representative acre. The Final EIS/EIR should clarify these issues.	YOLO-70
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Response YOLO-70:

As identified by the commenter, the simple average for field crops incorrectly included corn which is not currently (2016) grown in the Lower Elkhorn Basin. DWR has therefore removed it from the calculation. The simple averages have been recomputed as weighted averages based on crops for which average damage per acre estimates are available in each crop category. The weighted average is

then used for other crops in each crop category for which average damage per acre estimates are not available.

Comment YOLO-71:

Page H-28	Better information needed regarding flood damage calculation assumptions	The flood damage calculation is not obvious from the information included in Table 8. It should be clear how the change in flood risk corresponds to the values seen in Table 8. Further, the calculation of average flood damage is questionable. There are missing observations and the simple averages are not adequate to capture the distributional aspect of the crop choices. Insufficient information on how flood damage is calculated introduces uncertainty into the report's results. The use of simple averages are not appropriate and underestimate the impact of flooding. The Final EIS/EIR needs to illustrate how calculations in Table 8 are derived.	YOLO-71
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Response YOLO-71:

Tables 8 and 9 have been added to Appendix H to show how the without-and with project flood damages are computed using weighted averages for missing crop damage/acre values as described in Comment YOLO-70. Please refer to Appendix H; due to the comprehensive edits to tables in this appendix, changes are not shown here.

Comment YOLO-72:

Page H-30	Table difficult to interpret	The numbers presented in Table 12 are difficult to interpret give that the columns do not add up. The Final EIS/EIR should	YOLO-72
		provide an explanation of the number sources and the table results.	cont. YOLO-72

Response YOLO-72:

Text in Table 12 (now Table 14) displays for each alternative the changes in direct annual economic effects between without- and with-project conditions. These are the values from Tables 10-13 Annual Impacts columns. An example explanation for the Alternative 2 results has been added to Appendix H on page H-11:

Table 14 summarizes the primary (direct) annual economic impacts for all alternatives. For example, for Alternative 2, the annual total crop revenue impact is -\$1,124,934, which is the difference between the without-and with-project conditions shown in Table 10. Subtracted from this are the changes in operating annual costs, expected annual land side flood damages, and expected annual losses caused by delayed planting on the water side (which is a positive number because these costs did not occur in the without-project condition). Flood damages and flood losses are treated the same as operational expenses to grow the crops. After deducting all changes in operational costs from changes in total annual crop revenues, the change (i.e. impact) in annual net crop revenue is derived. The annual net annual-crop revenue impacts range from about \$460,734-458,279 (Alternative 5) to about \$482,315-324,721 (Alternative 32). However,

the levee footprint for Alternative 2 has recently been re-evaluated resulting in a smaller total footprint (249 total acres vs 492 total acres previously estimated). This re-evaluation has not been done for Alternatives 3-5.

Comment YOLO-73:

Page H-33	Justification for approach needed	Table 20 uses a single land value for field crops based on LEBLS team assumptions. However, the land values may not be representative of the crops grown on the properties. The Final EIS/EIR should explain why this approach is appropriate.	YOLO-73
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Response YOLO-73:

See response to Comment Yolo-64.

Comment YOLO-74:

Page H-37	Consistency needed between tables and figure	Figure 3 shows growth in acreage in 2020 yet Tables 1 and 2 do not show that same growth. The Final EIS/EIR needs to explain the growth in total acreage identified in Table 3.	YOLO-74
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Response YOLO-74:

The commenter identifies an error on Figure 3 in the 2020 grain and hay crop category, which previously included summer and winter acres. Figure 3 has been revised to include only summer grain and hay acres.

WS City of West Sacramento

Comment WS-1:

1. Prior to the use of any City of West Sacramento street by trucks involved in the project, the City shall be notified and appropriate mitigation negotiated and agreed to by DWR and the City. WS-1

Response WS-1:

Mitigation Measure TR-1 requires that DWR assess pre- and postconstruction roadway conditions and repair project-related damage. As shown in the response to Comment Yolo-48, text in the first paragraph of Mitigation Measure TR-1 (on page 4.20-8) has been modified to include consultation with the City of West Sacramento in preparing the plan.

Comment WS-2:

2. No hazardous wastes shall be hauled on City of West Sacramento streets without prior written authorization by the City. WS-2

Response WS-2:

As described in Section 4.13, “Hazards and Hazardous Materials,” construction of the project would occur in compliance with applicable laws and regulations governing hazardous materials handling.

MBK MBK Engineers

Comment MBK-1:

We are reviewing the hydraulics section in the EIR/EIS. Could we get the HEC-RAS model input/output for the 100- and 200-year events for EWP,FWOP, FWP for Alternative 2?

MBK-1

Response MBK-1:

DWR provided the requested hydraulic data to the commenter, and the data are available to others upon request.

CPG Conaway Preservation Group

Comment CPG-1:

RE: Lower Elkhorn Basin Levee Setback Project Draft Environmental Impact Report/Environmental Impact Statement

Dear Ms. Toland and Ms. Brehmer,

The following comments on the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the proposed Lower Elkhorn Basin Levee Setback (LEBLS) Project are submitted on behalf of Conaway Preservation Group, LLC (CPG).

CPG owns Conaway Ranch, located in Yolo County, consisting of approximately 17,000 acres. Approximately 60% of Conaway Ranch is protected from flooding by the west levee of the Yolo Bypass. The remaining land is within the Yolo Bypass. Because of CPG’s unique position in relation to the Sacramento River Flood Control Project, we are concerned with your proposed LEBLS.

The DEIR/EIS for the LEBLS proposes to increase the carrying capacity of the Yolo Bypass and Sacramento Bypass, yet it finds there will be no impact to agricultural production, that the LEBLS will not affect the flood flow frequency, will not affect the duration of inundation, will not affect the stage of inundation, and will not adversely affect the west levee of the Yolo Bypass.

From CPG’s perspective, we must rely on your conclusions. But if your change to the Sacramento River Flood Control Project results in future damage to CPG’s land, business, or works that protect it, or results in an overburdening of existing easements, we will be forced to take all actions necessary to protect our rights, including but not limited to, pursuing an action in inverse condemnation.

If you have any questions or comments or would like to discuss this matter further please do not hesitate to contact me.

CPG-1

Response CPG-1:

The commenter identifies concerns related to the potential of the project to affect agricultural production, flood flow frequency, duration and stage of Yolo Bypass inundation, and the west levee of

the Yolo Bypass. Impact HH-1 in Section 4.14, “Hydrology, Hydraulics, and Flood Risk Management,” discusses future flood stage in the Yolo Bypass with implementation of the project and concludes that the impact would be beneficial. Impact HH-3 considers the frequency and stage of Yolo Bypass inundation and concludes that the impact would be less than significant. These conclusions are supported by hydraulic modeling conducted by DWR and documented in Appendix G, “Lower Elkhorn Basin Levee Setback Project Hydraulic Impact Analysis (Draft).” The duration of Yolo Bypass inundation and potential effects on agricultural production are discussed in Impact SOCIO-2 in Section 4.19, “Socioeconomics.” The comment does accept the conclusions of the EIS/EIR and does not raise any issue related to the adequacy of the environmental analysis provided in the EIS/EIR. No changes to the EIS/EIR document are proposed in response to the comment.

**Appendix L. Revisions to the Draft Environmental
Impact Statement/Environmental Impact
Report**

Introduction

This appendix presents corrections and revisions made to the proposed project's Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) based on public comments and further design by DWR staff. This appendix does not identify administrative changes to the DEIS/DEIR text which do not affect the analysis contained in the DEIS/DEIR (for example, updates to the public review process). New text is indicated with an underline and text to be deleted is reflected by a ~~strike through~~. Text changes are presented in the page order in which they appear in the DEIS/DEIR.

The changes identified below are clarifications or amplification of the information and analysis contained in the DEIS/DEIR. None of the changes identified below results in a significant impact that was not already identified in the DEIS/DEIR. Furthermore, none of the impacts identified in the DEIS/DEIR were found to be substantially more severe as the result of the following changes. For these reasons, recirculation of the DEIS/DEIR is not warranted.

Executive Summary

Page ES-3, the fourth bullet from the top is revised to read:

- Identify potential locations for improving ecosystem functions and ~~contributing to~~ implement improvements to contribute to meeting Central Valley Flood System Conservation Strategy (CVFSCS) objectives, consistent with CVFPP goals, while still meeting river stage and bypass conveyance goals.

Page ES-5, a new bullet is added following the first bullet in Section ES.4, "Areas of Known Controversy:"

- The type and location of habitat restoration that would occur as part of the project. As described in Chapter 3, "Alternatives," the project includes creation of sufficient habitat to mitigate project impacts, and additional restoration opportunities are also described to streamline later approvals. The type and location of mitigation that would be constructed as part of the project will be determined during Section 7 consultation with USFWS and related consultation with CDFW.

Page ES-19, on Table ES-4, the significance before mitigation for FISH-5 (Increases in Aquatic Habitat Associated with Expanded Floodplain Area) has been changed from B, "beneficial," to PB, "potentially beneficial."

Chapter 1. Introduction

Page 1-11, a new bullet is added following the first bullet in Section 1.6, "Areas of Known Controversy:"

- The type and location of habitat restoration that would occur as part of the project. As described in Chapter 3, "Alternatives," the project includes creation of sufficient habitat to mitigate project impacts, and additional restoration opportunities are also described to streamline later approvals. The type and location of mitigation that would be constructed as part of the project will be determined during Section 7 consultation with USFWS and related consultation with CDFW.

Chapter 2. Statement of Purpose and Need, and Project Objectives

Page 2-2, fifth bullet from the bottom is revised to read:

- Identify potential locations for improving ecosystem functions and ~~contributing~~ implement improvements to contribute to meeting Central Valley Flood System Conservation Strategy (CVFSCS) objectives, consistent with CVFPP goals, while still meeting river stage and bypass conveyance goals.

Chapter 3. Alternatives

Page 3-6, the final paragraph is deleted.

~~Because funding for the ARCF GRR has not been appropriated, and implementation of the ARCF GRR features on the LEBLS project site (Sacramento Weir widening and Sacramento Bypass North Levee setback) would likely occur later than other improvements included in the ARCF GRR (and so would not be in place at the time the LEBLS project was implemented), the ARCF GRR has not been included in the No Action Alternative for the LEBLS project.~~

Page 3-14, paragraph under “Yolo Bypass East Levee” is revised to read:

As mentioned previously, segments of the Yolo Bypass East Levee would be left in place in Alternatives 2 and 4 to act as upland ~~refugia habitat for various sensitive and target species~~. The existing levee is approximately 25 feet high, and approximately 220 feet wide at the base, with a crown width of approximately 20 feet, and 2H:1V to 4H:1V waterside and landside slopes. Segments would be spaced approximately 2,500 feet apart, and

Page 3-18, the last paragraph is revised to read:

Insufficient embankment protection may cause a levee to be undermined by erosive forces due to wave action and/or high-flow velocities along the levee bank. In many cases, the placement of embankment protection material on the waterside levee slope or on remnant levees, such as engineered armoring (riprap), would dissipate wave and velocity forces and reduce the potential for erosion to occur. Rock, or another acceptable alternative (e.g., buried rock, articulated concrete blocks, pyramat) may be required to be placed along the waterside levee slopes to protect against erosional forces that could threaten levee stability. Similar to the existing Sacramento Bypass North Levee, a portion of the setback Sacramento Bypass North Levee would be concrete-lined due to high velocities directly downstream of the Sacramento Weir. The linear footage of engineered armoring on the waterside of the new setback levees would vary depending on the alternative. In addition, a portion of the Sacramento Bypass South Levee, referred to as the “Sacramento Bypass Training Levee,” would require erosion protection, likely engineered armoring, in all action alternatives. The landside of the new levee would be subject to rainfall and minor sheet flow.

Page 3-19, the last paragraph is revised to read:

A 20-foot-wide permanent O&M access corridor would be established adjacent to the landside toe of the setback levee and seepage berm. Any relocated power poles and other utility infrastructure serving adjacent properties would be located outside this easement. The landside

O&M corridor would include an all-weather road surface for ease of access. A 20-foot-wide O&M easement would also be established adjacent to the waterside toe of the setback levee. The landside and waterside O&M corridors would be constructed and maintained free of woody vegetation. The O&M easements would be gated and signed to limit vehicular access.

Page 3-20, the first paragraph is revised to read:

The land within the footprint of each action alternative, which includes the setback levee, seepage berm, and waterside and landside O&M easements, would be acquired to prevent structural encroachments in the flood risk reduction area as required by USACE and the Central Valley Flood Protection Board (CVFPB). Land acquisition would also be required for a new road and right-of-way alignment proposed for each action alternative. Acquisition of an entire affected parcel was assumed if the real estate needs cover 60 percent or more of the original parcel size. The project requires that DWR acquire approximately 2,000 to 2,600 acres of real estate, depending on action alternative (Table 3-1). There are 17 parcels and six landowners within the project site. While DWR has condemnation authority for procurement of right-of-way for construction projects, DWR desires to work with landowners to find ways of procuring the right-of way without using condemnation, to the extent feasible. Following construction of the project, the State of California would retain fee-title ownership of the footprint of the setback levees. DWR would also place flood easements on the land located within the newly expanded Yolo and Sacramento Bypasses, and conservation easements as required.

Page 3-20, after the second paragraph, a new paragraph has been added:

When the existing Sacramento Bypass North Levee is degraded and County Road 126 is realigned approximately 0.37 mile to the north (on the north side of the Sacramento Bypass North Levee setback), parking for recreationists using the Sacramento Bypass Wildlife Area would be consistent with existing parking conditions on the County Road 126 road shoulder.

Page 3-21, second paragraph from the bottom is revised to read:

Potential borrow sites range in location from the area between the existing and proposed setback area levees, immediately adjacent to the levee construction site, to permitted commercial facilities within approximately 50 miles from the area of construction. In the area between the existing and proposed setback area levees, ~~1 foot of existing topsoil would be scraped and stockpiled within the project footprint, and then~~ borrow material would be excavated using bulldozers, scrapers, and/or excavators. Excavation depths would vary; however, where feasible, excavation depths would avoid the water table due to higher construction costs associated with dewatering. Earth-moving equipment and haul trucks would be used to transport borrow material to the construction area.

Page 3-22, last paragraph before Section 3.4.9 is revised to read:

Other construction materials that would need to be imported to the project site would include (but are not limited to) water (for dust suppression); bentonite; cement; lime (dry quicklime, dry hydrated lime, or lime slurry); incidental construction support materials; aggregate base rock; asphalt; concrete; hydroseed; riprap; willow plantings; container plants; and coir fabric. Borrow material of poor quality that is not able to be used on-site would be hauled off-site to a permitted disposal site within 50 miles of the project site.

Page 3-25, the last bullet is revised to read:

- **Wildlife-Friendly Agriculture** – Maintaining active agriculture within the setback area is recognized as a critical management action within the setback area, which would remain privately owned and farmed. Agricultural practices would be continued on the majority of the land in the project site, although crop types would likely change and some areas could be used for grazing. Agricultural fields would be graded so that they drain from north to south and east to west to avoid fish-stranding. Irrigation and/or drainage ditches would be configured to avoid fish-stranding to the greatest extent feasible. It is anticipated that any depressions or scour holes from inundation would be filled through standard farming practices and land management which would minimize stranding potential. Conservation easements directing land management practices may be used to incorporate specific actions to benefit wildlife and protect special-status species. Agricultural easements could be established on portions of the project site within the setback levee in Alternatives 2 and 5 to ensure future agricultural uses of this area.

Page 3-26, the second bullet is revised to read:

- **Remnant Levee Habitat** – As described above, the majority of the existing Yolo Bypass East Levee would be degraded. However, in Alternatives 2 and 4, portions of the remnant levee would be retained in place as upland ~~refugia for giant garter snake (GGS) and other wildlife species habitat.~~ Segments would be spaced approximately 2,500 feet apart, and would be approximately 500 feet long. The remnant levee segments would remain at or above the 0.01 annual exceedance probability (AEP) flood elevation. Riprap may be placed on portions of the remnant levee slope to protect from erosive forces. The remnant levees would not be subject to USACE levee vegetation guidance since they no longer provide flood protection. However, they would be subject to guidance for vegetation in floodplains and channel maintenance requirements per California Water Code Section 8361(f) and applicable O&M manuals.

Page 3-28, the second paragraph is revised to read:

The new setback levee would be designed and constructed in accordance with the State of California Code of Regulations Title 23 and USACE criteria. According to Title 23, the geometry for Bypass levees has a maximum steepness requirement of 4H:1V for waterside slopes and 3H:1V for landside slopes. The new levees would have a 4H:1V slope on the landside slopes as well as waterside slopes. The levee heights are anticipated to be approximately 27 feet tall, as determined by the 100-year water surface elevation plus a minimum 6 feet of freeboard. Additionally, to provide resiliency for future climate change adaptation that may necessitate adding additional freeboard, the levee crown would be approximately 28 feet wide, and the foundation system would be designed to withstand underseepage pressure gradients up to an additional 1 foot of water surface elevation. Levee tie-ins to the existing system are planned along the Sacramento Bypass approximately 300 feet (minimum) west of the Sierra Northern Railway Railroad and also along the Yolo Bypass south of I-5.

Page 3-32, the last paragraph is revised to read:

Contractor plant equipment could include construction office and equipment trailers, ~~warehousing and equipment storage and~~ maintenance facilities, a batch plant, and fuel pumps and fuel storage tanks. Mobile construction equipment would depend on the selected contractor's planned

operations. Typical equipment that may be used throughout the project, along with an approximation of the duration of each activity, is shown in Table 3-4.

Pages 3-37 through 3-38 are revised to read:

Agencies and organizations that currently have management responsibility for the levees along the Yolo and Sacramento Bypasses would continue to provide O&M post-implementation of the LEBLS project. DWR would be responsible for the design and construction of all levee improvements, and maintenance access. CVFPB is the non-Federal sponsor for the project and is responsible for performing O&M and/or overseeing O&M responsibilities transferred to other entities. At the end of the project construction period, all ~~project lands constructed features~~ would be in public ownership and/or would be under the permanent control of an LMA or natural resource conservation entity, with easements on the lands to facilitate O&M activities. LMAs, DWR, and CVFPB may continue their routine O&M responsibilities, as they occur under existing conditions. Alternately, a Joint Powers Authority for continued O&M may be created among local partner agencies.

The LEBLS project falls within the ~~vicinity of the following units of the SRFCP~~ authorized by the 1917 Flood Control Act; ~~and~~ officially transferred to the CVFPB in 1944 as the operating and maintaining authority and maintained in accordance with USACE's SRFCP *Operation and Maintenance Manual* (USACE 1955).

- ~~Unit O&M Manual No. SAC 116:~~ – left bank (south levee) of the Sacramento Bypass – The levees of this unit are located in RDs 537, 811, and 900, and Washington Levee District. Levees are maintained by RDs 900 and 537 and Maintenance Area No. 4 DWR Sacramento Maintenance Yard as authorized by California Water Code section 8361(e).
- ~~Unit No. 121~~ – right bank of the Yolo Bypass – The levee provides direct protection to agricultural lands within RD 2035. ~~Levees are maintained by DWR.~~
- Unit O&M Manual No. SAC 122.1: – right bank (north levee) of the Sacramento Bypass – maintained by DWR Sacramento Maintenance Yard as authorized by California Water Code section 8361(e); left bank (east levee) of the Yolo Bypass from Woodland Highway to the Sacramento Bypass – maintained by Reclamation District Nos. 785 and 827. ~~and left bank of the Yolo Bypass – Levees of this unit protect the lands of RD 537, 752, 785, and 827. DWR maintains the northerly 2 miles of this unit and the remainder is maintained by RDs 1660, 827, 785, 537, 900, 765, and 999.~~
- Unit O&M Manual No. SAC 158: – Sacramento Weir – ~~Operated and maintained by DWR~~ Sacramento Maintenance Yard as authorized by California Water Code section 8361(j).

The Sacramento Bypass and Yolo Bypass Channels – are – maintained by DWR Sacramento Maintenance Yard per as authorized by California Water Code Ssection 8361(fd). Maintenance Entails includes sediment, debris, and vegetation removal to maintain as-built bypass capacities specified in applicable unit-specific O&M manuals as detailed in O&M manuals for Units 116, 121, and 122.1.

Page 3-39, after the first paragraph, the following text has been added:

O&M activities will be consistent with the CVFPP Conservation Strategy Appendix E. Invasive Plant Management Plan.

O&M BMPs to reduce the likelihood of introducing invasive species via O&M activities may include:

- Providing annual environmental awareness training by a qualified biologist to all maintenance personnel and to new field-based personnel before engaging in maintenance activities. Environmental awareness training will include descriptions of all special-status wildlife species potentially occurring in the project area (or maintenance activity area for activity specific training), their habitats, and methods of identification, including visual aids as appropriate. Training will inform staff on weed biology, identification, and invasive plant prevention. The training will also describe activity specific measures that will be followed to avoid impacts. The measures will be provided to the Maintenance Yard Supervisor, crew leader, and any contractors participating in maintenance activities.
- To minimize the potential for invasive plants to be introduced or spread during maintenance activities, a qualified biologist will work with maintenance yard staff as needed to develop and implement an invasive species management plan that will include invasive plant prevention Best Management Practices (BMPs), based on Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers (Cal-IPC, 2012).

Page 3-40, last paragraph is revised to read:

Under the No Action Alternative, DWR would not conduct any work to improve flood system capacity and conveyance in the Yolo Bypass and Sacramento Bypass or to address levee seepage, slope stability, and erosion concerns that have been identified in the Yolo Bypass or the Sacramento Bypass Levees. Because the capacity of the bypasses would not be increased, the stage in the Sacramento River would not be reduced, and ~~a 200-year level of flood risk reduction would not be achieved for urban areas in the Lower Sacramento Basin, including portions of the Cities of Sacramento, West Sacramento, and Woodland.~~ Approximately 780,000 people in the Lower Sacramento River Basin area would continue to be subject to an unacceptable high risk of levee failure and subsequent catastrophic flooding, defined as a risk of flood in excess of the state's 200-year standard for urban areas (DWR 2012a, DWR 2016a), because the system capacity would not be increased and flood stages would not be reduced. Achieving 200-year flood risk reduction for these urban areas without the project could require much more costly and higher risk options. These options might include increasing the height of levees in other parts of the system, which could be substantially more costly and with greater impacts to urban residents living along the levees.

Page 3-44, second paragraph under "Future State or Federal Action" is revised to read:

One such example of possible Federal action is the ARCF GRR. USACE recommended extending the length of the Sacramento Weir and setting back the Sacramento Bypass North Levee as part of the Locally Preferred Plan (LPP) formulated under the ARCF GRR (USACE 2015). The ARCF GRR has been approved by USACE, authorized by the U.S. Congress, and initial funding has been appropriated ~~for the design phase of the project.~~ If the ARCF GRR recommendations were implemented, the constructed improvements would be similar to those

included in the LEBLS project, but would have a reduced project footprint, since the Yolo Bypass East Levee would not be set back. ~~Whereas the LEBLS project is anticipated to be constructed beginning in 2020, ARCF GRR levee improvements may not be completed until a later date.~~ Because implementation of the ARCF GRR features on the LEBLS project site (Sacramento Weir widening and Sacramento Bypass North Levee setback) would ~~likely occur later than other improvements included in the ARCF GRR (and so would not be in place at the time the LEBLS project was implemented),~~ the ARCF GRR has not been included in the No Action Alternative for the LEBLS project.

Chapter 4 Affected Environment, Environmental Consequences, and Mitigation Measures

4.1. Introduction

No changes were made in this section.

4.2. Aesthetics

Page 4.2-28, last bullet of Mitigation Measure VIS-3b is revised to read:

- In lieu of screened construction fencing, DWR may offer to temporarily relocate the residents at 19946 County Road 124 and 21788 County Road 124 to a hotel during the period when nighttime lighting would occur. The hotel will not be located more than 10 miles from the residences. Reimbursement of hotel accommodations will be limited to ~~\$100 per night~~ reasonable expenses, and will be limited to the duration of nighttime lighting activities within 300 feet of the residence.

4.3 Air Quality

Page 4.3-17, Mitigation Measure AIR-1d is revised to read:

Mitigation Measure AIR-1d: Use the Yolo-Solano Air Quality Management District's Off-site Mitigation Fee to Reduce ~~NO_x~~ and ~~ROG~~ Emissions, and Pay Associated Fees.

Pursuant to YSAQMD's significance thresholds, if the projected construction-related emissions exceed the NO_x or ROG significance threshold based on the equipment inventory, DWR will contribute to YSAQMD's off-site mitigation fee program sufficiently to offset the amount by which the project's NO_x or ROG emissions exceed the threshold of 10 tons per year. The determination of the final mitigation fee will be conducted in coordination with YSAQMD before any ground-disturbance occurs for any phase of project construction. If NO_x emissions exceed the general conformity *de minimis* thresholds, DWR will contribute to YSAQMD's off-site mitigation fee program as required by the general conformity regulations. In the event that PM₁₀ emission reduction measures and dispersion modeling do not reduce PM₁₀ emissions below the threshold of significance, DWR will contribute to YSAQMD's off-site mitigation fee program for PM₁₀ emissions in excess of the threshold. DWR will coordinate fee payment so that emissions offsets are committed prior to or concurrent with emissions for YSAQMD thresholds

and as required by General Conformity regulations if *de minimis* thresholds are exceeded. If there are changes to construction activities (e.g., equipment lists, increased equipment usage or schedules), DWR will work with YSAQMD to ensure emission calculations and fees are adjusted appropriately.

The estimated cost of NO_x offsets based on current offset pricing are included in Appendix D1 and range from \$5.5 million to \$8.4 million, after implementation of Mitigation Measure AIR-1c under the long-haul scenario. Under the reuse scenario with lower levels of material hauling the estimated cost of NO_x offsets after implementation of Mitigation Measure AIR-1c range from \$2.1 million to \$3.8 million. The fees will be recalculated postconstruction to ensure that the correct payment(s) had been made, based on actual construction emissions.

Timing: Prior to construction activities.

Responsibility: California Department of Water Resources.

Page 4.3-21, the last paragraph is revised to read:

Maximum annual construction emissions for all action alternatives are expected to exceed the YSAQMD significance thresholds for PM. Under the long haul scenarios (Table 4.3-5a), maximum annual emissions would be greatest for Alternatives 4 and 5, because all construction would occur in 1 year. Total project emissions would be greater under Alternatives 2 and 3, but these emissions would be spread over 2 years, resulting in lower annual emissions than Alternatives 4 and 5. Under the reuse scenarios (Table 4.3-5b), Alternative 2 would have lower annual emissions than Alternative 4, but the total project emissions would be greater under Alternative 2, because construction would occur in 2 years. Because PM emissions would exceed the YSAQMD significance thresholds under all action alternatives, this would be a **potentially significant** impact. Mitigation Measures AIR-1a, AIR-1b, AIR-1d, and AIR-1e, described below, have been identified to address this impact.

Page 4.3-22, the following text is added before Mitigation Measure AIR-1e:

Mitigation Measure AIR-1d: Use the Yolo-Solano Air Quality Management District's Off-site Mitigation Fee to Reduce Emissions, and Pay Associated Fees.

Please refer to the first appearance earlier in this section for the full text of this mitigation measure.

Page 4.3-23, the second and third paragraphs are revised to read:

NO_x is a regionally significant pollutant and local control measures cannot achieve the required reductions for this pollutant. Regardless of which action alternative is selected, the project would need to implement mitigation measures, ~~including the purchase of and purchase~~ offsets, to reduce NO_x emissions ~~below YSAQMD's significance threshold for NO_x of 10 tons per year~~. If NO_x emissions exceed the general conformity *de minimis* thresholds, DWR would contribute to YSAQMD's off-site mitigation fee program as required by the General Conformity regulations. DWR would coordinate fee payment so that emissions offsets are committed prior to or concurrent with emissions ~~for YSAQMD thresholds~~ and as required by General Conformity regulations if *de minimis* thresholds are exceeded.

The analysis methods for demonstrating General Conformity must be coordinated in advance with USACE, the agency responsible for making the General Conformity determination. Therefore, the air quality effects, under all action alternatives for General Conformity are considered a **significant** impact. Mitigation Measures AIR-1a through AIR-1e, described below, have been identified to address this impact.

Page 4.3-24, the last paragraph before “Residual Significant Impacts,” is revised as follows:

Significance after Mitigation: Implementation of Mitigation Measures AIR-1a, AIR-1b, AIR-1c, ~~AIR-1d~~, and AIR-1e would reduce NO_x emissions, but not to levels below the *de minimis* significance thresholds. Implementation of Mitigation Measure AIR-1d would offset NO_x emissions in accordance with General Conformity requirements. Therefore, with implementation of these mitigation measures, significant air quality impacts would be reduced to **less than significant**.

4.4 Biological Resources – Fish and Aquatic Organisms

Page 4.4-2, text added after the second full paragraph:

Although multiple studies have demonstrated the benefits of Yolo Bypass floodplain habitat for juvenile salmonids and other fishes, Quiñones and Lusardi (2017) highlight uncertainty regarding the magnitude of inundation required to achieve significant biological benefits for salmonids. They suggest, based on overall population estimates and density estimates for juvenile salmonids, a relatively small inundation footprint within the Yolo Bypass could provide significant biological benefits for covered fish species. The key point is that habitat availability does not necessarily equate to habitat quality. Therefore, environmental conditions, such as water temperature, dissolved oxygen, prey availability, and potential predation effects, are important factors that contribute to floodplain habitat value for juvenile salmonids.

Page 4.4-4, the second paragraph is revised to read:

Similar to other Delta habitats, there are more introduced species than native species in the Yolo Bypass floodplain (Table 4.4-1) (Sommer et al. 2003). Introduced species are one of the major environmental issues in the Delta, where they frequently dominate the fauna on a year-round basis (Bennett and Moyle 1996) and comprise approximately 90 percent of the biomass in the Delta. However, because the Yolo Bypass floodplain is seasonally ~~dewatered~~ dry and used for agricultural production during late spring through autumn, introduced fish species can only establish year-round dominance in the few areas of perennial aquatic

Page 4.4-8, the second paragraph is revised to read:

Delta smelt (*Hypomesus transpacificus*) is Federally listed as Threatened and State-listed as endangered. Designated critical habitat includes the southern Yolo Bypass, up to approximately 1 mile south of the Sacramento Bypass. Delta smelt are endemic to the Sacramento-San Joaquin estuary and are found seasonally in Suisun Bay and Suisun Marsh (Moyle 2002). Distribution varies with river outflow, extending from the Lower Sacramento River into Suisun Bay during high outflow and concentrating in the upper Delta and Lower Sacramento River during low outflow. Although delta smelt have been recorded in the Sacramento River as far upstream as Verona, most of the Yolo Bypass is upstream of the typical delta smelt distribution, which

generally remains downstream of Isleton, ~~but~~ Nevertheless, the species is known to occur year-round in the Cache Slough complex at the lower end of in the Bypass and could occasionally range as far upstream as the project site.

Page 4.4-14, the first full paragraph is revised to read:

Conflict with Provisions of an Adopted HCP or NCCP—The project site is within the planning area for the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018), which provides a framework to improve conservation of natural resources, including endangered species habitat, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. ~~The Second Administrative Draft of the HCP/NCCP (Yolo County HCP/NCCP Joint Powers Authority 2015) was issued in March 2015. However, the HCP/NCCP has not yet been adopted by participants or approved by the regulatory agencies. In addition, Because the HCP/NCCP does not cover listed fish species or populations, no impacts are analyzed in this chapter. Therefore~~ However, consistency of the project with ~~this the Yolo HCP/NCCP and its conservation plan strategy is not required to be analyzed under CEQA or NEPA~~ the Biological Resources – Vegetation and Wildlife chapter of the EIS and this EIR; therefore, such analysis is not included in this EIS/EIR.

Page 4.4-14, a new paragraph is added before “Impact Analysis:

Addition of Habitat for Listed Fish Species— The project will provide additional habitat for listed species; however, this increased habitat is not certain to increase the abundance of listed species in the Cache Slough Complex. The increase in floodplain habitat will not inherently increase the number of special-status fish, timing of their presence, or the overall abundance. However, the proposed project may provide improved rearing habitat upstream of the Cache Slough Complex, primarily for emigrating juvenile salmonids. The likely result would be an increase in the body size of emigrating juvenile salmonids through the Cache Slough Complex. Therefore, potential for such impacts from the project is speculative and not analyzed further in this EIS and the EIR.

4.5 Biological Resources – Vegetation and Wildlife

Page 4.5-5, the second-to-last paragraph is revised to include:

In September 2016, DWR environmental scientists observed a small non-breeding satellite colony of tricolored blackbirds (*Agelaius tricolor*), with approximately 100 to 150 individuals, foraging along the Tule Canal, approximately 1.5 miles north of the Sacramento Bypass. CDFW has also indicated the presence of wild turkey (*Meleagris gallopavo*), ring-necked pheasant (*Phasianus colchicus*), mallard (*Anas platyrhynchos*), and wood duck (*Aix sponsa*) in the vicinity of the project site.

Page 4.5-12, the discussion of Woolly Rose-Mallow is revised as follows:

Woolly Rose-Mallow. Woolly rose-mallow is CRPR designated 1B.1: rare or endangered in California and elsewhere, and seriously threatened in California (greater than 80 percent of occurrences are threatened and/or have a high degree and immediacy of threat). The species occurs along freshwater wetlands, wet banks, and marshes below 350 feet in elevation and blooms from July through September.

There is an occurrence of woolly rose-mallow in the Tule Canal, immediately north of the study area (CDFW 2016) (see Figure 4.5-2).

Habitat suitability and CNDDDB occurrence records indicate this species could potentially occur in the study area. Special-status plant reconnaissance surveys ~~are planned to be~~ were conducted during ~~the~~ the ~~blooming period of woolly rose-mallow in June~~ September 2017, and no woolly rose-mallow were identified in the project footprint.

Page 4.5-25, the following text has been removed before the “Impact Analysis” heading:

~~**Conflict with Provisions of an Adopted HCP or NCCP**—The project site is within the planning area for the Yolo HCP/NCCP, which provides a framework to improve conservation of natural resources, including endangered species habitat, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. The Second Administrative Draft of the HCP/NCCP (Yolo County HCP/NCCP Joint Powers Authority 2015) was issued in March 2015. However, the HCP/NCCP has not yet been adopted by participants or approved by the regulatory agencies. DWR will coordinate with the Yolo Habitat Conservancy, USFWS, and CDFW to ensure project implementation would not jeopardize feasibility of any key objectives or actions anticipated to be included in the HCP/NCCP. However, consistency of the project with this conservation plan is not required to be analyzed under CEQA or NEPA, and therefore, such analysis is not included in this EIS/EIR.~~

~~The project represents the approach to flood risk reduction reflected in the CVFPP for implementing multi-benefit flood risk reduction projects. Consequently, DWR would incorporate several management actions into the project to execute a multi-benefit project that is potentially self-mitigating and results in a net benefit for biological resources.~~

Page 4.5-37, the second bullet is revised as follows:

- ~~**Prohibit Use of Pesticides or Chemicals within 100 Feet of Established Buffers around Elderberry Shrubs.**~~ **Prohibit Use of Pesticides or Chemicals within 100 Feet of Established Buffers around Elderberry Shrubs.** No insecticides, herbicides, or other chemicals that might harm the beetle or its host plant will be used by DWR within established buffers (20 feet) around ~~of~~ ~~the~~ elderberry shrubs.

Page 4.5-38, the following text is deleted from the last full paragraph:

~~Project components that require dewatering of suitable aquatic habitat (see Figure 4.5-3) could displace giant garter snakes. Ground-disturbing activities in uplands adjacent to suitable aquatic habitat could result in direct displacement, injury, or the mortality of snakes if the habitat is used for basking, hibernating, or aestivating. Indirect impacts could occur if snakes are displaced from occupied habitat or disturbed by nearby construction activities. Displacement and disturbance resulting from human activity, construction noise, and equipment vibrations could affect the ability of snakes to conduct essential life history functions, such as dispersal, movement, or foraging, and could increase competition for food and space and vulnerability to predation. Levee improvements and O&M activities could temporarily degrade aquatic habitat – including the potential for earthwork below the ordinary high water mark (OHWM) in the Tule Canal, ~~but~~ ~~the overall result of implementing the ecosystem project elements would be an enhancement of habitat quality through the retention of upland refugia along the Tule Canal and the creation of a~~~~

~~wetland bench in the Tule Canal (under Alternatives 2 and 4). Under these alternatives, portions of the east levee along Tule Canal, which is currently maintained as grassland, would be retained; nonnative invasive species would be removed and perennial native grasslands would be established on the upland areas. These upland areas would no longer be maintained for flood control purposes. Some rock may be added to stabilize the levee remnants and prevent erosion; these rocks would be expected to support potential hibernaculae for giant garter snakes. A small amount of riparian habitat exists along the waterside toe of the levee; planting of additional riparian areas would occur separate from these upland refugia. A wetland bench may be added along the Tule Canal; this could add additional structure and opportunity to giant garter snake foraging habitat, to the benefit of this species.~~

Page 4.5-39, the following text is deleted from the second paragraph:

~~Levee improvements, O&M activities, and ecosystem project elements – where these activities involve disturbance to aquatic habitats, as well as annual grasslands – could disturb suitable habitat for giant garter snake. Project construction and implementation would result in permanent and temporary loss and disturbance of potential giant garter snake habitat. Temporary loss of habitat is defined as habitat being unavailable or unusable for one giant garter snake active season. Fill, temporary and permanent dewatering, land conversion, and staging and other construction disturbances, as well as O&M activities, could disturb, injure, or kill snakes using affected habitats, including irrigation ditches, drainage canals, and associated uplands. Project construction activities in areas of potentially suitable habitat could also result in direct disturbance and loss of individual giant garter snakes. Beneficial impacts to giant garter snake would also result from implementing the ecosystem project elements, specifically where sections of the Yolo Bypass East Levee would not be degraded but retained as upland refugia for giant garter snake.~~

Page 4.5-40, the following text is deleted from the second paragraph:

~~Alternative 3 includes construction of the same facilities as Alternative 2, with a slightly expanded setback area in the southern portion of the project site. The main differences between the impacts of these two alternatives are that (1) under Alternative 3, additional ditches and associated upland would be permanently impacted in the expanded footprint at the southern end of the project site, and (2) Alternative 3 would not result in temporary effects to ditches and associated upland within the footprint of the relocated canal footprint. Because the entire existing Yolo Bypass East Levee would be degraded, there would no beneficial effect from retaining remnant levee segments to provide upland refugia as under Alternative 2.~~

Page 4.5-41, the following text is added after the first paragraph:

Beneficial impacts to giant garter snake, which would result from implementing the ecosystem project elements, include enhancing habitat quality for the snake along the Tule Canal – which is the primary movement corridor for snake in the study area. Sections of the Yolo Bypass East Levee, which are currently maintained as grassland, would not be degraded but retained, and nonnative invasive species would be removed and perennial native grasslands would be established on the upland areas. A small amount of riparian habitat exists along the waterside toe

of the levee; planting of additional riparian areas would occur. These upland areas would no longer be maintained for flood control purposes, although O&M activities along the remnant levee would be conducted to maintain the native grasslands as well as any maintenance required to provide for flood conveyance.

The expanded floodplain – which is currently upland crops – would provide opportunities for increased rice cultivation, which would expand suitable habitat for the giant garter snake, particularly during its active season. DWR would preserve some of these rice fields, which are known to provide suitable foraging habitat for giant garter snake, through easements, thereby supporting expanded opportunities for foraging and rearing habitat for this species. During the snake’s inactive season, the remnant levee – which is approximately 25 feet high – would be above the average inundation depth (average depth estimated at 3.7 feet) (DWR 2017b).

Page 4.5-45 and 4.5-46, the following text is removed:

Project components that require dewatering of suitable aquatic habitat could result in stranding and displacement of northwestern pond turtles. Ground-disturbing activities in uplands adjacent to suitable aquatic habitat could result in direct injury or mortality of turtles if the habitat is used for basking, hibernating, or nesting. Indirect impacts could occur if pond turtles are displaced from occupied habitat or disturbed by nearby construction activities. Displacement and disturbance resulting from human activity, construction noise, and equipment vibration could affect the ability of turtles to conduct essential life history functions, such as dispersal, movement, or foraging, and could result in increased competition for food and space and vulnerability to predation. Construction activities could also temporarily degrade aquatic habitat. ~~One of the beneficial results of implementing the ecosystem project elements under Alternatives 2 and 4 would be an enhancement of habitat quality through the retention of upland refugia along the Tule Canal.~~

Page 4.5-46, the following text is removed from the second full paragraph:

Because the pond turtle uses similar habitats as the giant garter snake, Table 4.5-7 summarizes the amount of aquatic and upland habitat – including potential nesting habitat – for northwestern pond turtle that could be affected by implementing each alternative. Implementing Alternative 2 would result in permanent loss of potentially suitable habitat for giant garter snake, and thus pond turtle, through the removal of portions of ditches and canals during borrow extraction and construction of the new setback levee and associated features, and temporary impacts to these habitats as a result of dewatering and temporary construction disturbance. Alternative 3 includes construction of the same facilities as Alternative 2, with a slightly expanded setback area in the southern portion of the project site, a greater amount of ditches and associated upland that would be permanently impacted, and a lower amount of temporary effects to ditches and associated upland within the footprint of the relocated canal footprint. ~~Because the entire existing Yolo Bypass East Levee would be degraded, there would be no beneficial effect from retaining remnant levee segments to provide upland refugia as under Alternative 2.~~

Page 4.5-62, text in the second-to-last paragraph is revised as follows:

The Tule Canal and its associated upland, as well as the riparian habitat that borders this feature, is the primary movement corridor for birds and other wildlife in the project site. The Tule Canal

would be avoided by project activities, and most riparian habitat would be avoided. ~~In addition, under Alternatives 2 and 4, portions of the remnant levee would be retained, providing upland refugia for species along the Tule Canal.~~

Page 4.5-63, text following Impact BIO-9 is revised as follows:

Impact BIO-10: Conflict with Provisions of an Adopted HCP or NCCP.

Alternative 1: No Action Alternative

Under the No Action Alternative, USACE would not grant permission to DWR to modify the SRFCP by constructing setback levees or other flood risk reduction measures in the Lower Elkhorn Basin. The No Action Alternative would allow a continued high risk of flooding from levee deficiencies along 5.5 miles of the Yolo Bypass East Levee in Lower Elkhorn Basin, constrain Yolo Bypass flood conveyance capacities to existing levels, and substantially reduce flexibility to implement future Sacramento Basin flood system improvements to collectively improve public safety for portions of the Cities of Sacramento, West Sacramento, and Woodland. However, no construction-related effects would occur and existing O&M practices would continue. The consequences and environmental effects of potential levee failure and flooding are described in Section 3.5, “No Action/No Project Alternative,” under “Consequences of No Action.”

With no construction of setback levees or flood risk reduction measures, and no other meaningful changes to existing conditions at the site, the No Action Alternative would have no construction-related impacts to the habitats and species in the study area that are covered by the Yolo HCP/NCCP. Because there would be no habitat loss or modification due to construction, and habitats are anticipated to remain relatively unchanged from existing conditions, as land uses and levee O&M activities would generally be unchanged in the Lower Elkhorn Basin, implementation of this alternative would not directly conflict with the implementation of the Yolo HCP/NCCP. There would be **no impact**.

Alternatives 2 through 5: All Action Alternatives

The project site is within the planning area for the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018), which provides a framework to improve conservation of natural resources, including endangered species habitat, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. USFWS published a Notice of Availability of the Final EIS and Final Yolo HCP/NCCP in the Federal Register on April 30, 2018 and all six local permittees have adopted the Yolo HCP/NCCP as of June 5, 2018. The local permittees, including the Yolo Habitat Conservancy, Yolo County, and four cities, expect issuance of final permits from the Federal and State agencies in August 2018.

The project study area occurs within and adjacent to the Yolo Bypass, in an area that the Yolo HCP/NCCP identifies as a Priority 2 acquisition area as part of the HCP/NCCP conservation strategy. As a result of implementing the ecosystem project elements, the project would result in land use conversions rather than loss of habitat (e.g., conversion of upland cropland to rice agriculture, or grassland to riparian habitat) and following project implementation, the area

would still provide habitat for the special-status species in the study area, which are also identified as covered species under the Yolo HCP/NCCP. These land use conversions would not cause a net loss in the habitat values provided by these lands for HCP/NCCP-covered species in the project study area and vicinity. The overall habitat quality for HCP/NCCP-covered species that use these habitats is unlikely to be adversely affected. This is because many components of the proposed project would support attainment of HCP/NCCP goals and objectives through the expansion of the amount of habitat available for HCP/NCCP-covered species and the connection of habitats (e.g., the establishment of additional riparian habitat).

DWR will coordinate with the Yolo Habitat Conservancy, USFWS, and CDFW to ensure project implementation would not jeopardize feasibility of any key objectives or actions in the Yolo HCP/NCCP. With adequate coordination, the project is expected to be compatible with the Yolo HCP/NCCP and would contribute towards the implementation of HCP/NCCP conservation strategy. Further, the project represents the approach to flood risk reduction reflected in the CVFPP for implementing multi-benefit flood risk reduction projects. Consequently, DWR would incorporate several management actions into the project to execute a multi-benefit project that is potentially self-mitigating and results in a net benefit for biological resources.

Given the collective implementation of the ecosystem project elements, which includes the proposed mitigation to compensate for temporary and permanent habitat loss, the proposed project would not jeopardize the implementation and efficacy of the Yolo HCP/NCCP. The project would not threaten the viability of populations of HCP/NCCP-covered species, reduce the effectiveness of the Yolo HCP/NCCP conservation strategy, or adversely affect attainment of the goals and objectives of the Yolo HCP/NCCP. Therefore, under all of the action alternatives this impact would be **less than significant**.

Mitigation Measure: No compensatory mitigation measures have been identified to further reduce this impact.

Residual Significant Impacts

Some impacts associated with terrestrial biological resources are either considered less than significant or no impact would occur (i.e., Impact BIO-9~~8~~, Interference with Terrestrial Wildlife Movement, Migration Corridors, and Nursery Sites, and Impact BIO-10, Conflict with Provisions of an Adopted HCP or NCCP). Other impacts associated with terrestrial biological resources may be potentially significant. These consist of: Impact BIO-1 (Potential Loss of Special-status Plants and Loss and Degradation of Special-status Plant Habitat); Impact BIO-2 (Effects on Valley Elderberry Longhorn Beetle); Impact BIO-3 (Potential Disturbance or Loss of Giant Garter Snakes and Their Habitat); Impact BIO-4 (Potential Disturbance or Loss of Northwestern Pond Turtles and their Habitat); Impact BIO-5 (Potential Loss of Burrowing Owl Individuals from Destruction of Occupied Burrows and Nest Disturbance); Impact BIO-6 (Potential Disturbance of Nesting Special-status Birds and Common Raptor Species, Potential Loss of Active Nests and Nest Trees, and Loss of Nesting and Foraging Habitat); Impact BIO-7 (Potential Disturbance or Loss of Roosting Special-status Bats); and Impact BIO-8 (Potential Disturbance and Loss of Sensitive Habitats, including Riparian Habitat). However, with implementation of Mitigation Measures BIO-1a through BIO-8b, these impacts would be reduced to less-than-significant levels. Therefore, no residual significant impacts would occur.

4.8 Cultural Resources

Page 4.8-18, text in the last bullet is revised as follows:

- September 1, 2016 (letter dated August 31, 2016): DWR sent letters to all Native American contacts on the original NAHC list (Buena Vista Rancheria of Me-Wuk Indians, Cortina Band of Indians, Ione Band of Miwok Indians, Nashville Eldorado Miwok, Shingle Springs Band of Miwok Indians, Tsi-Akim Maidu, UAIC, Wilton Rancheria, and Yocha Dehe Wintun Nation) with separate letters for those Tribes that had requested consultation-notice of proposed projects under AB 52 and who are culturally affiliated with the project area (UAIC, Wilton Rancheria, and Yocha Dehe Wintun Nation, Ione Band of Miwok Indians, and Wilton Rancheria) and for those Tribes on the NAHC list that had not requested consultation-notice of projects under AB 52 (to comply with the Natural Resources Agency's Tribal Policy). The letters notified Tribes that a geoarchaeological sensitivity assessment was being prepared and that DWR was planning to conduct a pedestrian archaeological survey. The letters sent to the Tribes that sought notice under AB 52 instructed the tribes to notify DWR's Tribal Policy Advisor, in writing, if the Tribe wanted to consult under AB 52. These letters further provided that if a written response were not received by DWR within 30 calendar days, then consultation under Public Resources Code section 210801.3.1 (AB 52) would not take place, but that consultation could proceed under the California Natural Resources Agency's Tribal Engagement Policy and Governor Brown's Executive Order B-10-11. No Tribes that were sent consultation letters in accordance with AB 52 responded to these letters. Subsequent outreach and consultation with Tribes was therefore conducted under the California Natural Resources Agency Tribal Consultation Policy and the DWR Tribal Engagement Policy.

Page 4.8-19, text revised in the second bullet revised as follows:

- September 14, 2016: In response to the USACE September 12, 2016, invitation to a public scoping meeting, UAIC contacted DWR and USACE by email requesting a joint meeting with DWR and USACE to discuss the project. This meeting was held at UAIC offices on October 19, 2016.

Page 4.8-20, four bullets added and text revised as follows:

- May 2017: DWR and GEI staff conducted telephone calls in which Mr. Randy Yonemura of the Ione Band of Miwok Indians requested a project field review. On May 12, 2017, DWR conducted a field review (observation of the project site by driving on existing roads) of the project site with Mr. Yonemura. Mr. Yonemura identified several general locations as areas that may be sensitive for the presence of TCRs. Mr. Yonemura also requested a follow-up project site field review and access to those areas that he identified as potentially sensitive.
- May 2018: DWR contacted the Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, UAIC, Wilton Rancheria, and Yocha Dehe Wintun Nation to provide notice of the availability of the Draft EIS/EIR, and of a public meeting in June 7, 2018.
- August 2018: DWR was informally advised that Mr. Yonemura no longer represented Ione Band of Miwok Indians. No further communications from Ione Band of Miwok Indians was received by DWR concerning the proposed project.

- December 2018: No comments on the public DEIR were received from any Native American Tribe during the public review comment period ending on July 9, 2018, or after the public review comment period as of December 5, 2018.
- December 2018: In accordance with PRC 2108.3.2 (b) (1) DWR considers consultation under AB 52 concluded because 1) no significant effect on a TCR has been identified by any consulting Tribe; 2) mitigation measures have been identified in this document that would result in avoidance, reduction of impacts to a less-than-significant level or appropriate treatment of any TCRs that could potentially be discovered during project construction; and 3) no comments on the impact analysis, identified mitigation measures, or other portions of the cultural resources section of the DEIR were received from any consulting Tribe during the public review period for the DEIR.

DWR is will continueing to consult with interested Tribes in accordance with AB 52 and Tribal Engagement Policies referenced above and in accordance with mitigation measures identified in this document pertaining to Tribal Cultural Resources and Cultural Resources.

4.14 Hydrology, Hydraulics, and Flood Risk Management

Page 4.14-2, text under “Yolo Bypass” is revised as follows:

The Yolo Bypass has received floodwaters from the Sacramento River and Sutter Bypass due to overflows at Fremont Weir in approximately 70% of years, joining flows from western tributaries. In approximately 10% of years, localized flooding is due to western tributary contributions only (Reclamation and DWR 2012). 53 out of the last 74 years. In the absence of spills at the Fremont and Sacramento Weirs, the hydrology of the Yolo Bypass is dominated by inflows from Knights Landing Ridge Cut, Cache Creek, Willow Slough, and Putah Creek. Base flow discharges from these tributaries may be important sources of water for irrigation supply and to maintain aquatic and riparian habitats along the waterways. Moderate or high flows from the tributaries can cause localized flooding. During non-flood periods, surface water flows from west to east through a network of channels that cross the Yolo Bypass and discharge into the Tule Canal, an artificial channel that follows the toe of the east side levee along the entire length of the Bypass. In winter, low flow in the northern half of the Yolo Bypass consists primarily of base flow discharges from Cache Creek and Willow Slough. In summer, flows are dominated by irrigation deliveries and return flows diverted from Cache Creek, the Knights Landing Ridge Cut, and the Sacramento River, as well as discharges from the Woodland wastewater treatment plants (Yolo County 2005). All waterways in the project vicinity are tributary to the Sacramento River, as the Yolo Bypass drains floodwater back into the river at the southern end of the Bypass.

Page 4.14-6, text under “Model Scenarios” is revised as follows:

Four scenarios were modeled to represent different conditions and are described in detail in Appendix G, “Lower Elkhorn Basin Levee Setback Project Hydraulic Impact Analysis”:

- *Existing Conditions* – Existing conditions without LEBLS project implementation
- *Existing With-Project* – Existing conditions with LEBLS project (includes Sacramento Bypass Levee Setback and Yolo Bypass levee setback)

- *Future Without-Project* – Future conditions without LEBLS project (includes American River Common Features [ARCF] General Reevaluation Report [GRR] ~~and~~ Sacramento Bypass levee setback and Sacramento Weir widening only); analogous to the No Action Alternative.
- *Future With-Project* – Future conditions with LEBLS project (includes Sacramento Bypass Levee Setback, Yolo Bypass levee setback, and ARCF GRR Sacramento Weir widening)

For hydraulic modeling purposes, the *Existing Conditions* ~~model scenario represents conditions in the system on the date the NOP was issued is identical to the No Action Alternative and the No Project Alternative.~~ The No Action Alternative is most accurately represented by the *Future Without-Project* model scenario, which also includes the ARCF GRR Sacramento Bypass Levee Setback and Sacramento Weir widening were included in the Future Without-Project scenario to provide additional hydraulic specificity information since both the ARCF GRR and the project have the Sacramento Bypass Levee Setback as a common feature. In order to present the most accurate hydraulic analysis and accommodate modeling efforts that were ongoing for the Yolo Bypass at the time the EIS/EIR was initiated, the No Project Alternative (represented by the *Future Without-Project* hydraulic model scenario) offers a more precise representation than simply using the existing conditions under CEQA. The *Future With-Project* model scenario represents cumulative conditions with all project and ARCF GRR features combined.

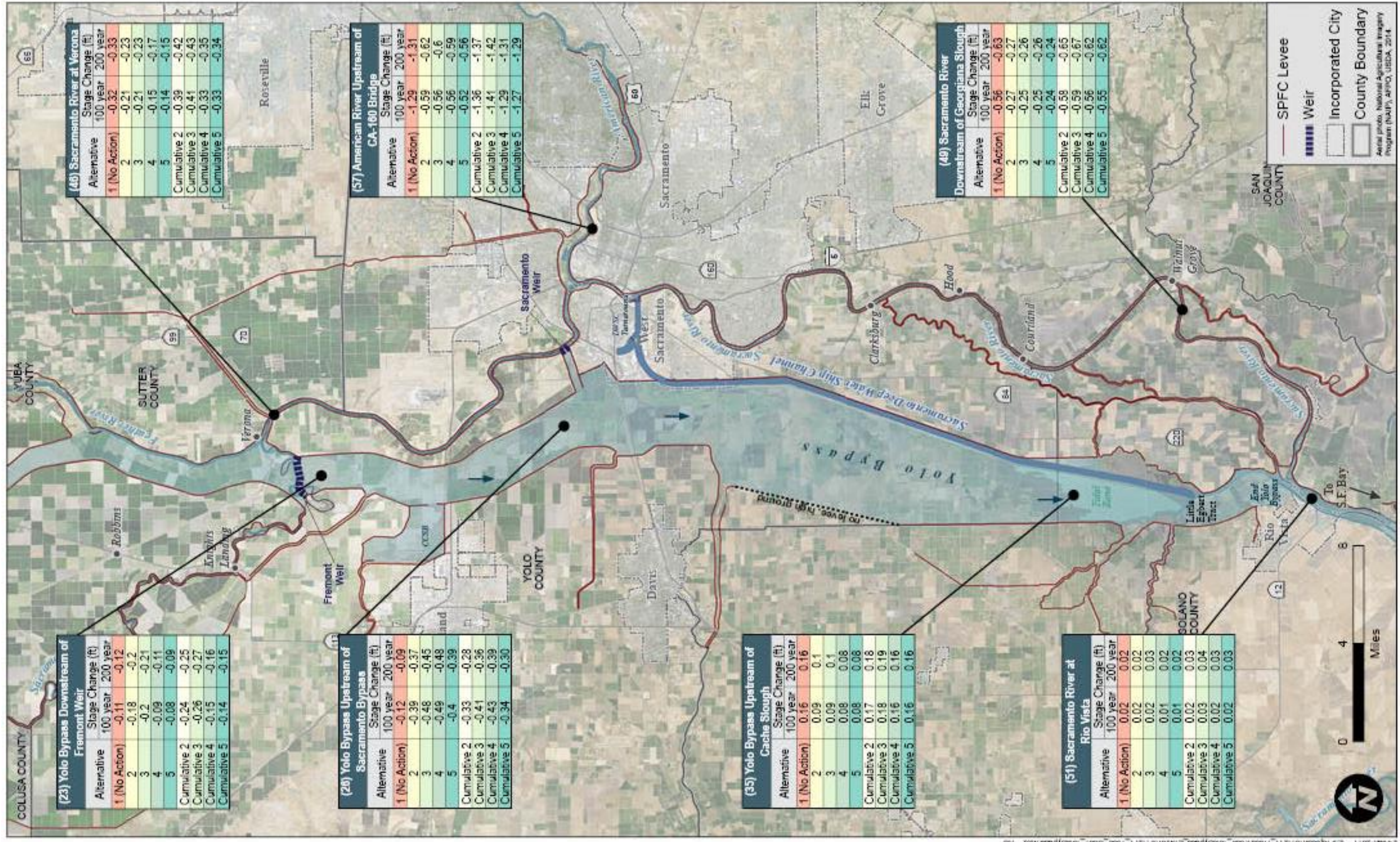
Page 4.14-12, second and third paragraphs under “No Action Alternative” are revised as follows:

The No Action Alternative subject to hydraulic analyses ~~differs from~~ is more specific than the No Action Alternative as described in Chapter 3, “Alternatives.” Under NEPA, the No Action Alternative indicates that no action related to the proposed project will occur but does not represent a condition under which no action within the system will occur. DWR relied upon ongoing modeling efforts (part of the ongoing 2017 CVFPP Update) to quantify impacts for the proposed project. To most accurately represent the No Action Alternative for hydraulic analysis, DWR developed the Future Without-Project model scenario, in consultation with USACE, as described on page 4.14-6 of the Draft EIS/EIR and Page G-6 of Appendix G.

This Future Without-Project Scenario represents future system conditions without the LEBLS project and ~~is the same as the Existing Conditions model scenario, with the addition of~~ includes the features in the USACE American River Common Features General Reevaluation Report (ARCF GRR) recommended plan. Those features include widening the Sacramento Bypass by approximately 1,500 feet and extending the Sacramento Weir by the same length. ~~There would be no changes under the No Action Alternative compared to the Existing Conditions scenario; for hydraulic analyses, they are identical.~~

Page 4.14-18, Figure 4.14-2b is revised as follows:

Figure 4.14-2b. Summary of Hydraulic Modeling Results by Alternative for Representative Index Points and 100- and 200-year Flood Events



Source: California Department of Water Resources 2016, adapted by GEI Consultants, Inc. in 2017

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4.15 Land Use and Planning, and Agricultural and Forestry Resources

Page 4.15-15, the last paragraph is revised as follows:

Constructing the proposed flood risk reduction facilities would require a substantial amount of borrow material. As described in greater detail in Chapter 3, “Alternatives,” most of the borrow material would be obtained from within the setback area, from degrading the existing levees, and potentially from the RD 785 and RD 537 cross levees. In the setback area, ~~existing top soil would be scraped and set aside and then~~ borrow material would be excavated and stockpiled using bulldozers. Following the completion of each of the two construction seasons, borrow sites would be hydroseeded with native grasses to reduce erosion during winter and to encourage their continued use as upland habitat. At the completion of material excavation, excavation sites within the setback area would be graded to depths appropriate for future agricultural use. The short-term and temporary on-site borrow activities would be conducted within Prime Farmland and may be conducted on land held under Williamson Act contracts. However, ~~the borrow areas are designated by the Yolo County 2030 General Plan as Agriculture and are zoned A-N (Agricultural Intensive) (Yolo County 2009a). Surface mining is considered a conditionally permitted compatible use with the A-N zoning under the Yolo County Zoning Code (Yolo County 2015: Table 8 2.304[d]) and is also considered a compatible use with Williamson Act contracts (Yolo County 2012). Furthermore, the topsoil at borrow sites in the setback area would be removed and set aside prior to commencement of borrow activities, and the topsoil would be replaced and the soil profile at the project site does not generally include a distinction between topsoil and subsoils, and~~ agricultural uses would resume at the conclusion of borrow activities. Therefore, this project component would have a temporary, short-term **less-than-significant** impact.

Page 4.15-17, Mitigation Measures AG-1a, AG-1b, and AG-1c are revised as follows:

Mitigation Measure AG-1a: Preserve Agricultural Productivity of Important Farmland to the Extent Feasible.

In a May 4, 2005, memorandum to California Resources Agency departments, boards, and commissions, the Secretary stated that “in selecting and developing resource-related projects, departments under the Resources Agency should consider ways to reduce effects on productive agricultural lands” and encouraged departments to incorporate, where appropriate, the strategies identified in the CALFED Bay-Delta Program (CALFED) EIR to reduce the impact of the CALFED Ecosystem Restoration Program on agricultural land and water use.

The measures listed below include the applicable strategies identified in the CALFED EIR and some additional measures. These measures are also reflective of the mitigation strategy included in the 2012 Central Valley Flood Protection Plan (CVFPP) (DWR 2012a), the 2015 Bay-Delta Conservation Plan (DWR and U.S. Bureau of Reclamation 2015), and DWR’s Agricultural Land Stewardship Framework and Strategies (DWR 2014). Not all measures listed below may be applicable for the project. Rather, these measures serve as an overlying framework to be used for specific discussions regarding mitigation between DWR and Yolo County. The applicability of measures listed below would vary based on input to DWR from Yolo County, as well as the location, timing, and nature of levee setback construction and operation. To the extent that these measures do not reduce the impact on agricultural land, Mitigation Measure AG-1c will apply.

Yolo County has an Agricultural Land Conservation and Mitigation Program (Yolo County Code Section 8-2.404) that specifies the types and ratios of mitigation for conversion of agricultural land that are to be applied to projects. However, the requirements of this program are not applicable to DWR.

DWR will ensure that the measures listed below are implemented as applicable ~~and feasible~~ to minimize effects and preserve agricultural productivity on Important Farmland, in addition to those measures included in Mitigation Measures AG-1b and AG-1c.

- ~~▪ Coordinate with Yolo County to receive input regarding the nature and types of measures that could be implemented to reduce the project's conversion of agricultural land to nonagricultural uses.~~
- ~~▪ Site the project and project footprint to minimize the permanent conversion of Important Farmland to nonagricultural uses if feasible.~~
- ~~▪ Identify and implement feasible project design features that balance benefits from flood risk reduction, agriculture, and natural resources.~~
- ~~▪ Minimize the splitting or fragmentation of parcels that are to remain in agricultural use, when selecting the site(s) for the flood control facilities.~~
- ~~▪ Maximize contiguous parcels of agricultural land of a size sufficient to support their efficient use for continued agricultural production.~~
- ~~▪ Maintain a means of reasonably convenient access to these agricultural properties as part of project design, construction, and implementation, where the construction or operation of the project could limit access to ongoing agricultural operations.~~
- ~~▪ Remove and stockpile, at a minimum, the upper 1 foot of topsoil of borrow sites and replace the topsoil after project completion as part of borrow site reclamation. Borrow site reclamation for agricultural production will also take into account the potential unique characteristics of soils to produce certain crops (e.g., clay pan soils for rice).~~
- ~~▪ Make topsoil available in areas permanently disturbed by project activities, and where topsoil is removed as part of project construction (e.g., stripping topsoil under a levee foundation) and not reused as part of the project. The topsoil will be made available to less productive agricultural lands that could benefit from the introduction of good quality soil. By agreement between DWR and the recipient(s) of the topsoil, the recipient(s) would use the topsoil for agricultural purposes.~~
- Relocate and/or replace wells, pipelines, power lines, drainage systems, and other infrastructure that are needed for ongoing agricultural uses and would be affected by project construction or operation.
- Minimize disturbance of Important Farmland and continuing agricultural operations during construction by implementing the following measures:

- Locate construction laydown and staging areas on sites that are fallow, already developed or disturbed, or to be discontinued for use as agricultural land, to the extent possible.
- Use existing roads to access construction areas to the extent possible.
- Coordinate with growers to develop appropriate construction practices to minimize construction-related impairment of agricultural productivity. Practices may include coordinating the movement of heavy equipment and implementing traffic control measures.
- Support the testing and application of alternative crops (i.e., agroforestry or energy crops) on idle farmland.

Timing: Before, during, and after project construction activities.

Responsibility: California Department of Water Resources.

Mitigation Measure AG-1b: Minimize Impacts on Williamson Act-contracted Lands, Comply with California Government Code Sections 51290–51293, and Coordinate with Landowners and Agricultural Operators.

DWR will ~~consider~~ implement the measures described below ~~and implement them~~, as applicable, to reduce effects on lands under Williamson Act contracts.

- DWR will comply with applicable provisions of California Government Code Sections 51290–51295 with regard to acquiring lands under Williamson Act contract. Sections 51290(a) and 51290(b) specify that State policy, consistent with the purpose of the Williamson Act to preserve and protect agricultural land, is to avoid locating public improvements and any public utilities improvements in agricultural preserves, whenever practicable. If such improvements must be located within a preserve, they will be located on land that is not under contract, if practicable.
- ~~More specifically,~~ DWR will comply with the following ~~basic~~ requirements ~~stated in~~ of the California Government Code:
 - Whenever it appears that land within a preserve or under contract may be required for a public improvement, DOC and Yolo County will be notified (Section 51291[b]).
 - Within 30 days of being notified, DOC and Yolo County must forward comments, which will be considered by DWR (Section 51291[b]).
 - A public improvement may not be located within an agricultural preserve unless findings are made that (1) the location is not based primarily on the lower cost of acquiring land in an agricultural preserve, and (2) for agricultural land covered under a contract for any public improvement, no other land exists within or outside the preserve where it is reasonably feasible to locate the public improvement (Sections 51291[a] and 51291[b]). If the land is acquired for the purpose of flood damage reduction measures, DWR is

exempt from the findings required in California Government Code Section 51292 (Section 51293[e][1]).

- The contract is normally terminated for lands acquired by eminent domain or in lieu of eminent domain (Section 51295).
 - DOC will be notified within 10 working days upon completion of the acquisition (Section 51291[c]).
 - DOC and Yolo County will be notified before completion of any proposed work of any significant changes related to the project (Section 51291[d]).
 - If, after acquisition, DWR determines that the acquired property would not be used for the proposed flood control facilities, DOC and Yolo County will be notified before the land is returned to private ownership. The land will be reenrolled in a new contract or encumbered by an enforceable restriction at least as restrictive as that provided by the Williamson Act (Section 51295).
- DWR will coordinate with landowners and agricultural operators to sustain existing agricultural operations, at the landowners' discretion, until the individual agricultural parcels are needed for project construction.

Timing: Before, during, and after project construction activities.

Responsibility: California Department of Water Resources.

Mitigation Measure AG-1c: Establish Conservation Easements Where Potentially Significant Agricultural Land Use Impacts Remain after Implementation of Mitigation Measures AG-1a and AG-1b.

As discussed in Mitigation Measure AG-1a, in general, where there is a reduction or termination of agricultural activities to undertake flood risk reduction, environmental protection, or other conservation measures, DWR will consider other ~~measures~~ factors before ~~considering~~ purchasing conservation easements or other measures of compensation (collectively referred to as “easements” below). The following factors will be considered when determining whether effects on agricultural land warrant purchase of an easement or other compensatory measures:

- Whether the change would affect the use of the land for agricultural purposes (i.e., ceasing agricultural activities and allowing land to be fallowed or be used for resource restoration in such a way that land could be returned to agricultural production).
- Whether the change would permanently take land out of production (i.e., construction of a new facility such that the land could no longer be farmed).
- Whether the land could be used for agricultural production but has not been or is not likely to be able to be used for such purposes because of flooding, bad soils, lack of dependable water supplies, or other reasons.

- Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of the project, but the project would provide benefits to nearby or other land that could be or is being used for agricultural purposes.
- Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of physical changes brought about by the project, and the land is Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.
- Whether the land would be converted to a use that would reduce ancillary environmental benefits.

Appropriate conservation measures may include but are not limited to establishing agricultural conservation easements, paying in-lieu fees toward agricultural conservation easements, supporting agricultural land trusts, and participating in habitat conservation plans or natural community conservation plans that include conservation of agricultural lands. The appropriate ratio of purchase or establishment of agricultural conservation easements relative to conversion of Important Farmland will be established by DWR following consultation with Yolo County, but in no event will it be less than 1:1.

~~If after implementing all other applicable measures such as those listed above in Mitigation Measure AG-1a, the project could still result in a potentially significant environmental impact, property interests in agricultural land (e.g., conservation easements) easements will be considered purchased requiring the preservation and/or enhancement of other land of similar agricultural quality and acreage, either directly or indirectly, to mitigate for permanently converted Important Farmland. Easements are most likely appropriate where there would be serious degradation or elimination of the physical conditions or natural processes that provide the land's resource qualities for agriculture. In this situation, there would normally also be other impacts on the environment. As part of Mitigation Measure AG-1c, DWR will consult with Yolo County regarding the potential for easements. Where feasible, the agricultural conservation easements should be acquired in the county in which the conversion would take place, i.e., Yolo County. If there is not a sufficient supply of similar Important Farmland where the conversions would occur, the agricultural conservation easements may be obtained in a different county. Where conservation easements are established by DWR, they may be held by land trusts, local governments, or other appropriate agencies that are responsible for ensuring that these lands will be maintained in agricultural use. Where easements are applicable, the factors listed below will be considered.~~

Where easements are considered for other resources such as terrestrial biological resources, purchase of easements ~~should~~ will be coordinated where possible so that agricultural resources are also addressed. For example, if it were determined that the project would permanently terminate agricultural activities on a piece of land that served as Swainson's hawk foraging habitat, if an easement on another property were determined appropriate to address losses of Swainson's hawk foraging habitat, the replacement land could also support the same kind of agricultural activity as the original converted property.

- ~~Applicable methods established in the area of the specific project activity will be considered. Methods for compensation may include but are not limited to establishing agricultural conservation easements, paying in-lieu fees toward agricultural conservation easements, supporting agricultural land trusts, and participating in habitat conservation plans or natural community conservation plans that include conservation of agricultural lands. The appropriate ratio of purchase or establishment of agricultural conservation easements relative to conversion of Important Farmland will be established by DWR following consultation with Yolo County. Depending on the specifics of the impact, available agricultural conservation programs in various locations, and local or regional regulatory standards, there are some circumstances where less than a 1 to 1 compensation ratio may be appropriate, and other circumstances where greater ratios may be required. Where conservation easements are established by DWR, they may be held by land trusts, local governments, or other appropriate agencies that are responsible for ensuring that these lands are maintained in agricultural use.~~

~~When determining whether effects on agricultural land warrant purchase of an easement, the factors below will be considered:~~

- ~~Whether the change would affect the use of the land for agricultural purposes (i.e., ceasing agricultural activities and allowing land to be fallowed or be used for resource restoration in such a way that land could be returned to agricultural production).~~
- ~~Whether the change would permanently take land out of production (i.e., construction of a new facility such that the land could no longer be farmed).~~
- ~~Whether the land could be used for agricultural production but has not been or is not likely to be able to be used for such purposes because of flooding, bad soils, lack of dependable water supplies, or other reasons.~~
- ~~Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of the project, but the project would provide benefits to nearby or other land that could be or is being used for agricultural purposes.~~
- ~~Whether the land is currently being used for agricultural production and would not be able to be used for similar purposes in the future because of physical changes brought about by the project, and the land is Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.~~
- ~~Whether the land would be converted to a use that would reduce ancillary environmental benefits.~~

Timing: Before, during, and after project construction activities.

Responsibility: California Department of Water Resources.

Significance after Mitigation: Implementation of Mitigation Measures AG-1a, AG-1b, and AG-1c would reduce permanent long-term effects on conversion of Important Farmland to a nonagricultural use and conversion of land under Williamson Act contracts to an inconsistent use

under all action alternatives. The impacts related to Williamson Act contracts would be less than significant. However, the permanent long-term effects on conversion of Important Farmland to nonagricultural, under each action alternative, would be a potentially **significant and unavoidable** impact. Even with the implementation of Mitigation Measures AG-1a, AG-1b, and AG-1c, some agricultural lands ~~likely~~ will be taken out of production permanently within the footprints of the new setback levees and likely cannot be fully mitigated.

4.17 Noise and Vibration

Page 4.17-15, the following text is added to the end of Mitigation Measure NOI-1:

DWR will offer to temporarily relocate the residents at 19946 County Road 124 and 21788 County Road 124 to a hotel during the period when construction noise would occur within 1,000 feet of the residence(s). The hotel will not be located more than 10 miles from the residences. Reimbursement of hotel accommodations will be limited to reasonable expenses and will be limited to the duration of active construction within 1,000 feet of the specified residences.

Timing: Before and during construction.

Responsibility: California Department of Water Resources.

4.18 Recreation

Page 4.18-2, the following text is added to the paragraph under “Tule Canal:”

The Tule Canal runs along the east side of the Yolo Bypass and forms the western boundary of the project site. It discharges into the Toe Drain (below the City of West Sacramento), and thence to Prospect Slough and Cache Slough, and ultimately to Delta channels. The Tule Canal provides fishing opportunities for white sturgeon, white catfish, black bass, and black crappie (CDFW 2016a). The canal, which is approximately 170 feet wide, is lined with riparian vegetation on both sides, and is accessible to fisherman from the adjacent dirt road on top of the levee crown and from County Road 124. The east side of the Tule Canal is bounded by the Yolo Bypass East Levee. Although the levee crown does not contain an officially designated trail, it is used as a pedestrian and bicycle path.

4.19 Socioeconomics

Page 4.19-11, Table 4.19-9 has been updated, and the summary text that precedes and follows the table is revised as follows:

The analysis of agricultural economics (revenues) compared the crop conditions on the project site as of summer 2016 with forecasted future conditions (when the remaining agricultural land on the project site would be located outside of the Lower Elkhorn Basin levees, and agricultural crops types would be shifted). The project site, under forecasted conditions, would be subject to more frequent inundation. After implementing one of the action alternatives, the net revenue would decline between 12 percent (in Alternative 25) and ~~18-20~~ percent (in Alternative 3).

Table 4.19-9. Agricultural Revenue Changes, All Action Alternatives

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Acreage in Agricultural Use	5,874	5,382	5,385	5,578	5,575
Change from Existing Agricultural Acreage	--	(492,442)	(489,663)	(296,490)	(299,484)
Total Crop Revenue	\$11,464,183 11,458,213	\$10,339,249 10,183,014	\$9,430,086 9,755,092	\$9,931,352 10,256,507	\$10,359,570 10,684,576
Change from Existing	--	(\$1,124,934 1,275,199)	(\$2,034,163 1,703,121)	(\$1,532,831 1,201,706)	(\$1,104,614 773,637)
Net Crop Revenue	\$2,934,139 3,719,230	\$2,609,618 3,140,757	\$2,454,560 3,037,533	\$2,457,582 3,151,611	\$2,476,058 3,254,906
Change from Existing	--	(\$324,721 578,473)	(\$479,779 681,676)	(\$476,757 567,619)	(\$458,281 464,323)

Note: All totals may not add to 100 percent due to rounding. Revised smaller footprint was evaluated for Alternative 2, but revised footprints were not developed for Alternatives 3 through 5.

Source: Data provided by California Department of Water Resources in 2018⁷

The analysis evaluates economic losses based on potential delays due to continued inundation of the Yolo Bypass as described in Appendix H. The analysis does not identify economic losses based on potential planting delays due to continued inundation of the Bypasses, because such inundation is difficult to predict, and therefore too speculative for meaningful consideration. The analysis also does not identify potential indirect economic effects of these agricultural uses. The analysis also evaluates potential indirect economic effects of these agricultural uses as described in Appendix H.

Page 4.9-14, Table 4.19-10 has been updated, and summary text that precedes the table is revised as follows:

DWR conducted an IMPLAN secondary impact analysis to evaluate the indirect, induced, and total effects of total annual crop revenue changes (See Appendix H). DWR's IMPLAN analysis estimated the loss of employment (including direct loss of full-time, part-time, and seasonal agricultural jobs, as well as indirect and induced changes to overall employment) at between 13.9⁸ and 29 full-time, part-time, or seasonal jobs, depending on the alternative (Table 4.19-10). Farm employment in Yolo County was estimated at 5,900 in 2015, with non-farm employment at 99,600 in 2015 (see Table 4.19-4). The estimated total job loss would be less than 0.5 percent of the farm employment in Yolo County in all of the alternatives, and would have a marginal impact on incomes. The employment changes include part-time and seasonal jobs as well as full-time jobs, and would affect both farm- and non-farm employment, further reducing the relative magnitude of the effects related to both job losses and income. This impact would be **less than significant**.

Mitigation Measure: No compensatory mitigation measures have been identified to further reduce this impact.

Table 4.19-10. Agricultural Employment¹ Changes, All Action Alternatives

	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Direct ²	(14.6)	(49.6 19.5)	(8.9)	(8.9)
Indirect ³	(5.2 3.6)	(6.6)	(4.9 5.0)	(3.6)
Induced ⁴	(2.3 2.1)	(3.0)	(1.6)	(1.4)
Total	(22.120.3)	(29.0)	(15.4)	(13.8 13.9)

Notes:

¹ Employment includes full-time, part-time, and seasonal jobs

² Effect of initial production changes by growers

³ Effect of growers buying goods and services from other businesses

⁴ Effect of growers and workers re-spending income in the economy

Source: Data provided by California Department of Water Resources in 2017

4.20 Traffic

Page 4.20-8, the last paragraph is revised as follows:

Before the start of project-related construction activities, DWR will prepare and implement a plan to manage expected construction-related traffic to the extent feasible, and to avoid and minimize potential traffic congestion during project-related construction. The traffic control plan will outline the phasing of activities and the use of specific routes to and from the work site and borrow site locations to minimize the daily amount of traffic on individual roadways. This plan will be prepared in consultation with the City of West Sacramento and Yolo County. The items listed below will be included as terms of the construction contracts.

4.22 Water Quality

Page 4.22-1, the paragraph under “Yolo Bypass” is revised as follows:

The Yolo Bypass is inundated in approximately 70% of years when Fremont Weir overtops with floodwater from the Sacramento River and Sutter Bypass, joining flows from western tributaries within the Bypass. In approximately 10% of years, localized flooding is due to western tributary contributions only (Reclamation and DWR 2012)~~approximately once every 3 years with floodwaters from the Sacramento River and Sutter Bypass.~~ When flooded floodwaters are present, the Yolo Bypass is considered a Delta waterway and water quality conditions reflect those of the Sacramento River and Sutter Bypass, except along the western margin of the Bypass. After diversion over the Fremont Weir ceases and floodwater within the Bypass drains, chemical concentrations within the Yolo Bypass are influenced by inflows from local streams, which are sources of nutrient and contaminant loading (USGS 2002). Some contaminants from the Sacramento River can be trapped in the Yolo Bypass as the floodplain begins to drain. In addition, local stream inflows, irrigation return flows, and discharges from local urban areas are potential sources of contaminants to the Yolo Bypass (USGS 2002). When the area is not flooded, the Tule Canal/Toe Drain provides connectivity from the Yolo Bypass to the Sacramento River and Delta. The Yolo Bypass has several existing and potential beneficial uses, pertaining to agriculture, habitat, fisheries, and recreation, as detailed in Table 4.22-1.

Chapter 5. Cumulative Impacts

Page 5-4, the second bullet is revised as follows:

- Hydrology, Hydraulics, and Flood Risk Management—local (drainage systems affected within and downstream of individual improvement sites), and regional (Sacramento River Flood Control System). The modeling conducted in support of the analysis in Section 4.14, “Hydrology, Hydraulics, and Flood Risk Management,” used parameters for the existing and future conditions that were established by USACE and DWR for use in evaluating DWR’s application under Section 408 of the Rivers and Harbors Act. The list of projects used for hydraulics modeling is described in Section 4.14, “Hydrology, Hydraulics, and Flood Risk Management,” and in Appendix G, “Lower Elkhorn Basin Levee Setback Project Hydraulic Analysis Report.” The list of projects used in the hydraulic analysis varies from the list of projects identified in this chapter to evaluate cumulative impacts more generally.

Page 5-5, the third bullet is revised as follows:

- *Sacramento Bypass Wildlife Area* – The approximately 360-acre Sacramento Bypass Wildlife Area is an approximately 360-acre area preserve, providing provides important cover and feeding areas for wildlife during late fall, winter, and early spring. Vegetation varies throughout the preserve, from mature cottonwood trees to willows and valley oaks.

Page 5-31, the text under “Fremont Weir Adult Fish Passage Modification Project – Future” is revised as follows:

The Fremont Weir Adult Fish Passage Modification Project would widen and deepen the existing fish ladder at the Fremont Weir to improve adult fish passage at the Fremont Weir and along the Tule Canal. The maximum target flow through the fish passage structure would be limited to approximately 1,100 cubic feet per second. The upstream and downstream adjoining channels would be reconfigured to accommodate migratory fish passage. ~~Two~~ One existing earthen agricultural road crossings would be replaced by ~~a two~~ permanent crossings, either railcar bridges or large fish-friendly box culverts, to allow for clear passage of migratory fish. ~~One agricultural crossing would be eliminated.~~ The Fremont Weir is owned by the Sacramento-San Joaquin Drainage District. The agricultural crossings ~~is are~~ owned by Knaggs Ranch and Swanston Properties. Planning and design began in 2016. ~~A joint NEPA/CEQA document is anticipated in early 2017,~~ and construction is anticipated to start in ~~late 2017~~ 2019.

Page 5-32, text is revised as follows:

Central Fremont Weir Gated Notch

The Central Fremont Weir Gated Notch would provide a new gated notch through Fremont Weir near the center of Fremont Weir. This gated notch would have an invert elevation of 14.8 feet because the river is higher at this upstream location. This location is on an outside bend of the river. Studies have indicated that juvenile fish may be found in greater numbers on the outside edge of river bends. The new gated notch would allow flow to pass into the Yolo Bypass at lower river elevations than under existing conditions, where flows only enter the Yolo Bypass when Fremont Weir overtops. Also, there is the consideration of including Central Multiple Gated Notches, with the goal of increasing the number of out-migrating juvenile fish that enter the Yolo Bypass. Trapezoidal channels create some limitations for fish passage because they have smaller flows at lower river elevations (because the channel is smaller at this elevation) when winter-run Chinook salmon are out-migrating. This alternative includes multiple gates so

that the deeper gate could allow more flow to enter the bypass when the river is at lower elevations. Flows would move to other gates when the river is higher to control inflows while maintaining fish passage conditions.

West of Fremont Weir Inundation Structure Gated Notch

The West Fremont Weir Gated Notch would have an invert elevation of 16.1 feet because the river is higher at this location. The western location is on the outside of a river bend but would be easier to access for O&M than a central location. The new gated notch would allow flow to pass into the Yolo Bypass at lower river elevations than under existing conditions where flows only enter the Yolo Bypass when Fremont Weir overtops. There is also the possibility of a West Side Gated Notch – Managed Flow, that would have a smaller amount of flow entering the Yolo Bypass through the gated notch in Fremont Weir than the other alternatives, but it would incorporate water control structures to maintain inundation in defined areas for longer periods of time within the northern Yolo Bypass. Additionally, this project is also considering a Large Gated Notch, that would allow flows up to 12,000 cfs to enter the Yolo Bypass. It was designed with the goal of entraining more fish while allowing more flow into the bypass when the Sacramento River is at lower elevations. Typically, winter-run Chinook salmon move downstream during the first high-flow event of the season. This flow event is sometimes not high enough to result in what would be considered substantial flows into the bypass. The gated notch could allow more flow to enter during winter-run Chinook salmon out-migration, potentially maximizing fish entrainment. This alternative would include a supplemental fish passage facility on the eastern side of Fremont Weir.

BiOp planning efforts are considering a stand-alone inundation notch located to the west of Fremont Weir. This location is not concurrent with the existing weir, but allows for hydrologic benefit by capturing flood flows along the river at an earlier point with no impact to the existing Fremont Weir structure. Flood flows would be introduced on the west side of the Bypass.

East of Fremont Weir Inundation Structure Gated Notch

The East Fremont Weir Gated Notch, would allow increased flow from the Sacramento River to enter the Yolo Bypass through a gated notch on the east side of Fremont Weir. The gated notch would create an opening in Fremont Weir that is deeper than Fremont Weir, with gates to control water going through the facility into the Yolo Bypass. The invert of the new notch would be at an elevation of 14 feet, which is approximately 18 feet below the existing Fremont Weir crest. Water would be able to flow through the notch during periods when the river elevations are not high enough to go over the crest of Fremont Weir (at an elevation of 32 feet).

Page 5-40, the following text is added to the bulleted list:

Other construction projects may occur simultaneously in the SVAB prior to or during the planned construction period for the LEBLS project (2020-2021). These projects, grouped by their anticipated construction year(s), include:

- **2017** – SAFCA North Sacramento Streams Levee Accreditation Project
- **2017** – SAFCA NLIP Reach I
- **2018/2019** – SAFCA Bryte Landfill Remediation Project

- **2017-2020** – WSAFCA Southport EIP
- **2018/2019 – 2020/2021** – SAFCA Sacramento River East Levee Accreditation Project, NLIP Riverside Canal, NLIP Reaches 13-20
- **2020/2021** – Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project
- **2020+** – SAFCA NLIP Contract 2

Chapter 7. Consultation and Coordination

Page 7-1, text starting in the first paragraph under “Agency Consultation and Coordination” is revised as follows:

In addition to the public involvement activities presented in Chapter 9, “Public Involvement,” USACE sent letters on October 6, 2016 to NMFS and USFWS inviting them to serve as NEPA Cooperating Agencies. Both agencies accepted this invitation. (Cooperating Agency correspondence is included in Appendix A, “Lower Elkhorn Basin Setback Levee Scoping Report.) USACE is also consulting with NMFS and USFWS under Section 7 of the Endangered Species Act. NMFS issued a Letter of Concurrence to the USACE on March 1, 2019, concluding that the proposed project is not likely to adversely affect Federally-listed fish species or designated critical habitats, and is not likely to adversely affect Essential Fish Habitat for Chinook salmon, and provided conservation recommendations to the USACE as allowed by the Fish and Wildlife Coordination Act. The USFWS issued a Biological Opinion to the USACE on May 2, 2019, concluding that the proposed project is not likely to adversely affect the western yellow-billed cuckoo and least Bell’s vireo and is not likely to jeopardize the continued existence of the valley elderberry longhorn beetle and giant garter snake.

Chapter 8. Compliance with Applicable Laws, Regulations, and Policies

Page 8-2, text starting on the second paragraph under “Clean Air Act of 1963, as amended, 42 USC 7401, et seq.” is revised as follows:

An analysis of air quality effects of the project is presented in Section 4.3, “Air Quality.” The project is expected to exceed the Federal air quality standards for nitrogen oxide (NO_x, which is a precursor of ozone), exceed EPA’s General Conformity *de minimis* thresholds for NO_x, and hinder the attainment of air quality objectives in the local air basin (NO_x). Implementation of BMPs would reduce NO_x emissions, but not below Federal thresholds.

Revised air quality estimates will be prepared and included in the ROD to document whether a Conformity Determination would be required. If a Conformity Determination is required based on the revised estimates, it would be completed before the ROD is issued. Therefore, the project would be in compliance with this act when the ROD is issued.

~~Therefore, a Conformity Determination would be required, and the project would be in partial compliance with this act when the ROD is issued.~~

Page 8-2, the second paragraph under “Endangered Species Act of 1973, as amended, 16 USC 1531, et seq” is revised as follows:

A list of threatened and endangered species and designated habitat that may be affected by the project was obtained from USFWS in 2016 (see Appendix E2, “U.S. Fish and Wildlife Service Species List”), and impacts are described in Sections 4.4, “Biological Resources – Fish and Aquatic Organisms,” and 4.5 “Biological Resources – Vegetation and Wildlife.” USACE has initiated and is actively engaged in consultation with USFWS and NMFS concerning impacts to listed species and critical habitat. A letter requesting to initiate consultation and a Biological Assessment were transmitted to USFWS and NMFS on October 24, 2017. NMFS sent letters requesting additional information on November 22, 2017, and on February 1, 2018, and withdrew from consultation on April 5, 2018, pending receipt of additional information. The USACE submitted additional information (including a revised Biological Assessment) to USFWS and NMFS on January 31, 2019. NMFS issued a Letter of Concurrence to the USACE on March 1, 2019, concluding that the proposed project is not likely to adversely affect Federally-listed fish species or designated critical habitats, and is not likely to adversely affect Essential Fish Habitat for Chinook salmon, and provided conservation recommendations to the USACE as allowed by the Fish and Wildlife Coordination Act. The USFWS issued a Biological Opinion to the USACE on May 2, 2019, concluding that the proposed project is not likely to adversely affect the western yellow-billed cuckoo and least Bell’s vireo and is not likely to jeopardize the continued existence of the valley elderberry longhorn beetle and giant garter snake. The USFWS has communicated to the USACE that it would not prepare a Fish and Wildlife Coordination Act report. NMFS sent a letter requesting additional information on February 1, 2018, and withdrew from consultation on April 5, 2018, pending receipt of additional information.

Page 8-5, the text under “Fish and Wildlife Coordination Act of 1958, as amended, 16 USC 661, et seq.” is revised as follows:

The Fish and Wildlife Coordination Act (FWCA) ensures that fish and wildlife receive consideration equal to that of other project features for projects that are constructed, licensed, or permitted by Federal agencies. FWCA requires that all Federal agencies consult with USFWS, NMFS, and the affected State wildlife agency for activities that affect, control, or modify surface waters, including wetlands and other waters, and give full consideration to the views and recommendations of these agencies. FWCA requires that the views of USFWS, NMFS, and the applicable State fish and wildlife agency (CDFW) be considered when effects are evaluated and mitigation needs are determined. NMFS and USFWS are Cooperating Agencies under NEPA for this project, and USACE has engaged NMFS and USFWS throughout development of the EIS. CDFW provided comments on the DEIS/DEIR, and is involved in discussions of mitigation for project impacts on state-listed species.

Page 8-6, the text under “Magnuson-Stevens Fishery Conservation and Management Act, 16 USC 1801” is revised as follows:

NMFS is a Cooperating Agency under NEPA, and USACE has engaged NMFS throughout development of its EIS regarding the project’s potential effects on essential fish habitat. Furthermore, consultation was conducted ~~is underway~~ with NMFS under Section 7 of the Federal ESA, and the requirements of this act will be met through these actions.

Page 8-7, the text in the last paragraph before “Noise Pollution and Abatement Act of 1972 (42 USC Section 4901 et seq.)” is revised as follows:

In accordance with regulations implementing Section 106 of the NHPA (36 CFR 800.2[c][2]), USACE has consulted with Native Americans who attach religious or cultural significance to Historic Properties that may be affected by the proposed undertaking. A detailed description of consultation with Native Americans is provided under “Native American Consultation” in Section 4.8, and correspondence with Native American Tribes in compliance with Section 106 of the NHPA is provided in Appendix F, “Native American Correspondence.” In accordance with 36 CFR § 800.2 (c)(1), USACE has consulted with the SHPO, and SHPO has concurred with the delineation of the project Area of Potential Effects, adequacy of inventory methods, and finding of adverse effect. Native American consultation is on-going.

Chapter 11. References

Page 11-6, text in the last entries is revised as follows:

~~Yolo County Habitat Conservation Plan/Natural Community Conservation Plan Joint Powers Agency. 2015 (March). *Second Administrative Draft Yolo Habitat Conservation Plan and Natural Community Conservation Plan*. Woodland, CA.~~

~~Yolo County HCP/NCCP JPA. *See Yolo County Habitat/Natural Community Conservation Plan Joint Powers Agency.*~~

Yolo Habitat Conservancy. 2018 (April). *Final Yolo Habitat Conservation Plan / Natural Community Conservation Plan*. Woodland, CA.

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