California Regional Water Quality Control Board
San Francisco Bay Region

RESPONSE TO WRITTEN COMMENTS

On the October 2025 Initial Study and Mitigated Negative Declaration
for the Waste Management Unit Restoration Project

Martinez Renewable Fuels Facility, Martinez

The Regional Water Board received written comments from two parties on the September 2025 draft Initial Study/Mitigated Negative Declaration (ISMND) for the Martinez Renewable Fuels Facility (Facility) Waste Management Unit Restoration Project (Project) in Martinez. The ISMND analyzed the environmental impacts of closure activities for five inactive waste management units at the Facility. The Regional Water Board made changes to the ISMND in response to comments and they are included in the *Final Initial Study and Mitigated Negative Declaration for the Martinez Renewable Fuels Facility Waste Management Unit Restoration Project*, January 2026.

Comments on the ISMND were submitted by the following parties:

1. California Department of Conservation, Geologic Energy Management Division

2. California Department of Fish & Wildlife

The comments are organized by the commenting parties, and the comments are summarized below in *italics* (paraphrased for brevity) and followed by the responses. To request copies of the comment letters, please contact Katie Hart at (510) 622-2356 or Kathryn.Hart@waterboards.ca.gov.

Revisions to the text of the ISMND are shown with ~~strikethrough~~ for deletions and underline for additions.

California Department of Conservation, Geologic Energy Management Division (CalGEM)

Comments were submitted by May Soe, Supervising Oil & Gas Engineer – Northern District.

CalGEM Comment 1: Follow existing regulations regarding geothermal, gas, and oil wells.

CalGEM reviewed oil, gas, and geothermal well records within the project boundary and found no records of known oil or gas wells. Their letter summarizes existing regulations and landowner responsibilities regarding active and abandoned wells, and statutory authority of the Geologic Energy Management Division over oil, gas, and geothermal wells.

<u>Response to CalGem-1</u>: Comment noted, thank you for your comment. No revisions to the ISMND are necessary.

California Department of Fish & Wildlife - Comments were submitted by Mia Bianchi, Senior Environmental Scientist, Specialist.

The comment letter addressed aspects of the Project that the California Department of Fish & Wildlife (CDFW), by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish & Game Code. CDFW is a Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State.

CDFW Comment 1**: **Nesting Birds (General)

Mitigation Measure BIO-1 does not include an adequate survey radius relative to nest sites or nest trees that could prevent potential impacts to species with respect to raptors. The measure does not provide adequate details about nest monitoring timeline and requirements to ensure the qualified biologist does not miss signs of disturbance and/or distress. Without an adequate protocol specified, project related impacts to nesting birds could lead to significant impacts to nesting birds including, but not limited to nest abandonment, nest failure, impacts to availability of forage, chick mortality and resultant population decline.

To reduce impacts to less-than-significant:

CDFW recommends the ISMND replace Mitigation Measure BIO-1 with the following revised language to ensure that significant impacts to bird species resulting from the Project are mitigated to a level of less-than-significant.

> *Construction work should take place outside of the February 15 to September 15 bird nesting seasonal window to the maximum extent practicable. If construction is to be conducted during the nesting season, the Project Applicant is responsible for ensuring that the Project does not result in any violation of the Migratory Bird Treaty Act or Fish and Game Code. A qualified biologist shall conduct focused pre-construction nesting bird surveys throughout the Project area no more than five days prior to the initiation of on-site project-related activities. Surveys will be conducted in all potential habitat located at, and adjacent to, Project work sites and in staging and storage areas. The minimum survey radii surrounding the work area will be the following: (1) 250 feet for Passerines; (2) and 1,000 feet for raptors such as Buteo spp. In the event that there is a lapse in construction activities for seven days or more, a qualified biologist will conduct additional focused pre-construction nesting bird surveys in areas of potential habitat again before Project activities can be reinitiated. If an active nest is found, the qualified biologist may consult with CDFW if needed regarding appropriate action to comply with Fish and Game Code.*
>
> - *Active Nest Buffers. Active nest sites and protective buffer zones shall be designated as "ecologically sensitive areas" where no Project-related activities or*

personnel may enter (while occupied or in use for the season in the case of multi clutch bearing species) during the course of nesting bird season with the establishment of a fence barrier or flagging surrounding the nest site. The qualified biologist will determine the necessary buffer, in consultation with CDFW if needed, to protect nesting birds based on existing site conditions, such as construction activity, topography, and line of sight, and will increase buffers as needed to provide sufficient protection of nesting birds and their natural behaviors.

- *Active Nests. A qualified biologist shall observe any identified active nests prior to the start of any Project-related activities to establish a behavioral baseline of the adults and any nestlings. Once Project activities commence, all active nests shall be continuously monitored by a qualified biologist to detect any signs of disturbance and behavioral changes as a result of the Project. In addition to direct impacts, such as nest destruction, nesting birds might be affected by noise, vibration, odors and movement of workers or equipment. If signs of disturbance and behavioral changes are observed, the qualified biologist shall halt Project activities causing that change until the nestlings have fledged, and the nest is determined to be inactive.*

Response to CDFW-1

Mitigation Measure (MM) BIO-1 of the draft ISMND has been replaced by the following measure to accommodate the CDFW's comments. The revisions to MM BIO-1 are shown below and are reflected in the text of the Final ISMND.

MM BIO-1 Avoid Disturbance of Nesting Special-Status and Non-Special-Status Raptors and other Migratory Birds, including northern harrier, Suisun song sparrow. If construction activities are scheduled during the ~~breeding and/or~~ nesting season (February 15 through August 31), a qualified biologist shall conduct a ~~preconstruction nest~~ focused pre-construction nesting bird survey throughout the Project area no more than 5 days prior to the initiation of ~~suitable nesting habitat~~ Project-related activities. Surveys shall be performed for the Project construction and staging areas and suitable habitat within 250 feet of the Project construction and staging areas ~~in order~~ to locate any active passerine (perching bird) nests and within ~~500~~ 1,000 feet of the Project construction and staging areas to locate any active raptor (birds of prey) ~~nest. The survey shall be conducted not more than 14 calendar days prior to the start of work.~~ nests. If nesting passerines and raptors ~~do~~ are not ~~occur~~ observed within 250 and ~~500~~ 1,000 feet of the Project area~~,~~ respectively, then no further action is required if construction begins within ~~14 calendar~~ 7 calendar days. In the event that there is a lapse in construction activities for seven days or more, a qualified biologist will conduct additional focused pre-construction nesting bird surveys in areas of potential habitat again before Project activities can be reinitiated. If the survey indicates the potential presence of nesting birds, the biologist shall determine an appropriately sized active nest buffer. ~~buffer around the nest and no work will be allowed in this buffer until the young have successfully fledged. The size of the nest buffer will be determined by a qualified biologist and will depend on the species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other~~

~~disturbances, and other topographical or artificial barriers. In general, buffer sizes of up to 300–500 feet for raptors and 50–250 feet for other birds should suffice to prevent disturbance, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.~~

Active Nest Buffers. Active nest sites and protective buffer zones shall be designated as "ecologically sensitive areas" where no Project-related activities or personnel may enter while a nest is active during nesting bird season with the establishment of a fence, barrier, or flagging surrounding the nest site. The qualified biologist will determine the necessary buffer to protect nesting birds based on species present, existing site conditions, such as construction activity, topography, existing barriers, and line of sight, and will increase buffers as needed to provide sufficient protection of nesting birds and their natural behaviors.

Active Nests. A qualified biologist shall observe any identified active nests prior to the start of any Project-related activities to establish a behavioral baseline of the adults and any nestlings. Once Project activities commence, active nests shall be monitored by a qualified biologist to detect any signs of disturbance and behavioral changes resulting from Project activities. If signs of disturbance and behavioral changes are observed, the qualified biologist shall either halt Project activities causing that change or increase and/or modify the protective buffer zone size until the nestlings have fledged and the nest is determined to be inactive.

CDFW Comment 2: Burrowing Owl

Burrowing owl (Athene cunicularia) is currently a candidate species under the California Endangered Species Act (CESA) and is afforded the same protection as a CESA-listed species (CEQA Guidelines, §15380, subds.(b)). Unauthorized take of this species pursuant to CESA is a violation of Fish and Game Code section 2080 et seq.

The ISMND indicates that the Project could result in the temporary loss of potential foraging habitat for burrowing owl that use the study area for overwintering. One observation of burrowing owl has been detected directly within the Project site (California Natural Diversity Database (CNDDB), accessed November 2025). While the ISMND implements BIO-2 addressing burrowing owl, this measure only includes pre-construction survey measure requirements and mitigation. Without adequate no-work buffers and other protections, direct and/or indirect impacts to burrowing owl are likely to occur.

Direct mortality could occur through crushing of adults or young within burrows, loss of nesting burrows, loss of nesting habitat, loss of foraging habitat resulting in reduced nesting success (loss or reduced health or vigor of eggs or young), nest abandonment, and reduced frequency or duration of care for young resulting in reduced health or vigor of young. This could occur due to excavation for placement of modules, excess noise and disturbance, and earth moving equipment. Because of their highly specialized, ground-dwelling lifestyle and dependence on underground tunnels, burrowing owl are

extremely vulnerable to direct and indirect impacts of grading, disking, tilling, earthmoving, burrow blockage, and eradication of ground squirrels.

***To reduce impacts to less-than-significant**:*

Burrowing Owl Buffers

A Designated Biologist shall conduct at least two surveys using the methods described in the Staff Report on Burrowing Owl Mitigation, dated March 7, 2012 (Conservation and Management of Wildlife and Habitat). A Designated Biologist shall visually inspect any pipes, debris piles, culverts, pallet stacks, burrow exclusion installations, or similar structures for burrowing owl before the material is moved, buried, or capped. A Designated Biologist shall inspect all open holes and trenches within the Project area at a minimum of twice a day and immediately prior to backfilling. At the end of each workday, the Project proponent shall place an escape ramp at each end of trenches or holes to allow any animals that may have become trapped in the trench or hole to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30-45 degrees.

Burrowing Owl Monitoring

CDFW recommends adding a Mitigation Measure with the following language:

The Designated Biologist(s) shall be present during construction activities to monitor the behavior of any burrowing owl. The Designated Biologist(s) shall have the authority to order stop work if burrowing owls exhibit distress and/or abnormal behavior for (e.g., excessive vocalizations, defensive flights at intruders, flushing frequently, or otherwise displaying agitated behavior).

Burrow Avoidance

CDFW recommends adding a Mitigation Measure with the following language:

A qualified biologist shall clearly delineate a no-disturbance buffer around all burrowing owl burrows, including nesting, roosting, and satellite burrows, or the entire burrow complex within and adjacent to within 150 meters of the Project area with posted markers demarking the area to avoid, using stakes, flags, and/or rope or cord to minimize the disturbance of burrowing owl habitat. Buffers shall be determined based upon the time of year and level of disturbance as described in the CDFW 2012 Staff Report. If burrows cannot be fully avoided, CDFW shall be consulted. If take cannot be avoided, take authorization through the acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Burrowing Owl Avoidance or Take Authorization

CDFW recommends that the Project proponent obtain take authorization from CDFW through issuance of an ITP if full avoidance of burrowing owl and occupied burrow complexes during construction and/or operations is not feasible. The ISMND must include all biologically appropriate and feasible take avoidance measures. If permanent or temporary impacts of the proposed Project to burrowing owl foraging and/or nesting habitat cannot be completely avoided, the ISMND should include measures to minimize the impacts of construction on owls and their habitat, and effective compensatory mitigation to offset all habitat loss.

Response to CDFW-2

Burrowing owl potential impacts are addressed in Section 5.4.3 of the draft ISMND. A burrowing owl was observed within WMU 10/11/14 by a Facility worker in February 2014. No evidence of breeding burrowing owls was observed by qualified biologists during March 2014 surveys or thereafter. The nearest CNDDB documented occurrences of burrowing owl are located more than 3 miles from the Project to the east near the Marine Operations Terminal Concord (MOTCO) and over 3 miles south of the Project near Buchanan Field (CNDDB, accessed January 2025).

Mitigation Measure (MM) BIO-2 of the draft ISMND has been replaced by the following measure to accommodate the CDFW's comments. The revisions to MM BIO-2 are shown below and are reflected in the text of the Final ISMND.

> **MM BIO-2 Avoid Disturbance of Burrowing Owls.** A qualified biologist shall conduct at least two Take Avoidance Surveys using the methods described in the Staff Report on Burrowing Owl Mitigation, (*Conservation and Management of Wildlife and Habitat*).
>
> No more than 14 days prior to any ground disturbing activities (regardless of time of year), a qualified biologist shall conduct a take avoidance survey for burrowing owls. If no owls are found during this first survey, a final survey shall be conducted within 24 hours prior to ground disturbance to confirm that burrowing owls are still absent. If ground disturbing activities are delayed or suspended for more than 14 days after the initial take avoidance survey, the site shall be resurveyed (including the final survey within 24 hours of disturbance).
>
> If burrowing owls are found within the Project area during the surveys, a qualified biologist shall inspect all open holes and trenches within the Project area at a minimum of twice a day and immediately prior to backfilling. If the surveys identify breeding or wintering burrowing owls on or adjacent to the Project area, the qualified biologist(s) shall be present during construction activities to monitor the behavior of any burrowing owl. The qualified biologist(s) shall have the authority to stop work if burrowing owls exhibit distress and/or abnormal behavior for (e.g., excessive vocalizations, defensive flights at intruders, flushing frequently, or otherwise displaying agitated behavior). If burrowing owls are present a qualified biologist shall clearly delineate a no-disturbance buffer around all burrowing owl burrows, including nesting, roosting, and satellite burrows, or the entire burrow complex within 150

meters of the Project area with posted markers demarking the area to avoid, using stakes, flags, and/or rope or cord to minimize the disturbance of burrowing owl habitat. Buffers shall be determined based upon the time of year and level of disturbance as described in the CDFW 2012 Staff Report. If burrows cannot be fully avoided, CDFW shall be consulted. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

~~Because suitable habitat is present on the site and a burrowing owl has been observed in the PROJECT site, preconstruction take avoidance surveys for burrowing owls shall be implemented prior to construction activities. These surveys shall conform to the survey protocol established by the CDFW Staff Report on Burrowing Owl Mitigation. The following measures are consistent with the provisions of the Migratory Bird Treaty Act and the CDFW staff report.~~

- ~~No more than 14 days prior to any ground disturbing activities (regardless of time of year), a qualified biologist shall conduct a take avoidance survey for burrowing owls. If no owls are found during this first survey, a final survey shall be conducted within 24 hours prior to ground disturbance to confirm that burrowing owls are still absent. If ground disturbing activities are delayed or suspended for more than 14 days after the initial take avoidance survey, the site shall be resurveyed (including the final survey within 24 hours of disturbance). All surveys shall be conducted in accordance with CDFW guidelines.~~

- ~~If burrowing owls are found on the site during the surveys, mitigation shall be required in accordance with CDFW guidelines. If the surveys identify breeding or wintering burrowing owls on or adjacent to the site, occupied burrows shall not be disturbed and shall be provided with protective buffers. Where avoidance is not feasible, an exclusion plan shall be implemented to encourage owls to move away from the work area prior to construction. The exclusion plan shall be developed in consultation with CDFW and monitoring requirements. Mitigation would include the purchase of mitigation bank credits for burrowing owl foraging habitat at a minimum 1:1 ratio for the loss of suitable foraging habitat caused by the construction of the PROJECT or the preservation of equivalent lands.~~

CDFW Comment 3: Ridgeway's Rail

The ISMND acknowledges that Ridgway's rail has been observed within the nearby Point Edith Marsh located North of the WMU 31 Project site. The most recent protocol level survey conducted for Ridgway's rail was in 2017. These survey results are outdated since conditions on the Project site could have changed over the past eight years. Additionally, even if Ridgway's rail is not found directly on the Project site, operation of heavy equipment and associated activities may cause breeding rails to temporarily or permanently leave adjacent sites where they are nesting. Construction activities may include the temporary or permanent installation of fencing, posts, poles, or other structures that may provide perching opportunities for avian predators of Ridgway's rails. Nest abandonment or reduced frequency or duration of care for young,

as well as decreased time spent foraging and roosting, resulting in reduced health or vigor of all life stages may occur as a result of Project construction activities.

Ridgway's rail is a state fully protected species. Loss of emergent saline wetland habitat and upland refugia in and adjacent to the San Francisco Bay has contributed to declines in local populations of both rail species. Project impacts may further population declines of these species, including cumulative impacts resulting in the restriction of their range.

To reduce impacts to less-than-significant:

CDFW recommends incorporating the following language into mitigation measure BIO-4 to address impacts to Ridgway's rail.

Rail Surveys

CDFW recommends presence is presumed or presence/absence surveys are conducted following the 2015 California Clapper Rail Survey Protocol (California Ridgway's (Clapper) Rail Survey Protocol | FWS.gov) each year of construction in all suitable habitat within the Project. This protocol is recommended for conducting presence/absence surveys of California Ridgway's rail prior to Project construction (as opposed to other available protocols that may be more suitable for long-term monitoring purposes).

Rail Buffers

The ISMND should disclose and assess an appropriate buffer. Without additional noise reducing modifications, a 700-foot no-work buffer should be implemented in absence of protocol-level surveys between the location of construction activities and any current-year breeding rail detections, if construction cannot be avoided during the rail breeding season. The determined no-work buffers should be clearly marked with fencing or flagging to exclude workers from entering the no-work zone. Note that these features may be appropriate regardless of time of year to minimize impacts to rails in general.

Authority to Stop Work

The ISMND should include language specifying the Qualified Biologist will have authority to stop work any time construction activities appear to cause disturbance to nesting rails (e.g., rails vocalize or fly away from a nest) or an active rail nest is found.

Avoid Predator Perching Structures

The ISMND should include language that strives to avoid the temporary or permanent construction of features that may provide perching opportunities for avian predators. If needed for the Project, such features may be retrofitted with anti-perching devices to reduce the likelihood that avian predators will use them to perch.

Response to CDFW-3

Potential impacts to California Ridgway's rail (CRR) are discussed in Section 5.4.3 of the draft ISMND, where it is stated that although suitable habitat exists within the vicinity of the Project and there are nearby known occurrences of CRR, no suitable habitat

exists in the Project site and no CRR were observed during surveys. Therefore, there is no potential for CRR individuals to be in the Project site. However, there is potential for Project noise to affect individuals in the Point Edith Wildlife Area outside of the Project site. Due to the potential for significant impacts to CRR the United States Fish & Wildlife Service (USFWS) was consulted to mitigate the impact of potential take on CRR. The United States Army Corps of Engineers (Corps) initiated consultation with the USFWS under Section 7 of the Federal Endangered Species Act on July 16, 2012, regarding impacts to listed species including the CRR. The USFWS issued a Biological Opinion on November 17, 2017, finding that the Project with mitigation would not result in jeopardy to any listed species.

Suitable habitat for CRR consists of salt and brackish tidal marsh habitat, and requires vegetative cover suitable for both nesting and as high tide refugia (USFWS 2013). Habitat assessments conducted by WRA Environmental Consultants (WRA) have found no suitable habitat for CRR within the Project area. Suitable habitat for CRR does exist in the Point Edith Wildlife Area which is situated to the east of WMU 31 and north of WMU 10/11/14 across a county road and an active railroad line. WRA conducted extensive protocol surveys at the WMUs from 2011 to 2017 with no CRR detections over a total of 80 days and 332 hours of surveying. No rails have recently been detected from 2020 through 2024 during protocol surveys conducted in the Point Edith Wildlife Area by Olofson Environmental Inc. (OEI 2023 & 2024).

Based on WRA's and OEI's survey data we do not expect breeding CRR at the Point Edith Wildlife Area. CRR may pass through the area, but have not been found to occupy or breed at the Point Edith Wildlife Area. These survey findings are consistent with published findings that CCR is locally rare, typically absent, and not breeding at South Suisun Bay locations including the Point Edith Wildlife Area (Liu et al. 2007).

The local area experiences high levels of ambient noise from the nearby road and railway that represent a constant disturbance to the marsh near the WMUs. Once the Project is completed and the WMUs are closed, CCR habitat in the Point Edith Wildlife Area will experience long term benefits from this Project given the restoration of a buffer in the WMUs, the removal of hazardous materials that could enter the food chain and impact egg viability, and the improvement of water quality in Suisun Bay. Specifically, at WMU 31 which lies immediately west of Point Edith, all waste will be removed, waste excavations will be backfilled with appropriate soils, and all wetland and upland habitat will be restored. The 29 acres of restored wetland and upland habitat will be functionally superior to the existing degraded conditions and the marsh at Point Edith will benefit from the presence of these higher functioning wetlands and uplands as well as the absence of contamination in the vicinity. Significantly, these on-site restoration areas can contribute to the recovery of the area tidal marsh ecosystems as they lie within the boundaries of the Suisun Bay Area Recovery Unit of the USFWS 2013 Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California. The Project will result in the restoration and enhancement of over 6 acres of wetland habitat and 23 acres of potential salt marsh harvest mouse upland habitat.

Given the above information and that no suitable habitat for CRR exists on the Project site, Mitigation Measure (MM) BIO-4 of the draft ISMND has been replaced by the following measure to accommodate the CDFW's comments. CRR surveys are included, developed utilizing a protocol outlined by Spautz (2005). This protocol is intended for use at sites with low densities of CRR and is appropriate given the history of negative survey results at the Point Edith Wildlife Area. The revisions to MM BIO-4 are shown below and are reflected in the text of the Final ISMND.

MM BIO-4 Avoid and Minimize Impacts to California Black Rail and Ridgway's rail and Suitable CRR replacement habitat. If construction activities are scheduled during the CRR breeding season, pre-construction CRR surveys will be conducted by a qualified biologist. CRR surveys will be conducted prior to construction start at WMUs within 700 feet of suitable habitat within the Point Edith Wildlife Area. After pre-construction surveys are conducted, with negative survey results, they will not be repeated each rail breeding season in Project work areas where continuous construction is conducted. As the Project schedule continues after the initial WMU work is initiated, new phases of work may be started adjacent to CCR-surveyed areas where there is continuous construction. At these new construction locations, adjacent continuous construction work will not stop for new Project pre-construction CRR surveys as long as construction is not conducted during the CRR survey events. Surveys will conform to the following parameters:

- CRR surveys shall be conducted between January 15 and mid-April.
- Listening stations will be utilized during each survey to cover tidal marsh areas suitable for CRR breeding within 700 feet of the Project Area
- Three surveys will be conducted, tentatively scheduled for 2028 and 2030. The first two surveys will be passive, spending at least 10 minutes listening at each station. If CRR were not detected during the first two surveys, the third survey will use active broadcasting (call playback) as described below.
- During an active survey, a 5-minute passive listening period will occur at each survey station, following by 1 minute of broadcasting CRR calls and 4 minutes of listening (a total of 10 minutes per survey station). A total of four clatter or duet calls will be broadcast, with at least 5 seconds of silence between the calls. Broadcasting will cease immediately upon detection of CRR within 700 feet of the station.
- Surveys will be conducted at dawn or dusk. Dawn surveys will occur during the period from one hour before sunrise until one and a half hours after sunrise; dusk surveys will occur during the period from one hour before sunset to one hour after sunset. Surveys can be conducted at both sunrise and sunset.
- Surveys will not be conducted when tides greater than 4.5 feet NGVD are predicted at the Golden Gate Bridge during the survey period (with the timing of the tide adjusted to the survey area), or within two days of a full moon when the moon is visible in the sky during the survey.

- Surveys will be conducted a minimum of 7 days apart.
- Surveys will not be conducted when wind velocities exceed 10 mph or during heavy rains.

If an active CRR nest is found, no work will occur within 700 feet of the identified active CRR nest during the rail nesting season. The qualified biologist will have authority to stop work if construction activities cause disturbance to nesting CRR (e.g., CRR vocalize or fly away from a nest).

The Applicant shall fund the restoration of 5.5 acres of tidal marsh habitat/high tide refuge habitat for the CRR through channel excavation and creation of marsh mounds in the Sonoma Creek Marsh Enhancement Project at the San Pablo Bay National Wildlife Refuge in Sonoma, California, as offsite compensatory mitigation for the effects of the Project on the CRR and other rails. The Applicant shall provide the funding prior to the initiation of construction of the Project.

CDFW Comment 4: Salt Marsh Harvest Mouse

The ISMND states there is a moderate potential for salt-marsh harvest mouse to occur within WMUs 10/11/14, 31, and 32. These WMUs contain wetland communities suitable for this species. However, the habitat mapping was based on site visits conducted in March of 2013. These results are outdated since conditions on the Project site could have changed over the past eight years. The quantity of temporary and permanently impacted habitat types may have changed over time.

Additionally, while the ISMND addresses impacts to salt-marsh harvest mouse habitat based on the assessed temporary and permanent impacts, this species is State Fully Protected and impacts to the species must be fully avoided. The ISMND does not include any avoidance measures to ensure that CESA take is avoided.

To reduce impacts to less-than-significant:

CDFW recommends the ISMND be revised to avoid impacts to salt-marsh harvest mouse:

Habitat Surveys Prior to Construction

An approved qualified biologist shall conduct a salt-marsh harvest mouse habitat survey and assessment prior to the start of construction to determine all potential salt-harvest mouse habitat.

Qualified Biologist Inspection

Prior to Project activities (e.g., vegetation removal, disturbance to vegetation) occurring in potential salt-marsh harvest mouse habitat each day, an approved qualified biologist, familiar with salt-marsh harvest mice, shall walk through and inspect suitable habitat and search for signs of harvest mice or other sensitive wildlife and plants. If a salt-marsh harvest mouse is discovered, no work shall occur within 150 feet of that location. Personnel, under the supervision of the qualified

biologist, will remove vegetation using only hand tools (e.g., weed-eater, hoe, rake, trowel, shovel, grazing) so that vegetation is no taller than two inches. If string trimmers (a.k.a. weed whackers) are used, they shall be used to the minimum extent necessary and shall be used to take down vegetation height a couple inches at a time so that the biological monitor can search for potential salt-marsh harvest mouse nests. If a nest is discovered, all work shall stop immediately, the Qualified Biologist shall implement a no work and no personnel protective buffer surrounding the nest and CDFW shall be notified.

Response to CDFW-4: Salt Marsh Harvest Mouse

Mitigation Measure (MM) BIO-3 and MM BIO-5 of the draft ISMND have been replaced by the following measures to accommodate the CDFW's comments. The revisions to MM BIO-3 and MM BIO-5 are shown below and are reflected in the text of the Final ISMND.

MM BIO-3 Avoid and Minimize Impacts to Salt Marsh Harvest Mouse and Suitable SMHM Replacement. The Applicant shall compensate for the temporary disturbance of 24.64 acres and the permanent loss of 11.27 acres of SMHM habitat by preserving and managing land offsite to conserve the species and to offset temporary and permanent impacts to potential SMHM habitat due to Project activities. A total of 83.09 acres would be preserved through the preservation and management of high quality SMHM habitat in perpetuity at the Cordelia Slough Preserve in Suisun Bay (Solano County, California) as approved by USFWS long-term management plan with a fully-funded endowment.

Prior to the commencement of construction, the following measures will be conducted in an effort to ensure no SMHM are present in the Project area. A qualified biologist shall conduct a SMHM habitat assessment prior to the start of construction to determine areas of potential SMHM habitat. Prior to Project activities (e.g., vegetation removal, disturbance to vegetation) occurring in potential SMHM habitat, a qualified biologist, familiar with SMHM, shall walk through and inspect suitable habitat and search for signs of harvest mice or other sensitive wildlife and plants. If a salt-marsh harvest mouse is discovered, no work shall occur within 150 feet of that location. Personnel, under the supervision of the qualified biologist, will remove vegetation in potential SMHM habitat using only hand tools (e.g., weed-eater, hoe, rake, trowel, shovel, grazing) so that vegetation in potential SMHM habitat is no taller than two inches. If string trimmers (a.k.a. weed whackers) are used, they shall be used to the minimum extent necessary and shall be used to take down vegetation height a couple inches at a time so that the biological monitor can search for potential salt-marsh harvest mouse nests. If a SMHM nest is discovered, all work shall stop immediately, the qualified biologist shall implement a no work protective buffer surrounding the nest and CDFW shall be notified.

MM BIO-5 General wildlife protection measures for wildlife during construction.

- A qualified biologist will provide Worker Environmental Awareness Training (WEAT) to field management and construction personnel. Communication

efforts and training will take place during preconstruction meetings so that construction personnel are aware of their responsibilities and the importance of compliance. WEAT will identify the types of sensitive resources located in the Project area and the measures required to avoid impacts on these resources. Materials covered in the training program will include environmental rules and regulations for the specific Project and requirements for limiting activities to the construction right-of-way and avoiding demarcated sensitive resource areas.

- If new construction personnel are added to the Project, the contractor will ensure the new personnel receive WEAT before starting work. A sign-in sheet of those contractor individuals who have received the training will be maintained by the Project proponent. A representative will be appointed during the WEAT to be the contact for any employee or contractor who might inadvertently kill or injure a listed species or who finds a dead, injured, or entrapped individual. The representative's name and telephone number will be provided to the USFWS before the initiation of ground disturbance.
- If individuals of listed wildlife species may be present and subject to potential injury or mortality from construction activities, a qualified biologist will conduct preconstruction surveys. If a listed wildlife species is discovered, construction activities will not begin in the immediate vicinity of the individual until USFWS and/or CDFW is contacted, and the individual has been allowed to leave the construction area.
- Minimum qualifications for a qualified biologist will be a four-year college degree in biology or related field and demonstrated experience with the species of concern.
- Any special-status species observed during surveys will be reported to the USFWS and CDFW so the observations can be added to the CNDDB.
- All vehicle operators will limit speed to 15 mph within the Project area.
- Prior to the commencement of construction, exclusion fencing will be installed to protect western pond turtles during turtle nesting season (May 1–August 31) in the work areas adjacent to waterways.

CDFW Comment 5: Special Status Plants

The ISMND states that protocol-level botanical surveys were conducted within the Project areas. However, it is unclear what protocol the Qualified Botanist and Qualified Biologist used when conducting the survey. Additionally, the timing of the survey conducted was not during the appropriate bloom period for special-status plant species with the potential to occur onsite. For instance, page 204, section 2.2 of the ISMND only specifically identifies protocol-level botanical survey conducted on September 21 and 23, 2011. Otherwise, survey timeframes were only described as being conducted as part of the Biological Resources Assessment (WRA 2009). Also, the last surveys were conducted in 2011, which is a large gap in time from the anticipated start of Project construction. The site conditions are likely to have changed from the time the surveys were last completed. Special-status plants are often narrowly distributed endemic species. They are susceptible to habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species.

Appropriate methodologies for species detection should be clearly outlined and conducted well in advance of the anticipated start of construction. If CESA listed plants that may be impacted by the Project go undetected, the Project may result in mortality from direct impacts or degradation of habitat adjacent to ground disturbance.

To reduce impacts to less-than-significant:

Protocol-Level Surveys:

CDFW recommends surveys be conducted according to the following protocols and the ISMND be revised to include the results from those botanicals surveys:

> *The Project shall complete an additional two years of protocol-level botanical surveys and incorporate the results into a revised ISMND. The botanical survey results shall follow CDFW's 2018 Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities, including, but not limited to conducting surveys during appropriate conditions, utilizing appropriate reference sites, and evaluating all direct and indirect impacts such as altering off-site hydrological conditions where the above species may be present. Surveys conducted during drought conditions may not be acceptable. If the botanical surveys result in the detection of the above CESA listed plants that may be impacted by the Project, or the presence of these species is assumed, the Project applicant shall obtain a CESA ITP from CDFW prior to construction and comply with all requirements of the ITP. Surveys conducted during drought conditions may not be acceptable. If the botanical surveys result in the detection of CESA listed plants that may be impacted by the Project, or the presence of these species is assumed, the Project applicant shall obtain a CESA ITP from CDFW prior to construction and comply with all requirements of the ITP.*
>
> *The ISMND should be revised to include all species of special-status plants that will be impacted, and a well-developed, robust proposal for how the Project would be re-designed to avoid, minimize and/or mitigate impacts to those special-status plants. The applicant should provide a copy of the special-status plant survey results and proposed Mitigation and Monitoring Plan to CDFW for review and acceptance. Additionally, a Mitigation and Monitoring Plan should be prepared and implemented prior to project implementation if special-status plants, including those with a rare plant ranking, are found during surveys.*

Response to CDFW-5: Special Status Plants

Section 5.4.2 of the ISMND briefly references the three Floristic, protocol-level rare plant survey efforts conducted at the Project WMUs: (1) a 2007 survey conducted at WMUs 10/11/14, 31, & 32 (WRA 2008a, 2009a, 2009b); (2) a 2011 survey conducted at WMUs 10/11/14, 31, & 32 (WRA 2011); and (3) a 2014 focused reconnaissance-level rare plant survey in tidally influenced areas between the road and WMUs 10/11/14 and areas southeast of WMU 32 (WRA 2015a).

In 2007, plant species with a moderate or high potential to occur in the Project area were the targets for a focused protocol-level plant survey. The surveys were conducted in June and August, which falls within the peak blooming period for the target species.

WMUs 10/11/14 were surveyed on August 15, WMU 31 was surveyed on June 26, August 15, and August 23, and WMU 32 was surveyed on August 10 and 27. The field survey was conducted by botanists with knowledge of the rare plant species that could occur in the area and followed the protocol for plant surveys described by Nelson (1987). This protocol complies with recommended resource agency guidelines (CNPS 2001, California Department of Fish & Game (CDFG, former name for CDFW) 2000, USFWS 1996). Reference sites for known special status plant occurrences were visited, when possible, to check the phenology of the species and to obtain a better search image. Sites were chosen based on proximity to the Project area, similarity of habitat, and quality of a given occurrence.

In 2011, two floristic, protocol-level rare plant surveys were conducted on September 21 and 23. The surveys corresponded to peak blooming periods for the six vascular special-status plant species with the potential to occur in the Project area. The field surveys were conducted by a botanist familiar with the flora of coastal brackish marsh, seasonal wetland, and ruderal grassland habitats in Contra Costa County. Where and when possible, WRA consulted with other botanists, reviewed dates of historical documentation, or conducted reference site visits to ensure that the surveys were conducted within a period sufficient to identify the potentially occurring special-status plant species. The surveys followed the protocol for plant surveys described by Nelson (1987), which complies with recommended resource agency guidelines (CNPS 2001, CDFG 2000, CDFG 2009, USFWS 1996). The plant surveys were floristic in nature with all observed species recorded and included as a species list in the October 2011 rare plant survey report.

Based on the previous rare plant surveys conducted in 2007 (WMU 10/11/14), 2011 (WMU 31,WMU 32, and portions of WMU 10/11/14) and the analysis completed in 2011 as part of the Biological Resource Assessments for WMUs 10/11/14, 31, and 32, it was determined that the non-tidal areas within and adjacent to the WMUs have no potential to support special-status plant species (WRA 2011, WRA 2009a-e, WRA 2007).

The November 5, 2014, rare plant survey corresponded to fall blooming periods for observing and accurately identifying the vascular special-status plant species with a moderate or high potential to occur in tidally-influenced portions of the Project area. The field surveys were conducted by a botanist familiar with the flora of coastal brackish marsh, seasonal wetland, and ruderal grassland habitats in Contra Costa County by walking a meandering transect. Where and when possible, the botanist consulted with other botanists, reviewed dates of historical documentation, or conducted reference site visits to ensure that the surveys were conducted within a period sufficient to identify the potentially occurring special-status plant species (WRA 2015a).

The surveys followed the protocol for plant surveys described by Nelson (1987), which complies with recommended resource agency guidelines (CNPS 2001, CDFG 2009, USFWS 2000). The plant surveys were floristic in nature with all observed species recorded and included as a species list provided in the 2014 Rare Plant Survey (WRA 2015a).

Given the abundance of survey information indicating the absence of special-status plants on the Project site, Mitigation Measure (MM) BIO-8 will be added to conduct one

(1) additional year of protocol-level surveys for special-status plants during the appropriate blooming times before the onset of construction activities, tentatively scheduled to occur in 2028 to accommodate CDFW comments. The added MM BIO-8 is shown below and is reflected in the text of the Final ISMND.

> **MM BIO-8 Avoid and Minimize Impacts to Special Status Plants.** Prior to construction, a qualified biologist shall conduct one year of focused surveys within the Project area for special-status plants. Surveys shall be conducted during the appropriate blooming period for species with the potential to be present in areas disturbed during the Project.
>
> If a special-status plant is found during pre-construction surveys, high visibility protective fencing shall be installed around the plants to prevent construction staff or equipment from entering this area. The protective fencing size shall be species specific, with a minimum buffer radius based on the guidance from a qualified biologist.
>
> If a CESA-listed plant species is found within the Project area, high visibility protective fencing shall be installed around the plants. CDFW would be notified prior to initiating construction. If construction has already commenced, work in the vicinity shall cease until coordination with CDFW has been completed.
>
> If individual special status plants cannot be avoided by Project activities, a qualified biologist shall harvest seeds or propagules from at least 50 percent of plants within areas of impact. Harvested seed or propagules shall be stored for reintroduction into temporarily disturbed portions of the Project site after construction is finished. A qualified biologist shall reintroduce the seed and/or propagules during the first autumn following completion of construction activities.