

**SHORTCUT PIPELINE IMPROVEMENT PROJECT-PHASE 3
FINAL MITIGATED NEGATIVE DECLARATION SUPPLEMENT
RESPONSE TO COMMENTS**

MAY 18, 2022

A. INTRODUCTION

In compliance with the California Environmental Quality Act, a Draft Mitigated Negative Declaration Supplement (MND Supplement) was prepared for the SCPL Phase 3. The MND Supplement was used since the SCPL Phase 3 is similar to the project as described in the IS/MND adopted by the CCWD Board in December 2011. It was found that, although the proposed Phase 3 project could potentially have significant adverse impacts related to Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, and Hydrology/Water Quality, mitigation measures described in the Initial Study and agreed to by the District would reduce potential impacts to less than significant levels.

The analysis incorporates by reference the information contained in the adopted 2011 IS/MND. The mitigation measures identified in the 2011 IS/MND would apply to Phase 3, and are incorporated by reference in this supplemental MND, except as changed and/or supplemented in this document.

The draft MND Supplement was prepared for the proposed SCPL Phase 3 project and, a public review period was held from March 11, 2022 to April 14, 2022.

The purpose of this document is to respond to specific comments received pertaining to environmental issues in the Draft MND Supplement. The Response to Comments document is organized with responses to each specific comment from the one letter that was received. The comments provided do not result in any changes to the SCPL Improvement Phase 3 project.

B. CONCLUSION

It should be noted that Section 15073.5 of the CEQA Guidelines, subparagraph (c) states that re-circulation of a negative declaration prior to adoption is not required when "new project revisions are added in response to written or verbal comments on the project's effects identified in the proposed negative declaration which are not new avoidable significant effects."

The environmental analysis demonstrates that, with the identified mitigation measures agreed to by CCWD, the project as proposed would not result in significant environmental impacts. The project therefore qualifies for a Mitigated Negative Declaration and no further analysis of alternatives is required as part of the environmental document.

One comment letter was received, from the Contra Costa County Flood Control & Water Conservation District (CCCFC&WCD). A copy of CCCFC&WCD's comment letter is provided in Exhibit A, and CCWD's responses to comments are contained in the Exhibit B.

TEXT CHANGES TO THE MITIGATED NEGATIVE DECLARATION

The following text changes are made to the Mitigated Negative Declaration/Initial Study and incorporated as part of the Mitigated Negative Declaration/Initial Study. These include both text changes made in the Project Description and Sections III and IV of this document in response to comments, and CCWD staff-initiated text changes and errata. Additions to text in this section are shown in tracked changes. The U.S. Dept. of the Interior, Bureau of Reclamation (Reclamation), as owner of the SCPL, will prepare a NEPA document and will use the CEQA IS/MND as its primary reference material.

The following changes have been made to these pages of the MND:

- p. 29 Soil Reuse
- p. 37 Lighting
- p. 58 Pre-construction nesting surveys
- p. 105 Frequency of inspecting relief wells (inadvertent returns)
- p. 107 Settlement induced by the Proposed Project
- p. 110 Salt Marsh Harvest Mouse, (SMHM), raptors and nesting birds

2.2.10 Utilities and CCWD Pipelines in The Vicinity of Phase 3

The Project will evaluate any potential safeguards that are required due to electric power lines, natural gas and petroleum lines and Contra Costa Sanitary Sewer lines that are within the project footprint.

Reclaimed Water Pipeline

The CCWD Reclaimed Water Pipeline originates at the Contra Costa County Central Sanitation District and ends at the Marathon Refinery. The District will need to protect the Reclaimed Water Line on the Conco property and at the Marathon Refinery (see Figure 12).

14-Inch Water Pipeline

The 14 Inch Water Pipeline supplies high quality water to the power plant within the Marathon Refinery. The District will need to armor the pipeline where construction equipment will pass over it with frequency during construction of the SCPL Phase 3 (see Figure 12).

8-Inch Water Line

The 8-Inch Water Line turn out from the SCPL on Site 5 (Marathon Property) is in the area where the drilling for the new HDPE pipelines will be performed. The 8-Inch Water Line provides untreated water to a cooling tower associated with the power plant within the Marathon Refinery. The 8-Inch water lines turnout will be reconstructed since this facility is within the area where the two new HDPE pipelines will tie into the existing 48-inch SCPL. The existing turnout will need to be armored to ensure it is not damaged during construction (see Figure 12).

2.2.11 Environmental Conditions

The conditions described below are required for Phase 3 construction and were not required for Phase 2 construction.

Groundwater Disposal/Dewatering Plan

Ground water will be removed and/or treated by Marathon Refinery or the Contra Costa County Central Sanitary District. If this is not feasible, then the water will be hauled off site. Horizontal directional drilling will result in boreholes underneath Walnut Creek. The initial open trenching and drilling will likely encounter groundwater seepage that will need to be collected and removed from the Project site. The District would dispose of any groundwater containing hazardous materials at an appropriate location for such materials. Excavated earthen material not used to fill open **construction** trenches is expected to be hauled off-site. ~~If excavated earthen materials are found to be free of contamination after testing, they may be disposed of or be left at the site without special measures being required.~~ **Soil hauled off site will be either transported to a third party for beneficial reuse or disposed at an appropriately permitted facility consistent with all applicable laws and regulations.**

Groundwater removal will occur within parcels owned or managed by Conco, Reclamation, and the Marathon Refinery. CCWD expects minimal surface disturbance on the CCCFC&WCD property and does not expect to remove groundwater since the pipelines will be drilled deep beneath this property. Construction on the CCCFC&WCD are limited to installation of settling monitors (Section 2.2.8).

Use of Night Lighting for Construction of the New Pipelines

Project activities will require night work with lights within the construction area. Up to 4 months of night work may be needed, primarily during drilling of the tunnels and the pipe pullback procedure. Light sources associated with Project construction shall be shielded as much as possible with the goal of ensuring that no direct beam illumination is provided outside of the construction area, furthermore, special status species exclusion fencing will be used around construction areas that require night lighting. Construction lighting shall not be so limited as to compromise the safety of construction workers; **however, lighting will be aimed downward and shielded to illuminate only within the Project boundary.** A biological monitor will be on site during all night work. **Additionally, the District will follow the requirements established within the biological opinion issued by USFWS and any CDFW requirements for night lighting and noise impacts.**

Inadvertent Returns Prevention and Contingency Plan for Construction of the New Pipelines

The District will be installing a series of relief wells west of the Site 4 tie-in location. The purpose of the relief wells is to control any potential surfacing of drilling muds to an area where no damages would occur to Walnut Creek. Instrumentation on the drilling equipment as well as visual inspections will advise whether there is any unplanned surface of drilling mud issues.

An Inadvertent Returns Prevention and Contingency Plan (IRPCP) will be developed as part of the Project design detailing minimum requirements for preventing an inadvertent return (such as using appropriate mud properties and drilling pressures), detection of an inadvertent return (such as continuous visual monitoring of the site and monitoring of drilling parameters such as downhole pressure), and addressing an inadvertent return if it occurs (such as use of a vac truck and best management practices (BMPs) to isolate and clean a spill if it occurs). The contractor will also be required to create their own plan meeting the minimum requirements set forth in the IRPCP developed during design.

To minimize inadvertent return of drilling fluids to the surface, the pipeline will be installed 60 to 80 feet below ground surface. Inadvertent returns have the highest likelihood of occurring on Site 4, where drilling fluid pressures will be the highest and boreholes begin to decrease in depth. To control any potential inadvertent drilling fluid returns, relief wells will be installed on Site 4 to provide a preferential pathway for drilling returns to the surface. Containment berms will be installed around each relief well to return, and drilling mud return, and the drilling mud will be removed and properly contained.

Environmental Review and Permit Summary

Table 7 below provides a summary of environmental review and permit status for SCPL Phase 2 and Phase 3. CCWD will follow all of the required environmental conditions within the newly obtained permits.

Summary

A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated – The Proposed Project could affect salt marsh harvest mouse through increased disturbance and habitat destruction. Increased levels of disturbance to salt marsh harvest mouse would result from noise and vibrations from equipment and other repair work activities, and potential destruction of SMHM habitat.

Operation of equipment and associated loss of habitat could result in displacement of salt marsh harvest mouse from protective cover and territories/home ranges (through noise and vibrations), and/or direct injury. These disturbances could disrupt normal behavior patterns of breeding, foraging, sheltering, and dispersal, and may result in the displacement of salt marsh harvest mouse in the areas where SMHM habitat is destroyed. Displaced SMHM may have to compete for resources in condensed, occupied habitat and may be more vulnerable to predators. Because SMHM are reproductively active from March through November, disturbance during this period could result in abandonment or failure of the nest and litter. Thus, displaced SMHM could suffer from increased predation, competition, injury, and reduced reproductive success.

Construction associated with the Proposed Project will result in the creation of new maintenance areas and improved access roads that are currently open space areas near or within seasonal wetland, tidal marsh, and upland grassland habitats. These areas provide suitable foraging, breeding, nesting, and refuge habitat to a variety of local wildlife species, including the SMHM. Although SMHM is mainly nocturnal, they have been observed to travel and forage during the day. Increased traffic associated with the Proposed Project could harass SMHM. Additionally, the improvements of existing access roads could potentially further isolate SMHM populations within the action area from those on adjacent lands. This impact would be temporary and cease once construction work is completed, and the maintenance areas and roads would only be used minimally for operations & maintenance.

Implementation of the mitigation measures listed below would reduce any potential significant impacts to less than significant, and other forms of take would be avoided.

BIO Mitigation Measure-1: Preconstruction Surveys – Prior to the initiation of exclusion fencing installation, vegetation clearing, and other construction activities, a Service approved biologist will conduct pre-construction surveys for SMHM. **For nesting birds, pre-construction surveys will be conducted within 14-days of start of construction. The District will follow the requirements established within the biological opinion issued by USFWS and any CDFW requirements for SMHM, nesting birds and raptors.**

BIO Mitigation Measure-2: Preconstruction Environmental Training – Prior to initiation of construction activities, all construction personnel will participate in an endangered species training program to be given by the Service-approved biological monitor. The training will provide information about the SMHM, measures being implemented to avoid impacts to the species, and procedures to follow should a SMHM be

Risk of drilling mud inadvertent returns was evaluated and reported by Stantec (2022). The construction can be built with a margin of safety which diminishes near the approach to the exit pit located east of Site 4. This is a benched upland area which presents a reduced likelihood of inadvertent release into Walnut Creek if contingencies for response are in place in advance of the work.

During HDD drilling, soil cuttings mixed with drilling fluid from the reclaimer would be stored temporarily on an adjoining ruderal upland area in Site 5 east of Walnut Creek. See Biology for details.

WQ Impact-5 HDD presents a risk of release of drilling mud termed “inadvertent return,” which could potentially result in discharge of sediment into a creek. Most of the proposed project has a design safety factor of $\times 1.5$, except the portion near the approach to the exit pit on Site 4 (Conco property).

WQ Mitigation Measure-5

The Contractor will be required to install drilling mud relief wells along the alignment with the highest risk of inadvertent return on Site 4 near the exit boring pit. The relief wells will provide a preferential pathway for drilling mud surfacing. Drilling mud exiting the ground surface will be contained, removed, and properly managed to minimize any potential for uncontrolled release.

The Contractor will include procedures for preventing and responding to inadvertent returns in an Inadvertent Returns Contingency Plan and will maintain on-site equipment and materials for containment and cleanup response. **During drilling activities, the relief wells will be inspected daily, at a minimum.**

WQ Impact-6 Stockpiled soil and construction activities generally have the potential to generate sediments conveyed in stormwater runoff that can impact surface water bodies. Construction of the SCPL Phase 3 Improvement Project will generate wet soil displaced by pipe, which will be stored temporarily in the Site 5 upland area next to Walnut Creek, thereby creating potential for discharge of sediments into Walnut Creek. Soil cuttings from the reaming process and drilling mud reclaimer will be too wet for direct loading into haul trucks, which necessitates staging in interim stockpiles for drying.

WQ Mitigation Measure-6

A SWPPP for the construction would be designed and implemented to control erosion during the construction. The SWPPP will include provisions for straw wattle to capture sediment, and provisions for restoration of ground cover as soon as possible after ground disturbing activity.

The SWPPP will include provisions for the interim soil stockpiles to maintain distributed overland flow and avoid concentration of runoff and increased sedimentation of Walnut Creek and wetlands adjacent to the project construction Site 5.

erosion if the soil is not properly protected. Omni silty clay on the project site has high runoff potential and is erosive.

Based upon the preliminary information, the proposed project would most likely be classified as Risk Level 2. Risk Level 2 projects require a SWPPP, implementation of BMPs, and effluent sampling at discharge points. Samples would need to meet the numeric action levels for pH and turbidity. If discharge samples exceed the levels set forth in the CGP, exceedance reporting, and BMP modifications could potentially be required. The SWPPP is discussed in Mitigation Measure WQ-3.

- (i) **No Impact** – Runoff from the project site generally would continue as sheet flow following pre-construction patterns. The pattern and volume of runoff would not be altered by the proposed project. Therefore, the proposed project would not impact available capacity at existing or planned stormwater drainage systems.
- (ii) **No Impact** – The proposed project would not include paved service roads or parking lots. Anti-trackout pads and heavy equipment pads would be constructed using rock fill over geotextile fabric. The proposed project would not increase the rate or volume of stormwater runoff volume.
- (iii) **No Impact** – The proposed project would construct an underground untreated water pipeline. Changes to the topography by cutting, filling, or addition of buildings are not proposed. Settlement due to pipe surcharge and annular void space potentially left from the drilling process is possible. Projected settlement is 0.66 inches over the top of pipe, but less with increased distance outboard from the pipe (Stantec, 2022). **The pipes will not be installed under the new levees.** In the vicinity of the LWCR Project, at the levees shown in Figure 25, settlement **induced by the project** would be negligible. Therefore, the proposed project could not impede or redirect flood flows or impair the floor protection effectiveness of the LWCR Project levees.

A. Is the proposed project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact – Based upon available mapping of risk prone areas by Cal/OES, the project site is not at risk for tsunamis and also is not located in a seiche zone. Since the proposed project is a water pipeline, there is no risk of release of pollutants due to project inundation.

B. Does the proposed project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact – Construction of the proposed project is expected to comply with a SWPPP and have a less-than-significant short-term impact on surface water and groundwater resources, their quality and quantity. The proposed project is not expected to have long-term effects on surface water and groundwater resources, their quality or quantity. No amount or groundwater recharge would be depleted by implementing the proposed project. The proposed project, therefore, would not

4. SUMMARY OF PROPOSED MITIGATION MEASURES

Earlier Analyses Used: The following mitigation measures identified, as well as the mitigation measures in the 2011 MND continue to be necessary to reduce potentially significant impacts to less than significant levels.

Mitigation Measures: The mitigation measures for the six topics listed would reduce Project impact to less than significant levels:

Air Quality

AQ Mitigation Measure-1: Provisions for track-out control of soil/mud from project construction will be implemented as construction best practices BP6 and BP7 described in Table 12.

AQ Mitigation Measure-2: To minimize fugitive PM emission and downwind PM concentrations from on-site construction, implement Construction Basic Practices A1 through A4 and A8 and Construction Best Practices BP6 and BP7 for anti-trackout (see Table 12).

AQ Mitigation Measure-3: To minimize exhaust PM emission and downwind PM concentrations from on-site construction, the BAAQMD recommends implementation of Construction Basic Practices A6 and A7 for non-road equipment exhaust control (see Table 14).

AQ Mitigation Measure-4: Carefully refuel in designated areas with spill response equipment and supplies available on-site to minimize incidental spills and respond in the event of accidental spills

Biological Resources

BIO Mitigation Measure-1: Preconstruction Surveys – Prior to the initiation of exclusion fencing installation, vegetation clearing, and other construction activities, a Service approved biologist will conduct pre-construction surveys for SMHM, **raptors and nesting birds**.

BIO Mitigation Measure-2: Preconstruction Environmental Training – Prior to initiation of construction activities, all construction personnel will participate in an endangered species training program to be given by the Service-approved biological monitor. The training will provide information about the SMHM, measures being implemented to avoid impacts to the species, and procedures to follow should a SMHM be encountered during routine activities. Training materials will be in Spanish and English.

BIO Mitigation Measure-3: Biological Monitoring – A U.S. Fish and Wildlife Service-approved biological monitor will be present during vegetation clearing and SMHM exclusion fence installation. Once the SMHM exclusion fencing has been installed and all work activity is confined to the cleared work site, the biological monitor will inspect the site at least once per day while construction is ongoing.

BIO Mitigation Measure-4: Contingency if SMHM is found on site - If a SMHM is observed within the areas being removed of vegetation or elsewhere within the work site, the biological monitor will stop work in the immediate area until the salt marsh harvest mouse leaves the work



Brian M. Balbas,
ex officio Chief Engineer
Allison Knapp,
Deputy Chief Engineer

April 11, 2022

Contra Costa Water District
Attn: Mark Seedall, Principal Planner
P.O. Box H20
Concord, CA 94524

RE: Shortcut Pipeline Project – Phase 3 Mitigated
Negative Declaration Supplement
Our File: FCP 629-21 CCWD Pipeline at WC

Dear Mr. Seedall:

The Contra Costa County Flood Control & Water Conservation District (CCCFCWCD) received a request for agency comments for the above referenced project. The following are our comments:

1. Groundwater Disposal and Dewatering

The project description states that surface and groundwater would be tested for constituents of concern before removal and discharged at appropriate locations per all local, state, and federal requirements.

CCCFCWCD would not authorize pumping into the Lower Walnut Creek Restoration Project (LWCRP), and it should not be released into Walnut Creek or surrounding wetland features. We request that the document specifically state that dewatering is not authorized into the LWCRP or Walnut Creek.

Please revise page 31 to remove the statement "With permission from the CCCFC&WCD and/or the SFRWQCB this water may be pumped to the Walnut Creek restoration area. If the CCCFC&WCD will not authorize the use of the Walnut Creek restoration area, then the District will need to seek another location to take the standing water."

Please revise page 38, Table 7, Contra Costa County Flood Control and Water Conservation District Encroachment Permit row, Item 5 "Permission to dispose of standing water to LWCRA property or Walnut Creek (if required)." This action would not be permissible.

The draft geotechnical report recommends that two observation wells be installed to monitor dewatering drawdown effects – this does not appear to be described in the CEQA document. We request that this be described in the project description or added as a mitigation measure.

2. Excavated Earthen Materials

Pg. 29 states "Excavated earthen material not used to fill open trenches is expected to be hauled off-site. If excavated earthen materials are found to be free of contamination after testing, they may be disposed of or be left at the site without special measures being required."

Much of the Project work site is surrounded by seasonal wetlands or other sensitive habitats. Excavated materials should not be left on site where they could eventually enter Walnut Creek or mobilize into the LWCRP. The SWPPP is only designed to control erosion during construction.

What measures are proposed to ensure excavated materials will not be placed into these sensitive habitats? If excavated soil were left onsite after construction, what measures would ensure they are contained long-term and would not erode into adjacent areas? The ISMND should describe and include measures that states how direct or indirect impacts to wetland features or plants/habitat types will be avoided if excavated materials are left onsite.

3. Settlement of levees

There is potential for HDD to impact to the newly constructed LWCR levees. CCWD prepared a Hydrofracture and Settlement Analysis (Stantec, January 18, 2022). Applicable information from the analysis should be included in the ISMND to disclose and address potential impacts to the levees. We request that a mitigation measure be included in CEQA to implement the plan to address the impacts. The mitigation measures should include specific thresholds for monitoring levee settlement and state the maximum allowable settlement (based on USACE maximum allowable settlement of one-inch for trenchless installations under typical levee embankments). If the settlement exceeds threshold in plan, then all work shall stop and not proceed until consultation with CCCFCWCD. The mitigation measures should also include provisions to promptly share the results of the settling monitoring with CCCFCWCD.

CCCFCWCD requests the opportunity to review and approve the Settlement Surveying and Monitoring plan.

4. Biological Resources

It is unclear if impacts to any special-status species beside Salt Marsh Harvest Mouse (SMHM) were re-considered since the original analysis in the 2011 ISMND. Consider updating the potential species list from 2011 to discuss what was ruled out and what is expected on site in 2023, since there may have been more recent sightings (e.g. Suisun Shrew). There are also newly listed candidate species since 2011 that should be included in the analysis.

There is not a mitigation measure for nesting bird pre-construction surveys (the 2011 ISMND Bio-4 requires "Pre-construction breeding bird surveys will be conducted at Sites 3, 7, or 10"); why is there not potential for nesting birds at Site 5 and 6? Will all work be conducted outside of breeding season? If so, that should be a clarified and a mitigation measure considered.

Black Rail and Ridgway's Rail are not considered in the ISMND however, rail habitat is present immediately adjacent to the Project Site (especially the eastern Site) and mitigation measures would be expected. For example, Mitigation Measure 1 may need pre-construction surveys for rails, and BIO-2 should describe species beyond just SMHM. It does not appear that rare plant surveys were updated (the ISMND references 2010 and 2011 field surveys, which found several species have the potential to occur in the Study Area). Delta tule pea and Suisun Marsh aster are known in the vicinity and may be affected by the loss of wetlands or by other direct and indirect impacts of the Project.

The ISMND should include a discussion of noise impacts (from general construction, including pile driving equipment) and lights (from night work), and recommend related mitigation measures (e.g. temporary noise barriers for areas with nesting birds, or directional/downward facing lighting during night work). For the adjacent and recently completed LWCRP, the CCCFCWCD worked closely with regulatory agencies to minimize noise impacts to rails by following seasonal work windows and used noise dampening material (vinyl barrier attached to chain link fence that ran between work area and rail habitat).

For reference see the LWCRP Mitigation and Monitoring Reporting Program (MMRP): <https://www.contracosta.ca.gov/DocumentCenter/View/62546/CEQA-Mitigation-Monitoring-and-Reporting-Plan-PDF?bidId=>

- BIO-4: Avoid and Minimize Impacts to California Black Rail and Ridgway's Rail
- Mitigation Measure BIO-9: Fish and Marine Mammal Protection During Pile Driving
Note: Marine mammals - sea lions can traverse Walnut Creek in this stretch (one was observed in January 2022 near Marsh Drive Bridge).

The ISMND should include a mitigation measure requiring that no monofilament is allowed in erosion control or other Project materials. Monofilament can trap SMHM, which could impact the LWCRP SMHM monitoring plan.

The ISMND should clarify where and how Temporary Wildlife Exclusion Fencing (TWEF) will be installed and the species it is intended to protect. The discussion should include the need for TWEF surrounding access and staging areas. This is especially critical for the east side staging / work area.

5. Temporary Impacts

The ISMND does not fully address how temporarily impacted areas will be restored. Table 5 states 0.052 AC Seasonal Wetland and 0.061 Tidal Marsh on CCCFCWCD property will be temporarily impacted.

Regarding Bio Mitigation Measure-6: Habitat Restoration.

The mitigation measure should clarify the definition of functions and values and the target criteria as well as examples of actions that will be taken if criteria are not achieved.

Further, it is unclear in the ISMND whether three years is sufficient time for habitat values to be restored. We recommend that further justification be provided or a longer monitoring period be stated in the mitigation measure.

CCCFCWCD requests to review the plant palette for site restoration. Use of non-native plants could impact the native plants being installed in the adjacent LWCRP area.

6. Invasive Plants

The LWCRP Monitoring and Adaptive Management Plan (MAMP) has a 10-year monitoring period to prevent introduction of invasive plants. The CCCFCWCD requests that a mitigation measure be incorporated to reduce the likelihood of invasive plants being introduced, similar to Bio-10 from LWCRP:

"The introduction of exotic plant species shall be avoided through physical or chemical removal and prevention. Measures to prevent the introduction of exotic plants into the project site via vehicular sources shall include vehicle cleaning for vehicles coming to the site and leaving the site. Earthmoving equipment shall be cleaned prior to transport to the project area. Weed-free rice straw or other certified weed-free straw shall be used for erosion control.

- Construction equipment shall not be stored in sensitive natural communities, wetlands, or waters.
- Only herbicides to be used will be USEPA certified for use in/adjacent to aquatic environments."

7. Inadvertent Returns

Pg. 104 –Inadvertent drilling fluid return is defined as "release of drilling fluid to the ground surface." What about fluids that are released that do not reach the ground

Mark Seedall
April 11, 2022
Page 5 of 5

7. Inadvertent Returns

Pg. 104 –Inadvertent drilling fluid return is defined as “release of drilling fluid to the ground surface.” What about fluids that are released that do not reach the ground surface, could there be impact to underground hydrologic connections that goes undetected?

WQ Mitigation Measure 5. The mitigation measure should state how frequently the relief wells will be monitored, and examples of procedures for preventing and responding to inadvertent returns as well as who will approve the Inadvertent Returns Contingency Plan.

Pg. 105 states that “Drilling fluid from reclaimer would be stored...in site 5 East of Walnut Creek ...See Biology for details,”

This does not appear to be discussed in the Biology section. Are there potential impacts that should be analyzed further? Please include a mitigation measure that addresses staging, and inadvertent release due to handling, storage, and processing.

8. Geology & Soils

The Concord fault was considered while developing the Geotechnical Report (Stantec, 2022), however there is not much discussion of seismic resilience in the ISMND. Consider further discussion on the Concord fault uncertainty zones and related design parameters. Should you have any questions, please contact Lori Leontini at Lori.Leontini@pw.cccounty.us or at (925) 313-2283.

Sincerely,



Avé Brown
Principal Environmental Analyst
Environmental Services Division

AB:ll

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c: Tim Jensen, Flood Control
Paul Detjens, Flood Control
Claudia Gemberling, Environmental
Laura Cremin, Environmental
Lori Leontini, Flood Control

**Letter from Contra Costa County Flood Control and Water Conservation District (CCCFCWCD)
Comment Letter Responses**

1. Groundwater Disposal and Dewatering

CCWD Response: As stated on page 37 within the MND Supplement, the District will follow the conditions provided by the CCCFCWCD within its encroachment permit. The District will follow all SFRWQCB permit requirements related to the disposal of any standing water. No modifications to the MND Supplement are needed to address this comment.

The draft geotechnical report recommendations

CCWD Response: The draft geotechnical report for this project was prepared prior to preliminary design when the concept of groundwater observation wells were thought to be needed. During the design phase it has been determined that groundwater monitoring wells are not needed due to the shallow dewatering of groundwater needed to complete construction. The District will be obtaining permits from the SFRWQB, SF Corps as well as other regulatory agencies and will follow all requirements regarding monitoring of groundwater. No modifications to the MND Supplement are needed to address this comment.

2. Excavated Earthen Materials

CCWD Response: SCPL Phase 3 work and staging areas avoid property owned by the CCCFC&WCD except for instrumentation monitoring wells that are installed by hand. Any soil that is not used as part of the Project will be hauled off-site. As stated on page 37 within the MND Supplement the District will follow all of the requirements within the CCCFC&WCD encroachment permit as well as permits obtain from the SF Corps and SFRWQCB.

*The statement on page 29 will be edited in the Final Supplemental MND to state,
"Excavated earthen material not used to fill open construction trenches is expected to be hauled off-site. Soil hauled off site ~~if they are found to be free of contamination after testing excavated, they may be disposed of or be left at the site without special measures~~ will be either transported to a third party for beneficial reuse or disposed at an appropriately permitted facility consistent will all applicable laws and regulations."*

3. Settlement of levees

CCWD Response: The SCPL Phase 3 project will not be impacting any of the newly constructed CCCFC&WCD LWCR levees. As stated on page 37 within the MND Supplement the District will follow all of the requirements within the CCCFC&WCD.

The new pipes will be installed approximately 60-80 feet below ground surface under the existing levee and installed in the stiff alluvium to minimize settlement. The maximum anticipated settlement is 0.66 inches directly over the pipes, with less settlement with increased distance from the pipe (see the MND Supplement at page 107).

4. Biological Resources

CCWD Response: The District will follow the requirements established within the biological opinion issued by the United States Fish and Wildlife Service (USFWS) and any CDFW requirements for nesting birds and raptors, special status plants, night lighting and noise.

The USFWS Information for Planning and Consultation (IPaC) database was accessed on December 16, 2021 and the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (December 2021 dataset) was accessed at that time as well. These datasets helped inform the current status, type and location of critical habitat and special-status animals and plants that could be affected by the project.

As with all CCWD projects and typically as a permit condition, pre-construction surveys for nesting birds will be conducted within 14-days of start of construction.

Pre-construction special-status plant surveys will be conducted in the appropriate blooming period prior to the start of construction.

All night lighting will be aimed downward and shielded to illuminate only within the Project boundary. Biological monitors will be on-site during all night work.

Monofilament is not used in any CCWD projects. It will not be allowed in any erosion control or other Project materials. All contractors will be informed that monofilament is not allowed on this Project.

Wildlife Exclusion Fencing will be installed according to manufacturer's specification. It will be trenched in around the Project perimeter including staging areas and is intended to protect against entry of SMHM but will protect all wildlife that may be in the vicinity of the Project. The Wildlife Exclusion fencing will be inspected at least twice per week by the biological monitor.

5. Temporary Impacts

CCWD Response: All temporarily disturbed sites are anticipated to be restored to full habitat functions and values within the 12-month period following impacts. These sites will be compared to designated reference sites prior to construction, and the plant palette will mimic these reference sites. No nonnative plants or plants unsuitable to the existing habitats/plant communities will be used. A three-year monitoring and maintenance period will ensure that restored areas meet pre-construction habitat quality. The District will follow the requirements established within the biological opinion issued by USFWS and any CDFW requirements for restoration of temporarily impacted areas.

6. Invasive Plants

CCWD Response: The District will follow the requirements established within the biological opinion issued by USFWS and any CDFW requirements for invasive plant species control, including perennial pepperweed, stinkwort, and other invasive plants.

7. Inadvertent Returns

Comment: Page 104

CCWD Response: CCWD has completed an extensive subsurface geotechnical and environmental investigation. Given the limited diameter of the borehole, the use of drilling fluid during the horizontal directional drilling process, and the results of the geotechnical and environmental investigation, no impact to underground hydrologic connections is anticipated.

Comment: WQ Mitigation Measure 5.

CCWD Response: As stated on page 37 of the MND Supplement a SF Corps and SFRWQCB permit will be obtained for the project. Additionally, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Project. The project will comply with all applicable regulatory requirements. Relief wells will be inspected daily. WQ Mitigation Measure 5 will be revised as follows:

"The Contractor will be required to install drilling mud relief wells along the alignment with the highest risk of inadvertent return on Site 4 near the exit boring pit. The relief wells will provide a preferential pathway for drilling mud surfacing. Drilling mud exiting the ground surface will be contained, removed, and properly managed to minimize any potential for uncontrolled release.

The Contractor will include procedures for preventing and responding to inadvertent returns in an Inadvertent Returns Contingency Plan and will maintain on-site equipment and materials for containment and cleanup response. During drilling activities, the relief wells will be inspected daily, at a minimum."

Comment: Pg. 105 states that "Drilling fluid from reclaimer would be stored...in site 5 East of Walnut Creek ...See Biology for details,"

CCWD Response: The intent of the "see Biology" reference was to refer the reader back to the Biology section within the MND Supplement for a description of the ruderal upland area where drilling fluid from the reclaimer will be temporarily stored. Consistent with WQ Mitigation Measure-3 (Page 103) and WQ Mitigation Measure -6 (Page 105), a SWPPP will be prepared for the proposed project to address sedimentation, maintenance

of overland flow, and erosion control during construction. As stated on page 37 of the MND Supplement, the Project will comply with all applicable regulatory requirements to minimize inadvertent release of materials. No further analysis of impacts is needed.

8. Geology & Soils

CCWD Response: The discussion of the Concord fault zone can be found on Page 10 and 89. The Project is designed to increase reliable long-term service with less vulnerability from shifting bay muds and seismic events. Seismic resiliency is being addressed through the project design including fault zone uncertainties and specific design parameters. No modifications to the MND Supplement are needed to address this comment.

Mitigation, Monitoring and Reporting Plan (MMRP) for the CCWD Shortcut Pipeline Project Phase 3 - CEQA Mitigated Negative Declaration(MND) Supplement, April 2022

Mitigation Measures: The mitigation measures (MMs) for the environmental review topics for the SCPL Phase 3 Improvement Project MND Supplement listed in Table 1 would reduce SCPL Phase 3 Project impacts to less than significant levels. This table has a column on the far right that compares the measures contained in the 2011 MMRP.

BIO-1 has been updated as part of the Final MND Supplement and is shown in tracked changes in Table 1 below.

The December 2011 MMRP from the Shortcut Pipeline Phase 2 Project is contained at the end of this MMRP Table (Table 2).

**Table 1
Mitigation Monitoring and Reporting Plan for the
Shortcut Pipeline Improvement Phase 3 Project**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
AQ-1	Provisions for track-out control of soil/mud from project construction will be implemented as construction best practices BP6 and BP7 described in Table 12 of the IS/MND. These are: BP6: Wash truck beds, trailers, equipment tracks or tire treads before hauling or transporting equipment off site. BP7: Treat the site entry with a six- to 12-inch compacted layer of wood chips, mulch, or gravel, to minimize mud/dirt track-out.	Before, during and after Construction Phase	CCWD			Updated from BAAQMD 2022 CEQA Guidelines

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
AQ-2	<p>To minimize fugitive PM emission and downwind PM concentrations from on-site construction, implement Construction Basic Practices A1 through A4 and A8 and Construction Best Practices BP6 and BP7 for anti-trackout (see below for A1-A4 and A8; see above for BP6 and BP7).</p> <p>A1: Water [at least] two times per day exposed soil surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads). BEST Maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.</p> <p>A2: Cover haul trucks transporting soil, sand, or other loose material to or from the site.</p> <p>A3: Remove visible mud or dirt track-out onto adjacent public roads, using wet power vacuum street sweepers at least once per day. The use of dry power sweeping should be done in conjunction with thorough watering of the subject roads.</p> <p>A4: Limit vehicle speeds on unpaved roads [less than] 15 mph.</p> <p>A8: Post a sign visible to the public with the telephone number and person to contact at the Lead Agency regarding dust or odor complaints.</p> <p>The Air District's Complaint Line (1-800-334-6367) shall also be included on posted signs to ensure compliance with applicable best practices and regulations. NOTE: The recommended response time for corrective actions, if any, shall be within 48 hours.</p>	Before, during and after Construction Phase	CCWD			Updated from BAAQMD 2022 CEQA Guidelines

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
AQ-3	To minimize exhaust PM emission and downwind PM concentrations from on-site construction, the BAAQMD recommends implementation of Construction Basic Practices A6 and A7 for non-road equipment exhaust control, as follows: A6: Minimize idling times to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. A7: Maintain and properly tune all construction equipment in accordance with the manufacturers' specifications.	Before, during and after Construction Phase	CCWD			Updated from BAAQMD 2022 CEQA Guidelines
AQ-4	Carefully refuel in designated areas with spill response equipment and supplies available on-site to minimize incidental spills and respond in the event of accidental spills.	Before, during and after Construction Phase	CCWD			Updated from BAAQMD 2022 CEQA Guidelines

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
BIO-1	Preconstruction Surveys – Prior to the initiation of exclusion fencing installation, vegetation clearing, and other construction activities, a Service approved biologist will conduct pre-construction surveys for Salt Marsh Harvest Mouse (SMHM), raptors and nesting birds.	Before Construction Phase	CCWD			This measure includes the Measures BIO-1, BIO-4, BIO-5 AND BIO-6 in the 2011 MMRP. Measures BIO-2, BIO-3 BIO-7 and BIO-8 from the 2011 MMRP are not included in this 2022 MMRP, as they are not relevant to Sites 4 and 5, which are the only subject of this MND Supplement.
BIO-2	Preconstruction Environmental Training – Prior to initiation of construction activities, all construction personnel will participate in an endangered species training program to be given by the Service-approved biological monitor. The training will provide information about the SMHM , measures implemented to avoid impacts to the species, and procedures to follow should a SMHM be encountered during routine activities. Training materials will be in Spanish and English.	Before Construction Phase	CCWD			This measure was not part of the 2011 MMRP.

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
BIO-3	Biological Monitoring – A U.S. Fish and Wildlife Service-approved biological monitor will be present during vegetation clearing and SMHM exclusion fence installation. Once the SMHM exclusion fencing has been installed and all work activity is confined to the cleared work site, the biological monitor will inspect the site at least once per day while construction is ongoing.	Before and during Construction Phase	CCWD			This measure updates and refines BIO-6 from the 2011 MMRP, based on best available science.
BIO-4	Contingency if SMHM is found on site - If a SMHM is observed within the areas being removed of vegetation or elsewhere within the work site, the biological monitor will stop work in the immediate area until the salt marsh harvest mouse leaves the work area on its own volition.	Before and during Construction Phase	CCWD			This measure updates and refines BIO-6 from the 2011 MMRP, based on best available science.
BIO-5	SMHM Exclusion Fencing – Exclusion fencing for SMHM will be installed between areas of SMHM habitat and work sites immediately following vegetation removal and before excavation activities begin to prevent entry of the SMHM into cleared areas.	Before and during Construction Phase	CCWD			This measure updates and refines BIO-6 from the 2011 MMRP, based on best available science.
BIO-6	Habitat Restoration – All temporarily disturbed sites shall be restored to full functions and values in the 12-month period following impacts. A three-year monitoring and maintenance period is prescribed for these sites to ensure they meet pre-construction habitat quality.	Before and during Construction Phase	CCWD			New Measure based on current conditions at SCPL Sites 4 and 5.

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
BIO-7	SMHM Habitat Compensation – CCWD will mitigate for SMHM offsite at Cordelia Slough Preserve (or another Service-approved site if not possible at this location), at a 1:1 ratio for short-term temporary disturbance (less than 12 months) involving major construction activities including vegetation removal, trenching, HDPE mats, and the use and staging of heavy equipment. Permanent impacts will be compensated at a 3:1 ratio.	Before and during Construction Phase	CCWD			This measure updates BIO-6 from the 2011 MMRP.
BIO-8	Pickleweed Harvesting and Propagation - Pickleweed within temporary impact areas will be mowed with string trimmers with saw-blade attachments to the soil surface leaving the root system intact. These areas will be covered with Visqueen sheeting (or similar) and marsh mats to allow equipment to drive on these areas. When construction is completed, the marsh mats and Visqueen sheeting will be removed and the pickleweed will be allowed to regrow naturally. In addition, areas of pickleweed impact will be permanently mitigated for at Cordelia Slough Preserve as a part of the SMHM habitat mitigation (see BIO Mitigation Measure 7).	Before and during Construction Phase	CCWD			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.
BIO-9	Wetland Compensation – The San Pablo-Rheem Creek Wetland Restoration Project contains already established seasonal wetlands on an 8.6 acre set of parcels adjacent to Rheem Creek and Breuner Marsh, located in the City of Richmond. Wetlands will be mitigated consistent with Phase 2 requirements – 1:1 for permanent impacts and 0.1:1 for temporary impacts.	Completed	CCWD			This measure updates BIO-9 and BIO-10 from the 2011 MMRP.

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
BIO-10	Erosion Control – To control erosion during and after implementation of the Proposed Project, the contractor would implement a Stormwater Pollution Prevention Plan (SWPPP) with appropriate Best Management Plans (BMPs), in accordance with San Francisco Bay Regional Water Quality Control Board guidelines.	Before and during Construction Phase	CCWD			
CR-1	If any cultural artifacts are encountered during site grading or other construction activities, all ground disturbance in the vicinity shall be halted until a qualified archaeologist can identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s).	Before and during Construction Phase	CCWD			YES. Note that CUL-3 (inadvertent discovery of paleontological resources) from the 2011 MMRP is not included in this 2022 MMRP as none are expected to be found.

**Table 1
Mitigation Monitoring and Reporting Plan for the
Shortcut Pipeline Improvement Phase 3 Project**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
CR-2	<p>In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately, and a qualified archaeologist shall notify the Office of the Contra Costa County Coroner and advise that office as to whether the remains are likely to be Native American.</p> <p>If the remains are Native American, the Coroner must notify the NAHC of the discovery within 24 hours. The NAHC will then identify and contact a Most Likely Descendant (MLD). The MLD may make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the remains and grave goods. Once proper consultation has occurred, a procedure that may include the reservation, excavation, analysis, and curation of artifacts and/or reburial of those remains and associated artifacts will be formulated and implemented.</p> <p>If the remains are not Native American, the Coroner will consult with the archaeological research team and the lead agency to develop a procedure for the proper study, documentation, and ultimate disposition of the remains. If a determination can be made as to the likely identity—either as an individual or as a member of a group—of the remains, an attempt should be made to identify and contact any living descendants or representatives of the descendant community. As interested parties, these descendants may make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the remains and grave goods.</p>	Before and during Construction Phase	CCWD			YES

**Table 1
Mitigation Monitoring and Reporting Plan for the
Shortcut Pipeline Improvement Phase 3 Project**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
GHG-1	To reduce GHG emission during construction, CCWD will require the contractor to implement a Worker Travel Plan, to be approved by CCWD, which includes measures to reduce VMT and travel in single-occupant vehicles. Estimated GHG reduction potential is 67 MT CO _{2e} or 10 percent of construction-phase emission of GHGs.	Before and during Construction Phase	CCWD			This Measure updates MMs GGE-1 and GGE-2 from the 2011 MMRP based on best available science.
HM-1	A Spill Prevention and Contingency Plan will be included as an element of the Soil & Groundwater Management Plan. Equipment will be maintained on site to respond to a spill of fuel, oil, hydraulic oil, or grease.	Before and during Construction Phase	CCWD			Updated Measure based on current conditions at SCPL Sites 4 and 5 and best available science.

**Table 1
Mitigation Monitoring and Reporting Plan for the
Shortcut Pipeline Improvement Phase 3 Project**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
HM-2	<p>Procedures for on-site safety and management of soil and groundwater will be set forth for the contractor in a Worker Health & Safety Plan and a Soil & Groundwater Management Plan, which will be incorporated into contract and construction documents.</p> <ul style="list-style-type: none"> • Posting of appropriate signage and covering of soil stockpiles will be implemented to minimize potential for public contact with temporarily stored soil and de-watering water. • A chemical profile will be completed before off-site disposal of groundwater. Only de-watered groundwater that has met relevant acceptance criteria and has been pre-approved (i.e., accepted or permitted) by a responsible discharger would be transported off site to that discharger. • A chemical profile will be completed before reuse or off-site disposal of soil. If applicable, open-air drying will follow provisions set forth in BAAQMD Regulation 8, Rule 40 (Aeration of Contaminated Soil). • Trucks transporting excess soil would be tarped and tire treads cleaned to avoid trackout on public ways. 	Before and during Construction Phase	CCWD			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science. This measure replaces and updates MM HYD-2.

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
HM-3	The contractor will be required to work subject to conditions of a contract and construction documents that acknowledge the nearby presence of underground natural gas and crude oil pipelines. Conditions of work at crossings of underground pipes, which are located in the southern part of the western (Site 4) and eastern (Site 5) staging areas, will preclude damage to the pipes. The contractor will be required to be familiar with the boundaries and acknowledge the presence of the nearby waste consolidation area and WMUs. Inadvertent work damaging to the integrity of the caps, slurry walls, or other subsurface features integral to their waste containment function will be avoided.	Before and during Construction Phase	CCWD			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.
HM-4	The contractor will be required to maintain fuel load on the project site near the existing load through vegetation management during construction. Cranes and other non-road equipment will operate only in suitably maintained work areas to minimize risk of grassfire.	Before and during Construction Phase	Contractor			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.
WQ-1	Any standing water pumped for discharge would first be pumped into Baker tanks for interim storage and settling, to ensure that sediment is minimized. Interim storage also will allow time for sampling and analytical testing by a laboratory before discharge or land application. Baker tanks would be staged near the entry and exit pits at a safe distance from the pipeline.	Before and during Construction Phase	Contractor			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science. This measure in updates 2011 MM HYD-2.

**Table 1
Mitigation Monitoring and Reporting Plan for the
Shortcut Pipeline Improvement Phase 3 Project**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
WQ-2	Unpermitted discharges of extracted groundwater to land or surface water will be prohibited. The Contractor will be required to install groundwater de-watering system(s) for the anticipated subsurface conditions. Groundwater pumped from dewatering system(s) will be stored, tested, and treated if required. Groundwater will be discharged into treatment systems on the Marathon property and/or CCCSD's WWTP with prior permission or permitting, in accordance with the waste discharge requirements of the dischargers.	Before and during Construction Phase	Contractor			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.
WQ-3	A SWPPP will be prepared for the proposed project to address sedimentation and maintenance of overland flow. The SWPPP will include performance criteria for site restoration and other mitigation measures listed below. <ul style="list-style-type: none"> • Equipment pads consisting of coarse rock on a suitable geotextile fabric would minimize a compaction of underlying soil. • Under temporary soil stockpiles, a suitable base consists of a double ply of plastic liner with geotextile fabric. Geotextile fabric will serve as a delineator, marking the bottom of materials placed during construction and identify the original native soil. • After removal of equipment and placed materials, to address potential erosion and sedimentation, site restoration will return surface soil infiltration and vegetative cover to pre-construction conditions. 	Before Construction Phase	Contractor			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.

Table 1 Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Phase 3 Project						
Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation & Verification		Compared to 2011 MMRP
				Action	Date Completed	
WQ-4	A Spill Prevention and Contingency Plan will be included as an element of in the Soil & Groundwater Management Plan. Equipment and sorbent materials will be maintained on site to respond to an inadvertent spill of fuel, oil, hydraulic oil, or grease.	Before Construction Phase	Contractor			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.
WQ-5	The Contractor will be required to install drilling mud relief wells along the alignment with the highest risk of inadvertent return on Site 4 near the exit boring pit. The relief wells will provide a preferential pathway for drilling mud surfacing. Drilling mud exiting the ground surface will be contained, removed, and properly managed to minimize any potential for uncontrolled release. The Contractor will include procedures for preventing and responding to inadvertent returns in an Inadvertent Returns Contingency Plan and will maintain on-site equipment and materials for containment and cleanup response.	Before Construction Phase	Contractor			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.
WQ-6	A SWPPP for the construction would be designed and implemented to control erosion during the construction. The SWPPP will include provisions for straw wattle to capture sediment, and provisions for restoration of ground cover as soon as possible after ground disturbing activity. The SWPPP will include provisions for the interim soil stockpiles to maintain distributed overland flow and avoid concentration of runoff and increased sedimentation of Walnut Creek and wetlands adjacent to the project construction Site 5.	Before Construction Phase	Contractor			New Measure based on current conditions at SCPL Sites 4 and 5 and best available science.

Table 2

**December 2011 Mitigation, Monitoring and Reporting Plan (MMRP) for the
CCWD Shortcut Pipeline Project Phase 2**

Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

Mitigation Number	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Implementation & Verification	
				Action	Date Completed
Air Quality					
AIR-1	<p><i>AIR QUALITY-1</i></p> <p><i>The District will implement the following BAAQMD mitigation measures to achieve emission reductions through the use of improved equipment, operational measures and the best available technology:</i></p> <ul style="list-style-type: none"> <i>• Minimize the idling time of diesel powered construction equipment to 2 minutes.</i> <i>• Develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.</i> <i>• Require that all construction equipment, diesel</i> 	During Construction	CCWD, Contractor		

Summary Table					
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project					
	<p><i>trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.</i></p> <ul style="list-style-type: none"> <i>Require all contractors use equipment that meets California ARB's most recent certification standard for off-road heavy duty diesel engines.</i> 				
Biological Resources					
BIO-1	<p>BIOLOGICAL RESOURCES- 1</p> <p><i>Burrowing Owl: Pre-construction surveys will be conducted within 14 days prior to ground-disturbing and vegetation removal activities. Due to the potential for burrowing owls utilizing nests outside the breeding season (February 1 through August 31), surveys will be conducted at all times of the year when required. To the extent possible, road construction will be scheduled to avoid the breeding season altogether. Once eggs have been laid, a buffer of at least 100 feet, or other CDFG approved buffer, must be established around the nest site and the site protected until August 31 or until the young have fledged.</i></p>	Prior to construction	Contractor, Biologist		
BIO-2	<p>BIOLOGICAL RESOURCES- 2</p> <p><i>Hoary Bat: Pre-construction bat surveys would be conducted by a qualified biologist at Sites 3 and 10 no more than seven days prior to vegetation removal that will occur between February 1 and October 31.</i></p>	Prior to Construction	Contractor, Biologist		

Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

BIO-3	<p>BIOLOGICAL RESOURCES- 3</p> <p><i>Oak and Riparian Trees: The District will comply with all provisions of the County's Tree Protection Ordinance and the Conservation Element of the Contra Costa County General Plan.</i></p>	<p>During Construction</p>	<p>CCWD, Contractor</p>		
BIO-4	<p>BIOLOGICAL RESOURCES- 4</p> <p><i>Other Protected Birds: Pre-construction breeding bird surveys will be conducted at Sites 3, 7, or 10 within 14 days prior to ground disturbance or impacts to on-site shrubs, trees, and wetland and marsh vegetation during the breeding season (February 1 through August 31). The surveys will encompass suitable nesting habitat on and within 200 feet of the work site(s). To the extent possible, road construction will be scheduled to avoid the breeding season altogether. Once eggs have been laid, a buffer of at least 100 feet, or other CDFG approved buffer, must be established around the nest site and the site protected until August 31 or until the young have fledged.</i></p>	<p>Prior to Construction</p>	<p>Contractor, Biologist</p>		

Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

BIO-5	BIOLOGICAL RESOURCES- 5	Prior to Construction	Contractor, Biologist		
<p><i>Raptors: Pre-construction breeding bird surveys will be conducted within 14 days prior to ground disturbance and vegetation removal activities at Sites 3, 7, or 10. Due to the potential for ground nesting raptors utilizing nests outside the breeding season (February 1 through August 31), surveys will be conducted at all times of the year when required. Surveys will encompass nesting habitat on and within 200 feet of the work site(s). To the extent possible, road construction will be scheduled to avoid the breeding season altogether. Once eggs have been laid, a buffer of at least 100 feet, or other CDFG approved buffer, must be established around the nest site and the site protected until August 31 or until the young have fledged.</i></p>					
BIO-6	BIOLOGICAL RESOURCES- 6	Prior to Construction	Contractor, Biologist		
<p><i>Salt Marsh Harvest Mouse: Prior to initiation of construction at Sites 2, 3, 4, 5, 7, 9 and 10, the project sponsor shall install a black silt fence barrier around pickleweed habitat for the salt-marsh harvest mouse (SMHM) to prevent the possible intrusion of this species into the work area during construction activities. The silt fence shall be installed six inches deep into the ground, so as to have no openings at the bottom of the fence, and shall stand 30 to 36 inches in height. In addition, all of the additional SMHM protection measures listed in Appendix D shall be implemented.</i></p>					

Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

<p>BIO-7</p>	<p>BIOLOGICAL RESOURCES- 7</p> <p><i>Special-Status Plant Species: Prior to initiation of construction, a qualified plant biologist shall conduct focused plant surveys at Site 10 for Congdon's tarplant (blooms June through November) and at all sites for soft bird's-beak (blooms April to July), Delta tule pea (blooms May to September), Mason's lilaeopsis (blooms April to December), and Suisun marsh aster (blooms May to November). Focused surveys for each of these plants shall be conducted during their respective blooming seasons to determine presence or absence on each site. Any special-status plants identified within any site will be protected during construction by construction barrier fencing around the special-status plant populations, and appropriate avoidance and mitigation measures would be developed and implemented in consultation with CDFG and/or USFWS.</i></p>	<p>Prior to & During Construction</p>	<p>Contractor, Biologist</p>		
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Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

BIO-8	<p>BIOLOGICAL RESOURCES- 8</p> <p><i>Western Pond Turtle: Pre-construction surveys at Sites 3, 4, 5, and 7 will be performed to identify any turtles encountered within sites, and installation of silt fencing surrounding upland pond turtle nesting areas to act as a barrier during the breeding season (March 1 – April 30), would avoid impacts to this species. Impacts at the other sites are not anticipated, and pre-construction surveys are not warranted. At Site 2, the proposed work would occur outside a seasonally inundated drainage (and when the drainage would be dry) and well separated from a permanent pond located more than 180 feet to the northeast. There are no drainage channels or pond habitat in the work areas at Sites 9 and 10, so the potential for impacts to pond turtles is very remote at these work sites.</i></p>	Prior to Construction	Contractor, Biologist		
BIO-9	<p>BIOLOGICAL RESOURCES- 9</p> <p><i>Wetlands and Waters of U.S. and State: To the extent feasible, all planned activities will be designed to avoid and minimize disturbances to wetlands as verified by the USACE. Prior to the placement of fill into wetlands or any alteration or modification of an existing creek, wetland, drainage or other jurisdictional feature, the project sponsor shall obtain permits under Sections 401 and 404 of the Clean Water Act. These permits, administered by the San Francisco Bay Regional Water Quality Control Board (RWQCB) and the U.S. Army Corps of Engineers (USACE), respectively, will identify specific mitigation measures that would be imposed on</i></p>	Prior to & During Construction	Contractor, Biologist		

<p align="center">Summary Table</p> <p align="center">Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project</p>					
BIO-10	<p><i>the project as permit conditions. Additionally, a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG) may be required. The District will comply with all permit conditions of the regulatory agencies; including the implementation of an appropriate compensatory mitigation plan for unavoidable impacts to wetlands.</i></p> <p>BIOLOGICAL RESOURCES- 10</p> <p><i>Wetlands and Waters of U.S. and State: Road construction work in wetlands and waters of the U.S. shall only occur between April 15 and October 15 to minimize the potential for erosion and sedimentation in downstream waters. Prior to road construction at Sites 3, 4, 5, 7, 9 and 10, the District will erect exclusion fencing around all wetlands to protect adjacent wetlands from incursion by equipment and vehicles.</i></p>	Prior to & During Construction	CCWD, Contractor,		
Cultural Resources					
CR-1	<p>CULTURAL RESOURCES- 1</p> <p><i>If any cultural artifacts are encountered during site grading or other construction activities, all ground disturbance in the vicinity shall be halted until a qualified archaeologist can identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s).</i></p>	During construction	Contractor, Archeologist		

Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

<p>CR-2</p>	<p>CULTURAL RESOURCES- 2</p> <p><i>In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Contra Costa County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the project sponsor, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts.</i></p>	<p>During construction</p>	<p>Contractor, Archeologist</p>		
<p>CR-3</p>	<p>CULTURAL RESOURCES- 3</p> <p><i>If any paleontological resources are encountered during site grading or other construction activities, all ground disturbance shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s).</i></p>	<p>During construction</p>	<p>Contractor, Paleontologist</p>		

<p align="center">Summary Table Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project</p>					
Geology & Soils					
GEO-1	<i>GEOLOGY & SOILS- 1</i> <i>The summer construction season is April 15 through October 15. Access road grading activities should be conducted during extended dry periods to provide better support for construction equipment. All site preparation activities shall conform to the recommendations of the project Geotechnical Engineer</i>	During Construction	CCWD, Contractor		
GEO-2	<i>.GEOLOGY & SOILS- 2</i> <i>To the extent practicable, existing topsoil in areas to be graded shall be stockpiled and re-used in the project areas for backfill, erosion control, or other purposes.</i>	During Construction	CCWD, Contractor		
Greenhouse Gas Emissions					
GGE-1	<i>GREENHOUSE GAS EMISSIONS- 1</i> <i>Minimize the idling time of diesel powered construction equipment to 2 minutes</i>	During Construction	CCWD, Contractor		
GGE-2	<i>.GREENHOUSE GAS EMISSIONS- 2</i> <i>Require all contractors use equipment that meets California ARB's most recent certification standard for off-road heavy duty diesel engines.</i>	Prior to Construction	CCWD, Contractor		

Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

Hazards & Hazardous Materials

HAZ-1	<p><i>HAZARDOUS MATERIALS- 1</i></p> <p><i>Prior to construction the District shall follow the procedures for handling of hazardous waste described at the end of Section 3.9 Hazards and Hazardous Materials (see Procedures to Follow in Handling of Hazardous Waste).</i></p>	Prior to Construction	CCWD		
HAZ-2	<p><i>HAZARDOUS MATERIALS- 2</i></p> <p><i>Prior to construction, the District shall perform a review of each site and excavation area to evaluate the potential for encountering hazardous materials during work activities. Where applicable, the District will prepare site-specific Worker Safety & Hygiene Plans known generally as Initial Site Assessment or Phase I Environmental Site Assessment. Additional special provisions for soil reuse/disposal management and construction dewatering shall be developed for sites where pollutants are present in soils and/or groundwater in accordance with "Procedures to Follow in Handling of Hazardous Waste."</i></p>	Prior to Construction	CCWD		

Summary Table
Mitigation Monitoring and Reporting Plan for the Shortcut Pipeline Improvement Project

Hydrology & Water Quality

<p>HYD-1</p>	<p><i>HYDROLOGY & WATER QUALITY – 1</i></p> <p><i>The District will follow all RWQCB requirements as appropriate to the extent that ground water disposal is required during construction.</i></p>	<p>During Construction</p>	<p>CCWD</p>		
<p>HYD-2</p>	<p><i>HYDROLOGY & WATER QUALITY – 2</i></p> <p><i>The District shall complete a hydrology analysis that determines the effect of the project on drainage and on the floodplain. All access roadways and roadway drainage facilities/culverts shall be designed to pass water without substantially altering the existing drainage pattern of the SCPL alignment, without contributing to flooding, and without affecting the currently mapped limits of the 100 year flood zone. All drainage design calculations and drawings shall be stamped and signed by a California-licensed Civil Engineer.</i></p>	<p>Prior to Construction</p>	<p>CCWD</p>		

