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# Addendum 2 to the Prospect Island Tidal Habitat Restoration Project Final Environmental Impact Report



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**ACRONYMS AND ABBREVIATIONS**

| <b>Acronym</b>    | <b>Definition</b>                                    |
|-------------------|--|
| CDFW              | California Department of Fish and Wildlife           |
| CEQA              | California Environmental Quality Act                 |
| DOGGR             | Division of Oil, Gas, and Geothermal Resources       |
| DTSC              | Department of Toxic Substances Control               |
| DWR               | California Department of Water Resources             |
| DWSC              | Deep Water Ship Canal                                |
| EIR               | Environmental Impact Report                          |
| °F                | Degrees Fahrenheit                                   |
| FEIR              | Final Environmental Impact Report                    |
| ft                | feet   |
| MPH               | miles per hour                                       |
| NAHC              | Native American Heritage Commission                  |
| NMFS              | National Marine Fisheries Service                    |
| NO <sub>x</sub>   | nitrogen oxides                                      |
| NPS               | National Park Service                                |
| PM <sub>10</sub>  | particulate matter less than 10 microns in diameter  |
| PM <sub>2.5</sub> | particulate matter less than 2.5 microns in diameter |
| PRC               | Public Resources Code                                |
| ROG               | Reactive Organic Gases                               |
| RWQCB             | Regional Water Quality Control Board                 |
| SR                | state route  |
| SWA               | State Wildlife Area                                  |
| SWPPP             | Stormwater Pollution Prevention Plan                 |
| USACE             | U.S. Army Corps of Engineers                         |
| USFWS             | U.S. Fish and Wildlife Service                       |

## EXECUTIVE SUMMARY

The California Department of Water Resources (DWR) and California Department of Fish and Wildlife (CDFW) have prepared Addendum 2 to the 2019 Prospect Island Tidal Habitat Restoration Project Final Environmental Impact Report (2019 FEIR) (SCH#2013052056). The 2019 FEIR evaluated the impacts and mitigation measures associated with the Prospect Island Tidal Habitat Restoration Project (Project).

This Addendum assesses the potential changes to previously evaluated environmental impacts associated with construction access route for construction equipment and imported materials for the Project. The 2019 FEIR evaluated impacts associated with the use of use State Route 84 (SR-84), Courtland Road and/or Teal Road (part of Road 107), and Road 107 to access the Sacramento Deepwater Ship Channel (DWSC) levee road north of Prospect Island. This Addendum routes all trucks used for construction equipment and imported materials to access the site using SR-84 and Holland Road. This represents a change from the 2019 FEIR which evaluated the use of this route for smaller equipment and work force commuter travel. This also represents a change from Addendum 1, which previously evaluated the environmental impacts resulting from the construction of a temporary 700-foot (ft) long ramp along the DWSC levee road access route.

This assessment concludes that the proposed changes in construction access would not result in any new potentially significant impacts, nor would any of the impacts identified in the 2019 FEIR be substantially intensified because of the proposed usage of public roads.

Based on the analysis in this Addendum, no Supplemental or Subsequent EIR is required to the 2019 FEIR because: 1) no substantial changes in the Project relevant to environmental concerns have occurred, 2) no new significant impacts would result from the proposed Project changes, 3) no substantial changes to environmental circumstances have occurred since the 2019 FEIR was certified, and 4) because no new information relevant to environmental impacts has come to light that would indicate the potential for new significant impacts not discussed in the 2019 FEIR.

## **1 INTRODUCTION**

### **1.1 Background**

A Final Environmental Impact Report (2019 FEIR) for the Prospect Island Tidal Habitat Restoration Project (Project) was prepared and certified by DWR and CDFW in accordance with the California Environmental Quality Act (CEQA) in 2019 (<https://ceqanet.opr.ca.gov/2013052056/3>). The 2019 FEIR evaluated the impacts and mitigation measures associated with the Prospect Island Tidal Habitat Restoration Project (Project). The 2019 FEIR assumed site access via public roads, levee roads, and/or barge on the Sacramento Deep Water Ship Channel (DWSC). Previously, Addendum 1 evaluated the environmental impacts resulting from the construction of a 700-foot (ft) long ramp along the construction access route. This Addendum eliminates the use of the DWSC levee road and ramp and assesses the environmental impacts resulting from utilizing existing roads and highways, primarily State Route 84 (SR-84) and Holland Road. The modified construction access route is the original option for the transportation of construction equipment and materials described in the 2016 Draft Environmental Impact Report and included for truck egress as well as for work force access in the 2019 FEIR.

### **1.2 CEQA Guidelines for Preparing an Addendum**

Prior to approval of subsequent actions that constitute a “project” under CEQA, the Lead Agency is required to determine whether the environmental effects of such actions are within the scope of the project covered by the EIR, and whether additional environmental analysis is required. The CEQA Guidelines identify the decision-making process the Lead Agency should use to determine the type of CEQA document appropriate for modification to the 2019 FEIR (§15164(a) and §15162).

The CEQA Guidelines (§15164(a)) specify that the lead agency shall prepare an Addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. According to Section 15162, a subsequent EIR shall not be prepared for the project unless the Lead Agency determines, based on substantial evidence considering the whole record, on or more of the following conditions are met:

1. Substantial changes are proposed to the project which would require major revisions to the EIR due to the involvement of new significant environmental

effects or a substantial increase in the severity of previously identified significant effects.

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which would require major revisions to the EIR due to the involvement of new significant environmental effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete, shows any of the following:
  - The project would have one or more significant effects not discussed in the EIR;
  - Significant impacts previously examined in the EIR would be substantially more severe than shown in that EIR;
  - Mitigation measures or project alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant impacts on the environment, but the Lead Agency declined to adopt the mitigation measure or alternative; or
  - Mitigation measures or project alternatives which are considerably different from those analyzed in the EIR would substantially reduce one or more significant impacts on the environment, but the Lead Agency declined to adopt the mitigation measure or alternative.

The requirements for a subsequent EIR as specified in the CEQA Guidelines (§15164(a)) have not been met, and this Addendum has therefore been prepared.

## **2 PROPOSED REFINEMENT TO THE PROSPECT ISLAND TIDAL HABITAT RESTORATION PROJECT**

This Addendum proposes to use Holland Road and State Route (SR) 84 as a modification to the construction site access route described in the 2019 FEIR. The modified access route would allow for equipment mobilization and transportation of materials to the Project site via these two roads. Specifically, this route would be used for all trucks hauling construction equipment and imported materials to access the Project site, while retaining the option for importing materials by barge. As described in the 2019 FEIR, construction workers and smaller equipment would also use SR 84 and Holland Road.

### **2.1 Construction Access as Outlined in 2019 FEIR**

#### **2.1.1 Equipment Mobilization and Demobilization**

The construction access route outlined in the 2019 FEIR would require trips for each equipment mobilization and de-mobilization event, with an estimated 94 trips (188 one-way trips) at the start and end of each construction season, assuming no equipment will be allowed to remain on-site during winter under the Central Valley Flood Protection Board (CVFPB) permit. Equipment mobilization trips would be spread over approximately two weeks. Access for major construction equipment would use SR-84, Courtland Road and/or Teal Road (part of Road 107), and Road 107 to access the DWSC levee road north of Prospect Island, then would follow the DWSC levee road south to the Project site. Access for smaller equipment would use SR-84 and Holland Road, which passes the Arrowhead Harbor Marina at Five Points to access the northern cross-levee at the northeast end of the Project site.

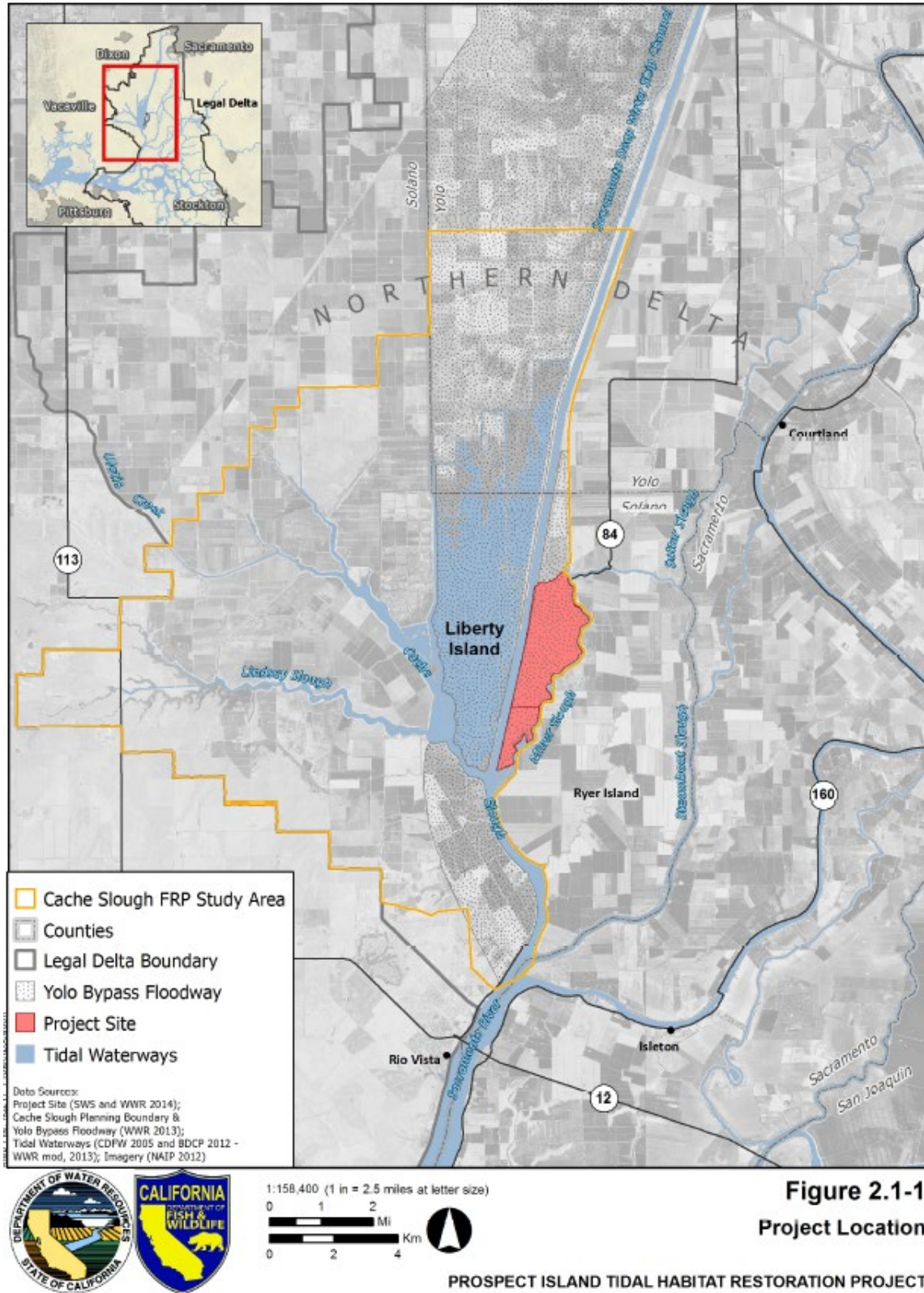
#### **2.1.2 Worker Access**

As described in the 2019 FEIR, traffic related to workers accessing the Project site throughout the construction period would be limited to approximately 40 trips/day (80 one-way trips), with workers expected to access the site via Holland Road. Towards the end of the construction period prior to Miner Slough levee breaching, import of planting materials and any temporary sheet pile removal would occur by truck, resulting in approximately 70 truckloads over a one-month period. There would be some additional haul truck trips during the construction period associated with demolition and removal activities (see Impact 3.13-1).



### **2.1.3 Materials Import**

In addition to the construction activities discussed above, materials such as rip-rap/ armoring material for erosion protection, import fill, and aggregate base would also be transported from their sources to Prospect Island by either barge, truck, or a combination of these modes. For the truck option described in the 2019 FEIR, this would potentially generate up to 7,840 trips over approximately 120 work days (6 months) involving use of Courtland Road and/or Teal Road, Road 107, and easements. The six-month period would likely be spread over two construction seasons (i.e., two three-month periods). Traffic during these periods could reach 65 round trips/work-day (130 one-way trips). Access for materials transport would use SR-84, Courtland Road and/or Teal Road (part of Road 107), and Road 107 to access the DWSC levee road north of Prospect Island, then would follow the DWSC levee road south to the Project site.



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**2.2 Construction Access Refinement**

Under this proposed addendum, equipment mobilization, materials import under the truck option, as well as worker access would use SR-84 and Holland Road to access the Project site. Courtland Road, Teal Road, Road 107, and DWSC would not be used. The Holland Road route is currently used by large equipment accessing Prospect Island (B. Janowiak, MBK Engineers, pers. comm., April 24, 2019). Accessing Prospect Island from Holland Road would allow faster travel and reduced travel distances for construction traffic, as compared with the DWSC levee road route described in the 2019 FEIR. The access route modification would eliminate the need (identified by DWR Department of Engineering staff) for improvements along secondary roads prior to commencement of construction. In addition, the SR-94 and Holland road access route would eliminate the need for construction of the 700 ft long access ramp previously assessed in Addendum 1.

**2.3 Updated Estimates of Truck Trips for Materials Import, Mobilization, and Demobilization**

Recent design review of materials import quantities and assumptions regarding payloads of haul trucks has indicated that the 7,840 trips needed for materials import in the 2019 FEIR is an overestimate. The current estimates of import fill, rock, and precast concrete total 15,400 cubic yards (cy), which would correspond to 1,284 truck trips assuming 12 cy per load. In addition, a revised estimate of aggregate base needed for temporary roads and levee road maintenance totals 22,800 tons, corresponding to 990 trips assuming 23 tons per load.

Including equipment mobilization, seasonal and final demobilization, the truck trip estimates for the Project would be revised down to 2,500 trips representing a 68 percent reduction in truck trips (i.e., 2,500 vs 7,840 trips) and workdays for materials import (i.e., 38 vs 120 days) when compared to the 2019 FEIR.

### **3 SUPPLEMENTAL ENVIRONMENTAL REVIEW**

#### **3.1 Environmental Checklist for Supplemental Review**

This section describes the methods used to evaluate the proposed refinements to the Project. The Environmental Checklist identifies the issues that pertain to the proposed refinement as addressed in the 2019 FEIR. The checklist (See Appendix A, Table A-1) states each environmental impact analyzed in the 2019 FEIR (e.g., noise, transportation/traffic, and air quality), and explains each impact's significance and associated mitigation measures.

The checklist also shows the significance determinations with the refined project access route, and compares how the proposed refinement affects the previous findings of environmental impacts with consideration for:

1. whether the proposed refinement to the Project would involve new significant environmental impacts or a substantial increase in the severity of previously identified significant impacts that, in turn, would require major revisions of the FEIR in accordance with Section 15162(a)(1) of the CEQA Guidelines;
2. whether changes to the circumstances under which the Project is undertaken have occurred that would involve new significant environmental impacts or a substantial increase in the severity of previously identified significant impacts that, in turn, would require major revisions of the 2019 FEIR in accordance with Section 15162(a)(2) of the CEQA Guidelines;
3. whether new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2019 FEIR was certified as complete, shows additional or substantially more severe significant impacts not discussed in the FEIR; specifically, if the new information shows that (A) the Project would have one or more significant impacts not discussed in the prior environmental documents, or (B) significant impacts previously examined would be substantially more severe than shown in the prior 2019 FEIR requiring preparation of a subsequent or supplemental EIR in accordance with Sections 15162(a)(3)(A) and 15162(a)(3)(B) of the CEQA Guidelines.
4. whether new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2019 FEIR was certified as complete, shows that mitigation measures or alternatives in the 2019 FEIR would now be feasible or identifies new mitigation measures or alternatives not in the 2019 FEIR that would reduce significant impacts in accordance with Sections

15162(a)(3)(C) and 15162(a)(3)(D) of the CEQA Guidelines; specifically, if the new information shows that (A) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant impacts of the Project, but DWR declines to adopt the mitigation measure or alternative or (B) mitigation measures or alternatives which are considerably different from those analyzed in the 2019 FEIR would substantially reduce one or more significant impacts on the environment, but DWR declines to adopt the mitigation measure or alternative, then preparation of a subsequent or supplemental EIR is required. However, if the additional analysis completed as part of this Addendum finds that the mitigation measures and alternatives of the 2019 FEIR remain the same, or additional mitigation measures or alternatives are available and either would be adopted by DWR or would not be necessary, then no supplemental or subsequent EIR is required, making this Addendum the proper environmental documentation for the proposed refinement to the Project.

### **3.2 Potential Revisions to FEIR**

In accordance with Section 15162(a)(1) of the CEQA Guidelines, this section provides an evaluation of whether the proposed refined access route would result in new significant environmental impacts or a substantial increase in the severity of previously identified significant impacts that would require major revisions of the FEIR. Table A-1 describes all environmental impacts as evaluated in the FEIR, their significance conclusions, and whether mitigation measures would be required to lessen the severity of impacts to “less than significant.” Table A-1 also provides the assessment for whether the refinement changes the conclusion and whether new mitigation measures would be required to maintain a conclusion of “less than significant” adverse effects.

Most checklist impact assessments would not be changed by the refinement of the access route as the proposed construction access route would have little to no relevance to the environmental impacts assessed, because:

1. the impact relates to resources and activities that occur in or around water or riparian zones and the proposed construction access route would not be cross water or riparian zones;
2. the impact relates specifically to the geography of the north or south Prospect Island properties and proposed construction access route is located east of Prospect Island properties;

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3. the impact relates to habitat for Valley elderberry long horn beetle and western pond turtle and the proposed construction access route does not include the specified habitat or create additional disturbance to the specified habitat;
  4. the impact assessment is for a long-term impact and the proposed construction access route would be temporary (short-term) impact;
  5. the impact relates to ground disturbance or earth moving of native soil and no such disturbance would occur to utilize the proposed construction access route; or
  6. The impact would result from effects to utilities or easements for utilities and no above-ground utilities have been identified and no below ground utilities would be disturbed by the utilization of the proposed construction access route.

The impacts from the FEIR that fall within the above six categories are: Hydrology Impacts 3.1, Water Quality Impacts 3.2, Aquatic Biological Resources Impacts 3.3, Wetland and Terrestrial Biological Resources Impacts 3.4, Geology and Soils Impacts 3.5, Hazards and Hazardous Materials Impacts 3.6, Mineral Resources Impacts 3.9, Aesthetics Impacts 3.11, Cultural Resources Impacts 3.13, Recreation Impacts 3.16, and Utilities Impact 3.18. These impacts and any mitigation measures are included in Table A-1 for reference.

The following impact assessments are relevant to the proposed access route: Air Quality Impacts 3.7, Noise Impacts 3.10, and Transportation and Traffic Impacts 3.17. However, the level of significance would be unchanged from the 2019 FEIR as the proposed new construction access route involves the use of existing Project roads, reduction of vehicle miles traveled, and an overall reduction in number of truck trips estimated. The impact assessments are discussed in more detail in Section 3.3 through 3.5 of this Addendum.

### **3.3 Air quality**

#### **Impact 3.7: Generation of criteria pollutant emissions that could contribute to air quality violations**

The original impact assessment for generation of criteria pollutant emissions that contribute to air quality violations is provided in the 2019 FEIR on pages 3-281 through 3-288. The proposed refined access route involves the use of only two existing roads, Holland Road and SR-84, to haul construction equipment and import materials as well as workers commuting to the Project site. The proposed

access route redirects traffic from unimproved levee roads to public roads resulting in an overall reduction of emissions associated with road improvements and temporary access ramp construction along the haul route. Additionally, the reduction in estimated truck trips and workdays (See Section 2.2) is expected to result in lower emissions overall and would also limit dust related emissions to vehicle travel within the Project site. The proposed access route change is not expected to alter conclusions regarding daily or annual thresholds previously assessed in the FEIR. Also, the FEIR identified three Mitigation Measures: 3.7-1.1, 3.7-1.2, and 3.7-1.3 to reduce the potential impacts to less than significant (see Table A-1). Complying with the same mitigation measures during mobilization and materials import activities, would result in the same impact significance of *less than significant with mitigation*.

### 3.4 Noise

#### **Impact 3.10: Potential for short-term noise disturbance to nearby residents**

The original impact assessment for potential short-term noise disturbance to nearby residents is provided in the 2019 FEIR on pages 3-307 through 3-311. The FEIR identifies that the Project would generate off-site noise from haul trucks. The FEIR states that trucks would utilize existing roads and highways, primarily SR-84, Holland Road, Courtland Road and/or Teal Road, and Road 107 during regular working hours (e.g., Monday–Friday during the daylight hours). The proposed refined access route involves the use of only two existing roads, Holland Road and SR-84, to haul construction equipment and import materials as well as workers commuting to the Project site. The proposed construction access route would generate off site noise at a similar intensity to the that used to evaluate impacts related to truck trips assessed in the FEIR. However, the elimination of the need for secondary road improvements and construction of the temporary access ramp (Section 2.2) and reduced truck trips and work days needed for materials import, equipment mobilization and demobilization (Section 2.3) represent nearly a 70 percent reduction in truck trips and reduced duration of noise related impacts. Although residences along the access routes (e.g., live-aboard residences at the Arrowhead Harbor Marina) would experience increased noise while trucks are hauling materials to and from the Project site, the reduction in estimated truck trips is expected to substantially reduce the duration of these impacts. The proposed access route change is not expected to alter conclusions regarding ambient noise thresholds previously assessed in the FEIR. Also, the FEIR identified Mitigation Measure 3.10-1.1 to reduce the potential impacts to less than significant (see Table A-1). Complying with the same

mitigation measures during mobilization and materials import activities, would result in the same impact significance of *less than significant with mitigation*.

### **3.5 Transportation and Traffic**

#### **Impact 3.17: Potential traffic impacts during construction**

The original impact assessment for potential traffic impacts during construction is provided in the 2019 FEIR on pages 3-363 through 3-366. The 2019 FEIR states that construction activities would generate off-site traffic, primarily on SR-84, Courtland Road, Teal Road, Road 107, and Holland Road, during construction. The proposed refined route would utilize only SR-84 and Holland Road, resulting in reduced traffic use of unimproved levee roads. The proposed access route change is not expected to alter conclusions regarding higher-than-normal traffic loads to highways and state routes that are designed for, and regularly receive, haul trucks. Additionally, the refined estimate of truck trips and workdays associated with materials import is expected to greatly reduce traffic intensity and duration on these roads. Also, the FEIR identified three Mitigation Measures: 3.17-1.1 and 3.17-1.2 to reduce the potential impacts to less than significant (see Table A-1). Complying with the same mitigation measures during mobilization and materials import activities, would result in the same impact significance of *less than significant with mitigation*.



## **4 CONCLUSION**

This analysis demonstrates that the use of SR-84 and Holland Road for transportation of construction materials to the Project site does not meet the criteria in Section 15162 of the State CEQA Guidelines for preparation of a subsequent EIR, and does meet the criteria of Section 15164 of the State CEQA Guidelines for preparation of an EIR Addendum. The FEIR (DWR and CDFW 2019), supplemented by this Addendum, is complete, accurate, and adequate to meet the requirements of CEQA and the State CEQA Guidelines.

## **5 REFERENCES**

DWR and CDFW (California Department of Water Resources and California Department of Fish and Wildlife). 2019. Prospect Island Tidal Habitat Restoration Project Final Environmental Impact Report. Prepared by DWR, Fish Restoration Program, Division of Environmental Services, West Sacramento, CA and CDFW, Fish Restoration Program, Bay Delta Region (Region 3), Stockton, CA.

Janowiak, B. 2019. Personal Communication. E-mail from B Janowiak (MBK Engineers) to L. Chu (DWR) and D. Riordan (DWR). April 24, 2019.

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## **Appendices**

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**Appendix A**

**Prospect Island Tidal Habitat Restoration Project Final  
Environmental Impact Report Impact Summary and  
Mitigation Measures**

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**Table A-1.** Summary of Impacts and Mitigation Measures by Resource Area

| Impact No.           | Impact Title  | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|----------------------|---|-------------------|---|----------------------------|-------------------------|
| <b>WATER QUALITY</b> |   |                   |   |                            |                         |
| 3.2-1                | Short-term construction-related water quality impacts | LTSM              | <p><b>Mitigation Measure 3.2-1.1</b><br/>A site dewatering plan shall be developed by the construction contractor and submitted to DWR for approval prior to commencement of construction activities. The site dewatering plan shall include items such as the following:</p> <ol style="list-style-type: none"> <li>1. Detailed description of work to be performed to control surface water at the Project site.</li> <li>2. Detailed description of methods, installation and details of the dewatering systems proposed to be used.</li> <li>3. Drawings showing the detailed layout of dewatering systems including pumps, ditches, berms, discharge lines, Best Management Practices (BMPs), and barriers to shield or divert flow.</li> <li>4. Supporting design information including design calculations prepared by a California Registered Civil Engineer, type of systems, sizes, capacities, proposed number and layout of pumps, depths, filters, other needed equipment, and power supply.</li> <li>5. Information related to backup pumping systems, backup power systems, and warning systems to protect against power failure, system failure, and high groundwater.</li> </ol> | LTSM                       | No                      |

| Impact No. | Impact Title | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
|------------|--------------|-------------------|--|----------------------------|-------------------------|
|            |              |                   | <p>6. Information related to operation, maintenance, monitoring, removal, decommissioning pumps, and system abandonment procedures.</p> <p>7. Information related to discharge, including methods to monitor turbidity and water treatment if necessary.</p> <p>8. Provisions for handling significant rainfall events (greater than 0.5 in predicted in a 24-hour period as described in the Stormwater Pollution Prevention Plan [SWPPP]). This shall also include procedures to be followed prior to the forecasted significant rain events.</p> <p>9. Provisions for handling emergency situations such as power outages, equipment failures, pumping system shutdowns and the proposed response.</p> <p>10. Information on schedule and sequencing of dewatering activities.</p> <p>11. Information on dewatering operations shall be coordinated with other construction operations including placement of compacted soil, removal and placement of pipe, and other miscellaneous items.</p> <p><b>Mitigation Measure 3.2-1.2</b><br/>Upland areas of the Project associated with staging activities shall be covered by a Stormwater Pollution Prevention Plan (SWPPP). All contractors working in a capacity that could increase the</p> |                            |                         |

| Impact No. | Impact Title | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|------------|--------------|-------------------|---|----------------------------|-------------------------|
|            |              |                   | <p>potential for adverse water quality impacts would receive training regarding the need to minimize impacts. Contractors would also be familiar with general storm water construction-site BMPs for the protection of water quality. The SWPPP may include, but would not be limited to, the following:</p> <ol style="list-style-type: none"> <li>1. Use of vegetated buffers, hay wattles or bales, sandbags, silt screens, or other erosion control measures to intercept runoff from construction, excavation, or staging areas to adjacent waterbodies.</li> <li>2. BMPs for staging of construction supplies and waste management.</li> </ol> <p><b>Mitigation Measure 3.2-1.3</b><br/>A Spill Prevention, Control, and Response Plan shall be developed by the construction contractor and submitted to DWR for approval prior to commencement of construction activities. Spill prevention and cleanup kits, equipment, and materials shall always be in close proximity to locations of hazardous materials (e.g., at fueling and staging areas) and conveniently located to allow rapid response. Prior to entering the work site, all field personnel would be informed of the location of the spill prevention and cleanup kits and appropriately trained in spill prevention, hazardous material control, and spill cleanup. The work site would be routinely inspected to verify that the Plan is properly implemented. The Plan would include:</p> <ol style="list-style-type: none"> <li>1. A vehicle inspection and fueling plan.</li> <li>2. BMPs for spill prevention and containment.</li> </ol> |                            |                         |

| Impact No. | Impact Title  | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
|------------|---|-------------------|--|----------------------------|-------------------------|
|            |   |                   | <ol style="list-style-type: none"> <li>3. Locations and uses of spill prevention materials, cleanup kits, and equipment.</li> <li>4. Qualification and reporting requirements for a federal reportable spill (CFR, Title 40, Section 110) including contact information for the RWQCB and the California Department of Toxic Substances Control (DTSC).</li> </ol>   |                            |                         |
| 3.2-2      | Short-term construction-related increases in turbidity and/or mobilization of contaminants from dredging and excavation of levee breaches | LTSM              | <p><b>Mitigation Measure 3.2-2.1</b></p> <ol style="list-style-type: none"> <li>1. Appropriate turbidity control measures (e.g., silt curtains) shall be required during all dredging operations. Selection of appropriate turbidity control measures would consider tidal forces in Miner Slough and would be designed to be robust and effective. Turbidity measures would be in place 1–2 days prior to commencement of dredging operations and would be positioned slightly above the bottom sediments allowing aquatic species to escape entrapment.</li> <li>2. The cycle time of the ascending loaded dredging bucket shall be limited to a velocity that reduces the potential to wash sediment out of the bucket.</li> <li>3. The number of bites performed per cycle shall be limited to one to reduce sediment re-suspension from opening and closing the dredging bucket.</li> </ol> | LTSM                       | No                      |



| Impact No. | Impact Title   | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|------------|--|-------------------|---|----------------------------|-------------------------|
| 3.2-3      | Short-term construction-related effects from application of aquatic herbicides | LTSM              | <p><b>Mitigation Measure 3.2-3.1</b><br/>Best Management Practices (BMPs) shall be employed in order to minimize potential impacts to water quality from accidental spills. All contractors working shall receive training regarding the need to minimize impacts. Contractors shall be experienced and compliant in the environmentally safe application of herbicides. BMPs shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>1. Areas for storage, mixing, and loading of herbicides shall be located where accidental spills to nearby waterbodies cannot occur.</li> <li>2. Applicators shall be trained in proper spill response, and rapidly report any spill to the appropriate agencies.</li> <li>3. Applicators shall maintain on-site (near herbicide storage and loading equipment) appropriate initial spill-response items (e.g., absorbent materials).</li> </ol> <p><b>Mitigation Measure 3.2-3.2</b><br/>In order to minimize off-target spray drift and impacts to water quality from herbicide application, aerial pesticide application by helicopter shall be preferred (over fixed wing aircraft). In addition, all appropriate, standard BMPs for aerial application of pesticides shall be followed, including but not limited to, the following:</p> <ol style="list-style-type: none"> <li>1. Applicators shall develop an application plan--including maps of the Project site showing general spotter and flight plans with application areas clearly indicated--to be</li> </ol> | LTSM                       | No                      |

| Impact No. | Impact Title | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|------------|--------------|-------------------|---|----------------------------|-------------------------|
|            |              |                   | <p>approved by the Lead Agency, before any application of herbicides.</p> <ol style="list-style-type: none"> <li>2. Applicators shall adhere strictly to proper mixing and application guidelines as presented on herbicide labels and in product instructions.</li> <li>3. Application of herbicides on levee vegetation shall not take place by air and otherwise avoided unless necessary, when it would be executed using spot application techniques.</li> <li>4. Herbicide application by air shall only take place during the in-water work window from July 1 to October 31 of any one year, in order to reduce potential impacts to migrating fish species of concern.</li> <li>5. Applicators shall maintain records of herbicide applications—including dates, times, weather conditions, amount of herbicide applied, problems experienced, etc.—in addition to or as required by federal, state, and/or local agencies.</li> <li>6. Spraying shall at all times be halted when flying over levees, adjacent waterbodies (e.g., Miner Slough, DWSC), and agricultural fields.</li> <li>7. Aerial application would occur only during light winds, non-gusty, relatively cool weather conditions.</li> <li>8. Application would involve the use of appropriate spray nozzles, nozzle configurations, and nozzle orientations that</li> </ol> |                            |                         |

| Impact No. | Impact Title  | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
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|            |   |                   | <p>minimize atomization of herbicide mixtures and production of fine droplets that tend to drift.</p> <p>9. Herbicide tanks would not be operated at excessively high pressures.</p> <p>10. If conditions require the use of aerial spray by fixed-wing aircraft, pilots shall be instructed to include an appropriate spray buffer (in addition to the width of the levee) where, to the extent possible, no herbicides would be directly applied (subject to overriding safety concerns).</p> |                            |                         |
| 3.2-4      | Short-term construction-related effects on water temperature in adjacent waterbodies due to dewatering activities | NI                | None required   | NI                         | No                      |
| 3.2-5      | Long-term effects on salinity in waterbodies near Prospect Island   | LTS               | None required   | LTS                        | No                      |
| 3.2-6      | Long-term effects on water temperature within Prospect Island and in nearby waterbodies                           | B                 | None required   | B                          | No                      |
| 3.2-7      | Long-term effects on primary productivity and dissolved organic carbon (DOC) within and near Prospect Island      | LTS               | None required   | LTS                        | No                      |
| 3.2-8      | Long-term effects on methylmercury production, bioaccumulation, and export  | LTS               | None required   | LTS                        | No                      |
| 3.2-9      | Long-term effects on groundwater quality  | NI                | None required   | NI                         | No                      |

| Impact No.                          | Impact Title  | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
|-------------------------------------|---|-------------------|--|----------------------------|-------------------------|
| <b>AQUATIC BIOLOGICAL RESOURCES</b> |   |                   |  |                            |                         |
| 3.3-1                               | Short-term loss and degradation of aquatic habitat from construction-related activities | LTS               | None required  | LTS                        | No                      |
| 3.3-2                               | Long-term conversion and enhancement of aquatic habitat                                 | B                 | None required  | B                          | No                      |
| 3.3-3                               | Short-term direct construction-related injury or mortality of fish                      | LTSM              | <p><b>Mitigation Measure 3.3-3.1</b><br/>Pile driving activities shall be conducted using vibratory hammers, where feasible, to minimize sound attenuation from pile driving activities. If in-water pile driving activities become necessary, underwater sound monitoring shall be performed to ensure that peak sound pressure does not exceed 206 decibels and accumulated sound exposure level does not exceed 187 decibels at 10 meters. If work is performed at a time when special-status fish less than 2 grams are expected near the Project site, accumulated sound exposure levels shall not exceed 183 decibels at 10 meters. Underwater sound reduction measures shall be implemented as needed to ensure that sound levels do not exceed the above thresholds. Sound reduction measures may include impact cushions, pipe caissons, bubble curtains, fabric barriers, and limiting operational hours and impact frequency.</p> <p><b>Mitigation Measure 3.3-3.2</b><br/>DWR shall consult with CDFW and USFWS before conducting any in-water work during the month of July. DWR shall determine the extent of Delta Smelt presence in the CSC and Miner Slough by evaluating catch and distribution data from CDFW's</p> | LTSM                       | No                      |

| Impact No. | Impact Title   | FEIR Significance                      | Proposed Mitigation Measures   | Significance with Addendum             | New Mitigation Measures |
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|            |  |  | <p>20 mm Survey<sup>1</sup> and Summer Townet Survey<sup>2</sup>. The results shall be sent to USFWS and CDFW representatives to determine the extent of allowable in-water work.</p> <p>20 mm Survey Stations 724 and 726 are located in Miner Slough at the lower and upper ends of Prospect Island and shall be used to determine Delta Smelt abundance in Miner Slough during July construction activities. Summer Townet Survey Station 715, just downstream of Miner Slough in Cache Slough; Station 723, just upstream from Miner Slough in the DWSC; and Station 716, just upstream from Miner Slough in Lindsey Slough, shall be used to determine Delta Smelt abundance in the vicinity of Miner Slough when the 20 mm Survey is not active.</p> |  |                         |
| 3.3-4      | Short-term construction-related noise impediments to fish migration  | LTSM                                   | <b>Mitigation Measure 3.3-3.1</b><br><i>(described above in Aquatic Biological Resources)</i>  | LTSM                                   | No                      |
| 3.3-5      | Short-term impairment of essential fish behaviors due to potential increases in turbidity during underwater sediment sampling activities | Impact deleted as sampling is complete | None required  | Impact deleted as sampling is complete | No                      |

<sup>1</sup> The 20 mm Survey is an annual survey conducted by CDFW that monitors post-larval to juvenile Delta Smelt throughout the Delta from March through July. Surveys run every two weeks and include stations in Cache Slough, Lindsey Slough, the DWSC, and Miner Slough.

<sup>2</sup> The Summer Townet Survey is an annual survey that monitors young of the year fish throughout the Delta from June through August. Surveys run every two weeks and include stations in Cache Slough, Lindsey Slough, and the DWSC.

| Impact No. | Impact Title   | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
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| 3.3-6      | Short-term impairment of essential fish behaviors due to construction-related increases in turbidity     | LTSM              | <b>Mitigation Measure 3.2-2.1</b><br>(described above in Water Quality)  | LTSM                       | No                      |
| 3.3-7      | Short-term fish injury or mortality during dewatering  | LTSM              | <b>Mitigation Measure 3.3-7.1:</b><br>To minimize mortality due to the dewatering process, a Fish Rescue Plan shall be prepared by DWR for approval by state and federal fish agencies (CDFW, USFWS, NMFS). Development of the Fish Rescue Plan shall include consideration of numerous sampling methods (seines, electrofishing, traps) and events, performed during and potentially after initial site dewatering. Fish would be captured alive and transported to nearby suitable habitat for release. The fish rescue would occur under the direction of CDFW. | LTSM                       | No                      |
| 3.3-8      | Fish Injury or mortality due to herbicide application  | NI                | None required  | NI                         | No                      |
| 3.3-9      | Post-construction increased predation on native fish   | LTS               | None required  | LTS                        | No                      |
| 3.3-10     | Long-term impacts to fish in Prospect Island and adjacent water bodies from changes in water temperature | B                 | None required  | B                          | No                      |
| 3.3-11     | Altered habitat and food web from invasion by Asian Clam   | LTS               | None required  | LTS                        | No                      |
| 3.3-12     | Food web impacts from increased levels of methylmercury bioaccumulation                                  | LTS               | None required  | LTS                        | No                      |

| Impact No.  | Impact Title  | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
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| <b>WETLAND AND TERRESTRIAL BIOLOGICAL RESOURCES</b> |   |                   |  |                            |                         |
| 3.4-1   | Short-term impacts to perennial aquatic habitats and wetland communities from site preparation                      | SU                | None   | SU                         | No                      |
| 3.4-2   | Short-term impacts to tidal aquatic habitats and wetland communities from dredging in the Miner Slough spur channel | NI                | None required  | NI                         | No                      |
| 3.4-3   | Short-term loss of valley/foothill riparian habitat   | LTSM              | <b>Mitigation Measure 3.4-3.1</b><br>Potential short-term impacts to individual high value trees for nesting and roosting would be minimized during final design by avoidance and protection measures, as specified in Mitigation Measures 3.4-14.1 and 3.4-17.1. A map of high value trees for nesting to be protected will be made available to on-site construction management.   | LTSM                       | No                      |
| 3.4-4   | Short-term construction-related mortality or detrimental effects to sensitive plants                                | LTSM              | <b>Mitigation Measure 3.4-4.1</b><br>Mitigation shall include conducting pre-construction surveys for special-status plants. If special-status plants are found within the affected footprint, preservation methods such as transplantation, salvage, or seed collection and dispersal would be considered and shall be implemented if deemed necessary to avoid a significant impact to the local population through consultation with CDFW. Herbicide application practices shall include following all application recommendations for the herbicide to be applied, and refraining from applying product under wind conditions which would increase the likelihood for drift. | LTSM                       | No                      |

| Impact No. | Impact Title  | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
|------------|---|-------------------|--|----------------------------|-------------------------|
| 3.4-5      | Long-term conversion of perennial aquatic habitats and wetland communities to tidal habitat types | LTS               | None required  | LTS                        | No                      |
| 3.4-6      | Long-term loss of valley/foothill riparian habitat  | LTSM              | <b>Mitigation Measure 3.4-3.1</b><br><i>(described above in Wetland and Terrestrial Biological Resources)</i>  | LTSM                       | No                      |
| 3.4-7      | Reduction in available habitat for special-status plant species adapted to existing conditions    | LTS               | None required  | LTS                        | No                      |
| 3.4-8      | Short-term construction-related impacts to valley elderberry longhorn beetle                      | LTSM              | <b>Mitigation Measures 3.2-3.1 and 3.2-3.2</b><br><i>(described above in Water Quality)</i>  | LTSM                       | No                      |
| 3.4-9      | Long-term impacts to valley elderberry longhorn beetle  | NI                | None required  | NI                         | No                      |
| N3.4-10    | Short-term construction-related injury or mortality and loss of habitat for giant garter snakes   | LTSM              | <b>Mitigation Measure 3.4-10.1</b><br>This mitigation measure includes the following: <ol style="list-style-type: none"> <li>1. Require construction personnel to receive USFWS and CDFW-approved worker environmental awareness training to recognize giant garter snake and its habitat.</li> <li>2. Install exclusion fencing around all staging areas.</li> <li>3. Survey the site at least 24 hours prior to the initiation of ground-disturbing activities in suitable giant garter snake habitat. This survey shall be conducted by a USFWS and CDFW-approved biologist in suitable giant garter snake habitat. Surveys shall be repeated if a lapse in construction activity of two weeks or greater occurs. If giant garter snake is encountered during ground-disturbing activities, activities at that specific location shall cease until appropriate</li> </ol> | LTSM                       | No                      |



| Impact No. | Impact Title                                       | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|------------|--|-------------------|---|----------------------------|-------------------------|
|            |  |                   | <p>corrective measures, in concurrence with USFWS and CDFW coordination, have been completed or it has been determined that individual giant garter snakes would not be harmed. Sightings shall be reported to USFWS and CDFW.</p> <ol style="list-style-type: none"> <li>4. Implement ground disturbing construction activity within giant garter snake habitat between May 1 and October 1. This is the active period for giant garter snake and direct mortality is lessened, because giant garter snakes are expected to actively move and avoid danger. DWR would contact the USFWS and CDFW to determine if additional measures are necessary to minimize and avoid take for work between October 2 and April 30.</li> <li>5. Vehicle speeds shall not exceed 15 miles per hour (MPH) to avoid hitting giant garter snakes and other special-status wildlife.</li> <li>6. Remove temporary fill and construction debris after construction completion, and, wherever feasible, restore disturbed areas to pre- Project conditions.</li> </ol> |                            |                         |
| 3.4-11     | Long-term conversion of giant garter snake habitat | LTS               | None required   | LTS                        | No                      |

| Impact No. | Impact Title  | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
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| 3.4-12     | Short-term construction-related habitat loss and injury or mortality of individual western pond turtles   | LTSM              | <p><b>Mitigation Measure 3.4-12.1</b><br/>Prior to implementing restoration activities and/or scheduled dewatering, a qualified biologist would survey areas in or adjacent to suitable western pond turtle aquatic habitat. Western pond turtles found in harm's way would be moved by a qualified biologist to a safe location outside of the work area in a manner consistent with applicable CDFW regulations. A qualified biologist would conduct periodic monitoring of suitable western pond turtle aquatic habitat until ground-disturbing/dewatering activities have ceased in those areas.</p> <p><b>Mitigation Measure 3.2-1.2</b><br/>(described above in Water Quality)</p> | LTSM                       | No                      |
| 3.4-13     | Long-term conversion of western pond turtle habitat   | B                 | None required  | B                          | No                      |
| 3.4-14     | Short-term, construction-related injury or mortality, take of nests, and loss of nesting and foraging habitat of special-status and migratory birds | LTSM              | <p><b>Mitigation Measure 3.4-14.1</b><br/>In order to minimize potential construction related impacts to special-status and migratory birds over the construction period, this mitigation measure includes the following:</p> <ol style="list-style-type: none"> <li>1. Site preparation and construction activities should take place outside of nesting season (February 15–August 15) to avoid take via disturbance or destruction of nests or mortality of individuals. If work begins before this period and continues uninterrupted throughout the nesting season, the consistent disturbance may deter birds from nesting at the site and prevent take.</li> </ol>                | LTSM                       | No                      |

| Impact No. | Impact Title | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|------------|--------------|-------------------|---|----------------------------|-------------------------|
|            |              |                   | <p>2. If work must take place during March 15 – August 15, a pre-construction survey would be conducted within 14 days prior to the initiation of construction activity by a qualified biologist to identify nesting Swainson’s Hawks within 0.5 mi of the construction footprint. If active Swainson’s Hawk nests are found, appropriate non-disturbance buffers and avoidance measures would be developed in coordination with CDFW to avoid disturbance of nesting Swainson’s Hawks based on individual bird behavior and construction-related disturbance that occurs. Surveys shall be repeated if a lapse in construction of 14 days or greater occurs. Surveys would be repeated annually if work takes place during subsequent nesting seasons.</p> <p>3. If work must take place during April 1– August 31, a pre-construction survey would be conducted within 14 days prior to the initiation of construction activity to identify nesting raptors within 500 ft, and other nesting birds within 100 ft of the construction footprint. Appropriate non-disturbance buffers would be established until nestlings have fledged. Surveys shall be repeated if a lapse in construction of 14 days or greater occurs during the nesting season. Surveys would be repeated</p> |                            |                         |

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|------------|--------------|-------------------|---|----------------------------|-------------------------|
|            |              |                   | <p>annually if work takes place during subsequent nesting seasons.</p> <ol style="list-style-type: none"> <li>4. If work must take place during March 15–August 15 and use of non-disturbance buffers is infeasible, a qualified biologist shall be on-site to monitor active nests. Monitoring requirements would be established in coordination with CDFW. Monitors would have authority to stop work if it appears that Swainson’s Hawk nests are disturbed by construction activity, and CDFW would be contacted for further guidance.</li> <li>5. Remove or trim the minimal number of trees to satisfy the Project design. Trimming and removal would take place August 15 to February 15, outside of nesting season.</li> <li>6. If construction activity results in take of individual birds or their nests, appropriate mitigation would be determined in coordination with CDFW.</li> <li>7. Vehicle speed limits shall not exceed 15 MPH to avoid striking birds.</li> <li>8. Remove temporary fill and construction debris after construction completion, and, wherever feasible, restore disturbed areas to pre-project conditions.</li> </ol> <p><b>Mitigation Measure 3.4-3.1</b><br/><i>(described above in Wetland and Terrestrial Biological Resources)</i></p> |                            |                         |

| Impact No. | Impact Title  | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
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| 3.4-15     | Long-term conversion of nesting and foraging habitat for special-status and migratory birds                         | LTSM              | <b>Mitigation Measure 3.4-3.1</b><br><i>(described above in Wetland and Terrestrial Biological Resources)</i>  | LTSM                       | No                      |
| 3.4-16     | Post-construction conversion to tidal habitat suitable for foraging migratory birds                                 | B                 | None required  | B                          | No                      |
| 3.4-17     | Short-term, construction-related injury or mortality and loss of roosting and foraging habitat for western red bats | LTSM              | <p><b>Mitigation Measure 3.4-17.1</b></p> <p>In order to minimize potential construction related impacts to western red bats over the construction period, this mitigation measure includes the following:</p> <ol style="list-style-type: none"> <li>1. Confine clearing of vegetation to only those areas necessary to facilitate construction activities and no greater.</li> <li>2. A pre-construction survey shall be conducted by a qualified biologist to identify roosting western red bats during the maternity season (May through August). If roosting bats are present, construction activities that involve the removal of mature riparian trees, snags, and remnant structures suitable for roosting shall be timed to avoid bat maternity season (May through August).</li> <li>3. Wherever feasible the Project design and implementation would avoid potential roosting habitat especially large mature trees like cottonwood and sycamore.</li> <li>4. Coordinate with CDFW on measures to minimize impacts to individuals.</li> </ol> | LTSM                       | No                      |

| Impact No. | Impact Title   | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
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|            |  |                   | <b>Mitigation Measure 3.4-3.1</b><br><i>(described above in Wetland and Terrestrial Biological Resources)</i> |                            |                         |
| 3.4-18     | Long-term removal of western red bat roosting and foraging habitat | LTSM              | <b>Mitigation Measure 3.4-3.1</b><br><i>(described above in Wetland and Terrestrial Biological Resources)</i> | LTSM                       | No                      |

| Impact No.               | Impact Title  | FEIR Significance | Proposed Mitigation Measures | Significance with Addendum | New Mitigation Measures |
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| <b>GEOLOGY AND SOILS</b> |   |                   |                              |                            |                         |
| 3.5-1                    | Long-term effect on exposure of people and structures to seismic- and landslide-related hazards | B                 | None required                | B                          | No                      |
| 3.5-2                    | Long-term effect on sediment deposition and erosion in Prospect Island                          | B                 | None required                | B                          | No                      |

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| <b>HAZARDS AND HAZARDOUS MATERIALS</b> |   |                   |  |                            |                         |
| 3.6-1                                  | Potential effects from abandoned gas wells  | LTSM              | <b>Mitigation Measure 3.6-1.1</b><br>Final construction plans shall be revised to avoid existing conflicts between grading and excavation areas and well locations. Once site dewatering is complete and prior to construction work, a geophysical survey shall be conducted to confirm locations of all known abandoned gas wells (DOGGR 2014), which shall be marked and avoided during construction. Also prior to construction, DWR shall file an application under the DOGGR Well Review Program and the site would be inspected.           | LTSM                       | No                      |
| 3.6-2                                  | Potential effects from contaminant migration via existing groundwater monitoring wells          | LTSM              | <b>Mitigation Measure 3.6-2.1</b><br>The Project design shall incorporate the groundwater monitoring well locations into the grading and access plans and design any construction at those locations to avoid adversely affecting the wells. If any of the existing groundwater wells are located at planned breach sites, they shall be properly destroyed and capped. Wells shall be avoided or properly destroyed and/or replaced as required by Section 13750 through 13755 (Article 2, Chapter 7, Division 7) of the California Water Code. | LTSM                       | No                      |
| 3.6-3                                  | Potential mobilization of contaminants from levee breaching and/or sediment dredging and re-use | LTS               | None required  | LTS                        | No                      |
| 3.6-4                                  | Hazards associated with the Prospect Island houses on the north property                        | B                 | None required  | B                          | No                      |
| 3.6-5                                  | Potential hazards associated with the abandoned house on the south property                     | B                 | None required  | B                          | No                      |



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| 3.6-6      | Potential soil or water contamination from on-site equipment storage and fueling                                      | LTSM              | <p><b>Mitigation Measure 3.6-6.1</b><br/>DWR's standard construction contract Section 01570 requires contractors to conduct fueling and lubrication of equipment in a manner that affords maximum protection against spills and evaporation. Consistent with this standard, the contractor for the Project shall be required to prepare an environmental protection plan, which shall include spill control and contaminant prevention components. The contractor shall be required to have spill kits on-site and to clean up any spill as soon as reasonably possible.</p> | LTSM                       | No                      |
| 3.6-7      | Potential effects on human health due to the short-term use of aquatic-approved herbicides prior to site construction | LTSM              | <p><b>Mitigation Measure 3.6-7.1</b><br/>Herbicides shall be applied under the supervision of a certified pesticide applicator. Certified pesticide applicators are trained to ensure that algaecides and aquatic herbicides are applied at rates consistent with label requirements and in a manner that avoids potential adverse effects including, effects to human health. Prior to herbicide application, DWR or its contractor will obtain all relevant permits required by the federal, state, and local agencies.</p>  | LTSM                       | No                      |
| 3.6-8      | Potential effects on human health due to changes in the extent of mosquito breeding habitat                           | B                 | None required  | B                          | No                      |

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| <b>AIR QUALITY</b> |  |                   |   |                            |                         |
| 3.7-1              | Generation of criteria pollutant emissions that could contribute to air quality violations | LTSM              | <p><b>Mitigation Measure 3.7-1.1</b><br/>The Project contractors shall implement the techniques listed in Table 3.7-8 in the FEIR, to reduce impacts of ozone precursors such as NO<sub>x</sub> and ROG, and PM<sub>10</sub> and PM<sub>2.5</sub> emissions.</p> <p><b>Mitigation Measure 3.7-1.2</b><br/>Section 6.1 of the YSAQMD CEQA Handbook (YSAQMD 2007) presents a list of feasible measures to control fugitive dust from construction-sites. Common techniques for controlling dust (PM<sub>10</sub>) focus on minimizing dispersal of earth materials during excavation, transport, and disposal activities. Watering and covering (e.g., tarps, surfactants, and vegetation) are frequently relied on to minimize dust at construction-sites. The Project contractors shall implement the following techniques for controlling dust (Table 3.7-9). The implementation details of these techniques shall be adjusted based on field conditions.</p> <p><b>Mitigation Measure 3.7-1.3</b><br/>DWR and/or its contractor shall monitor construction activities throughout the construction period and pay an off-site mitigation fee. Construction activities data will be collected, emissions associated with construction activities will be calculated, and these data will be reported to Yolo Solano Air Quality Management District (YSAQMD). The specific details of construction monitoring and reporting will be determined in</p> | LTSM                       | No                      |

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|            |  |                   | <p>consultation with the YSAQMD. Construction activities data will include, but are not limited to the following items:</p> <ol style="list-style-type: none"> <li>1. Barges – distance traveled by loaded and unloaded vessels, horsepower, idling time, fuel use and fuel type.</li> <li>2. Construction equipment – type and number, horsepower, hours of operation.</li> <li>3. Haul trucks (heavy-duty trucks) – number of trips, and total trip distance.</li> <li>4. Construction workers—number of construction workers per day.</li> </ol> <p>YSAQMD shall collect the construction activity and emissions reports for record keeping and monitoring purposes. The total offset mitigation fee will be calculated based on actual construction activities. DWR will work in coordination with YSAQMD to assess the specific mechanisms associated with construction monitoring, emission calculations, and payment logistics.</p> |                            |                         |
| 3.7-2      | Conflict with or obstruct applicable general plans or regional air quality plans | LTSM              | <b>Mitigation Measures 3.7-1.1 and 3.7-1.3</b><br><i>(described above)</i>   | LTSM                       | No                      |
| 3.7-3      | Expose sensitive receptors to air pollutants and cause higher health risks       | LTS               | None required  | LTS                        | No                      |
| 3.7-4      | Expose sensitive receptors to objectionable odors                                | LTS               | None required  | LTS                        | No                      |

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| <b>GREENHOUSE GASES</b>  |  |                   |                              |                            |                         |
| 3.8-1                    | Proposed Project-related greenhouse gas emissions  | LTS               | None required                | LTS                        | No                      |
| <b>MINERAL RESOURCES</b> |  |                   |                              |                            |                         |
| 3.9-1                    | Loss of a known mineral resource that would be of value to the region and residents of the state                                     | NI                | None required                | NI                         | No                      |
| 3.9-2                    | Loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan | NI                | None required                | NI                         | No                      |

| Impact No.   | Impact Title  | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
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| <b>NOISE</b> |   |                   |   |                            |                         |
| 3.10-1       | Potential for short-term noise disturbance to nearby residents  | LTSM              | <p><b>Mitigation Measure 3.10-1.1</b><br/>The following mitigation measure would reduce the noise impact to residences in the Project area to a less-than-significant level:</p> <ol style="list-style-type: none"> <li>1. The construction contractor shall locate stationary noise sources as far from existing residences as possible.</li> <li>2. The DWR shall identify a disturbance coordinator, and the name and phone number of this person shall be conspicuously be posted at the Project site in an area that can be accessed by the general public. If noise complaints are received, the disturbance coordinator shall respond to the complaints and shall take the steps necessary to mitigate the problem.</li> </ol> | LTSM                       | No                      |
| 3.10-2       | Potential for long-term increases in ambient noise levels in the Proposed Project vicinity                                  | LTS               | None required   | LTS                        | No                      |
| 3.10-3       | Potential for sensitive receptors to be exposed to excessive ground-borne vibrations during construction-related activities | NI                | None required   | NI                         | No                      |

| Impact No.                    | Impact Title   | FEIR Significance | Proposed Mitigation Measures | Significance with Addendum | New Mitigation Measures |
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| <b>AESTHETICS</b>             |  |                   |                              |                            |                         |
| 3.11-1                        | Temporary change in views during construction                        | LTS               | None required                | LTS                        | No                      |
| 3.11-2                        | Long-term change in views from State Route 84                        | LTS               | None required                | LTS                        | No                      |
| 3.11-3                        | Long-term change in views from Arrowhead Harbor Marina               | LTS               | None required                | LTS                        | No                      |
| 3.11-4                        | Long-term change in views from boats in Miner Slough                 | LTS               | None required                | LTS                        | No                      |
| 3.11-5                        | Long-term change in views from boats in the Deep Water Ship Channel  | LTS               | None required                | LTS                        | No                      |
| 3.11-6                        | Long-term change in views from nearby residences                     | LTS               | None required                | LTS                        | No                      |
| 3.11-7                        | Long-term light and glare  | NI                | None required                | NI                         | No                      |
| <b>AGRICULTURAL RESOURCES</b> |  |                   |                              |                            |                         |
| 3.12-1                        | Loss or conversion of prime, unique, or important agricultural lands | LTS               | None required                | LTS                        | No                      |
| 3.12-2                        | Conflicts with Williamson Act contracted lands                       | NI                | None required                | NI                         | No                      |
| 3.12-3                        | Potential effects to agricultural uses on adjacent lands             | LTS               | None required                | LTS                        | No                      |

| Impact No.                | Impact Title  | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|---------------------------|---|-------------------|---|----------------------------|-------------------------|
| <b>CULTURAL RESOURCES</b> |   |                   |   |                            |                         |
| 3.13-1                    | Impacts to historical resources on land                           | NI                | None required   | NI                         | No                      |
| 3.13-2                    | Inadvertent discovery of a shipwreck during in-water construction | LTSM              | <p><b>Mitigation Measure 3.13-2.1</b><br/>The title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the state and under the jurisdiction of the CSLC (PRC Section 6313[a]). In the case of an inadvertent discovery of a submerged shipwreck or related artifacts, all work must cease in the immediate vicinity of the find and DWR cultural resources staff and the USACE archaeologist shall be notified immediately in order to initiate consultation with the CSLC staff within two business days of such discovery pursuant to CFR Title 36 <i>Parks, Forests, and Public Property</i>, Chapter VIII <i>Advisory Council on Historic Preservation</i>, Part 800.13 (b)(3).</p> <p>PRC 6313 (c) states any submerged historic resource remaining in state waters for more than 50 years shall be presumed to be archaeologically or historically significant. If the DWR and U.S. Army Corps of Engineers (USACE) archaeologist, in consultation with the CSLC staff, determine that a historical resource may be present within the Project site, DWR shall retain the services of a qualified maritime archaeological consultant. The maritime archaeological consultant would recommend whether the discovery is an historical/archaeological resource that retains sufficient integrity and is of potential historical or</p> | LTSM                       | No                      |

| Impact No. | Impact Title                                | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|------------|---|-------------------|---|----------------------------|-------------------------|
|            |   |                   | <p>scientific significance. The maritime archaeological consultant also would recommend as to what action, if any, is warranted and would document all recommendations in writing. Based on this information, the USACE, in consultation with the CSLC, may require additional measures to be implemented by DWR.</p> <p>Measures might include preservation <i>in situ</i> of the historical resource or a data recovery program. The Project maritime archaeological consultant shall submit a Final Historical Resources Report to DWR, the USACE, and the CSLC staff. This report shall include an evaluation of the historical significance, with a description of the archaeological and historical research methods employed in any archaeological data recovery program undertaken.</p> |                            |                         |
| 3.13-3     | Impacts to unknown archaeological resources | LTSM              | <p><b>Mitigation Measure 3.13-3.1</b><br/>To reduce potential impacts to unknown archaeological resources, the following measures shall be implemented before the start of ground-disturbing activities:</p> <ol style="list-style-type: none"> <li>1. An archaeologist shall conduct cultural resources awareness training for contractors and staff prior to the start of construction.</li> <li>2. If historical or unique archaeological resources are discovered during construction, work must be halted within 100 ft of the find until a qualified archaeologist meeting the Secretary of the</li> </ol>  | LTSM                       | No                      |



| Impact No. | Impact Title                     | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|------------|----------------------------------|-------------------|---|----------------------------|-------------------------|
|            |                                  |                   | <p>Interior’s Standards for archaeologists (NPS 1997) visits the site and assess the significance of the resource. Work may continue on other parts of the Project while evaluation and mitigation takes place (CEQA Guidelines Section 15064.5(f)). After the assessment is completed, the archaeologist shall submit a report describing the significance of the discovery with treatment recommendations. If the find is determined to be an historical or unique archaeological resource, time allotment and funding sufficient to allow for implementation of avoidance measures or appropriate mitigation must be available.</p> <p>3. Should unique archaeological resources be found, the resources shall be treated in compliance with Public Resources Code Section 21083.2. If the Project can be modified to accommodate avoidance, preservation of the resource is preferred. Data recovery of the damaged portion of the resource also shall be performed pursuant to PRC Section 21083.2(d).</p> |                            |                         |
| 3.13-4     | Impacts to unknown human burials | LTSM              | <p><b>Mitigation Measure 3.13-4.1</b><br/>If human remains are found, such remains are subject to the provisions of California Health and Safety Code Section 7050.5-7055. The requirements and procedures shall be implemented, including immediately stopping work in the vicinity of the find and notification of the Solano County Coroner. The process for</p>   | LTSM                       | No                      |

| Impact No. | Impact Title                         | FEIR Significance | Proposed Mitigation Measures   | Significance with Addendum | New Mitigation Measures |
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|            |                                      |                   | notification of the California NAHC and consultation with the individual(s) identified by the NAHC as the “most likely descendant” is set forth in Section 5097.98 of the California Public Resources Code. Work can restart after the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. |                            |                         |
| 3.13-5     | Impacts to paleontological resources | NI                | None required  | NI                         | No                      |

| Impact No.  | Impact Title  | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|---|---|-------------------|---|----------------------------|-------------------------|
| <b>LAND USE AND PLANNING/POPULATION AND HOUSING</b> |   |                   |   |                            |                         |
| 3.14-1  | Potential conflicts with adjacent land uses   | LTS               | None required   | LTS                        | No                      |
| 3.14-2  | Potential conflict with plans and policies  | NI                | None required   | NI                         | No                      |
| 3.14-3  | Population and housing effects  | NI                | None required   | NI                         | No                      |
| <b>PUBLIC SERVICES</b>                              |   |                   |   |                            |                         |
| 3.15-1  | Potential conflict with existing police and fire protection services  | LTSM              | <b>Mitigation Measures 3.17-1.1</b><br><i>(described below in Transportation and Traffic)</i>   | LTSM                       | No                      |
| <b>RECREATION</b>                                   |   |                   |   |                            |                         |
| 3.16-1  | Short-term construction-related impacts to recreational boating in Miner Slough and Arrowhead Harbor Marina | LTSM              | <b>Mitigation Measure 3.16-1.1</b><br>Speed limit zones or channel closure shall be established by DWR during in-water construction along Miner Slough. The construction contractor shall post and distribute notifications at Arrowhead Harbor Marina and other local boating access sites of any scheduled imposition of boating safety speed limits or channel closure 14–30 days in advance of water-based construction work. | LTSM                       | No                      |
| 3.16-2  | Long-term impacts to recreational boating in Miner Slough and Arrowhead Harbor Marina                       | LTS               | None required   | LTS                        | No                      |
| 3.16-3  | Long-term Impacts on recreational use of Prospect Island  | NI                | None required   | NI                         | No                      |
| 3.16-4  | Consistency with existing plans   | LTS               | None required   | LTS                        | No                      |

| Impact No.                        | Impact Title                                  | FEIR Significance | Proposed Mitigation Measures  | Significance with Addendum | New Mitigation Measures |
|-----------------------------------|---|-------------------|---|----------------------------|-------------------------|
| <b>TRANSPORTATION AND TRAFFIC</b> |   |                   |   |                            |                         |
| 3.17-1                            | Potential Traffic Impacts During Construction | LTSM              | <p><b>Mitigation Measure 3.17-1.1</b><br/>The construction contractor shall submit a traffic control plan to the California DWR for review and approval that shall limit impacts to affected landowners and businesses. The control plan shall include temporary measures, such as the following:</p> <ol style="list-style-type: none"> <li>1. Advance public notification signage at areas that might be affected by traffic going to the Project site prior to the start of construction activities, to alert drivers to pending construction work and traffic restrictions.</li> <li>2. Notification to Arrowhead Harbor Marina, the Port of West Sacramento, and property owners adjacent to haul routes used for site access during construction, 10 days prior to initiation of construction traffic.</li> <li>3. Temporary railing, barricades, crash cushions, signage, lighting and flashing lights, pavement markings, and the service of qualified flaggers; all as required to provide for the safe passage of public traffic.</li> <li>4. Other safety measures as required to control vehicular and pedestrian traffic.</li> </ol> <p><b>Mitigation Measure 3.17-1.2</b><br/>Before- and after-Project construction an assessment of road surface conditions, and photographic or videographic documentation, will be conducted by DWR and its contractor at the following locations, if used for site access during</p> | LTSM                       | No                      |

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|                  |  |                   | construction: segments of Courtland Road and/or Teal Road, Road 107, Holland Road, as well as the DWSC levee. If local road conditions deteriorate during construction, DWR or its construction contractor will implement necessary repairs to bring the road up to pre-Project construction conditions.  |                            |                         |
| 3.17-2           | Potential Long-Term Loss of Access to Miner Slough Levee | LTS               | None required   | LTS                        | No                      |
| <b>UTILITIES</b> |  |                   |   |                            |                         |
| 3.18-1           | Solid waste disposal impacts                             | LTS               | None required   | LTS                        | No                      |
| 3.18-2           | Potential for adverse effects on existing utilities      | LTSM              | <p><b>Mitigation Measure 3.18-2.1</b><br/>In order to reduce the potential for adverse effects to existing utilities, the following actions will be taken by DWR and its contractor prior to any ground disturbing activities:</p> <ol style="list-style-type: none"> <li>1. Coordinate with local utility owners to discuss the potential for the existence of underground utilities within the Project area.</li> <li>2. If utility owners verify the potential for underground utilities, a qualified person shall perform a subsurface survey to identify the exact location of underground utilities within the Project area, so those utilities may be avoided. If the utilities cannot be avoided, they shall be removed in a manner consistent with CalOSHA Title 8, Sections 1539 through 1541.1.</li> </ol> | LTSM                       | No                      |
| 3.18-3           | Potential for adverse effects to easement holders        | LTS               | None required   | LTS                        | No                      |

Significance abbreviations are: B — *beneficial*; NI — *no impact*; LTS — *less than significant*; LTSM — *less than significant with mitigation*; SU — *significant and unavoidable*.