FORM APPROVED COUNTY COUNSEL
BY: ANITA C. WILLIS DATE 6-9-16

Departmental Concurrence

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

959

FROM: Department of Waste Resources

SUBMITTAL DATE:
June 7, 2016

SUBJECT: Resolution No. 2016-147 for the Adoption of a Mitigated Negative Declaration and Approval of the Corona Landfill Southeast Drainage Channel Improvement Project, District 1 [$0-Department of Waste Resources Enterprise Funds]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Adopt Resolution No. 2016-147, approving the Corona Landfill Southeast Drainage Channel Improvement Project (Project) and adopting the Mitigated Negative Declaration (MND) and Mitigation Monitoring Program (MMP) for the Project, based on the findings incorporated in Environmental Assessment (EA) Corona No. 2015-02, concluding that with mitigation, the Project does not cause significant environmental impacts.

BACKGROUND:
Summary
(continued)

Hans Kernkamp
General Manager-Chief Engineer

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	$ N/A	$ N/A	$ N/A	$ N/A	Consent ☐ Policy ☐
NET COUNTY COST	$ N/A	$ N/A	$ N/A	$ N/A	

SOURCE OF FUNDS: N/A

Budget Adjustment: No

For Fiscal Year: 16/17

C.E.O. RECOMMENDATION: APPROVE

BY: Steven C. Horn

County Executive Office Signature

MINUTES OF THE BOARD OF SUPERVISORS

☐ Positions Added ☐ Change Order
☐ A-30 ☐ 4/5 Vote

COUNTY

Prev. Agn. Ref.: | **District: 1** | **Agenda Number:**

12-2

(Summary)
Since the final closure of the Corona landfill in 1988, the Riverside County Department of Waste Resources (Department) has conducted post-closure maintenance activities, including maintenance of the landfill slopes adjacent to the South East Drainage Channel (SE Channel), a drainage channel running along the southern banks of the landfill's disposal footprint. Each year the Corona Landfill suffers damage due to erosion and flooding as a result of the constant and increasing urban run-off and high velocity storm water coursing through the SE Channel. High velocity flows have caused failure of the riprap protecting the landfill slope, causing the rip rap to separate and slide down to the slope's channel several inches. Site inspections and historical records revealed that the channel is under capacity near the inlet, and that the grouted riprap protecting the landfill slopes sustains repeated damage every winter.

The Project analyzed in EA No. Corona 2015-02 proposes to increase the capacity of the channel to significantly reduce flooding events at the landfill and install a revetment system to protect the landfill slopes (either a concrete channel or articulated concrete blocks).

California Environmental Quality Act (CEQA) Findings
EA No. Corona 2015-02 (attached) was prepared by the Department to evaluate the potential environmental impacts from the proposed Project and to identify appropriate mitigation measures to reduce or eliminate these impacts. The EA was prepared in conformance with the California Environmental Quality Act (CEQA), California Code of Regulations (CCR) Section 15000 et. seq. While the EA identified that the proposed Project has the potential to impact environmental resources, each of the potential impacts can be fully mitigated to below a level of significance with implementation of the mitigation measures identified in the EA. A MMP for the Project has been prepared incorporating these mitigation measures (attached). As a result, the Department has prepared a MND and MMP for adoption by the Board of Supervisors (Board), pursuant to sections 15063 and 15097 of the State CEQA Guidelines.

In accordance with the State CEQA Guidelines, the Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) and EA were posted with the State Clearinghouse and the Riverside County Clerk. The EA/MND was transmitted to responsible and trustee agencies, interested parties, and neighboring properties, for a 30-day comment period that began on April 9, 2016 and ended on May 11, 2016. Public notice, advertising the comment period for the NOI and EA/MND, was published in the Press Enterprise. Copies of the EA were made available to the public at the Department Headquarters, the Riverside County Clerk, the Corona Public Library, Riverside County Library and the El Cerrito Public Library, as well as made available on the Department's website at http://www.rcwaste.org.

During the public comment period, comment letters were received from the Riverside County Flood Control and Water Conservation District (District) and the United States Fish and Wildlife Service (USFWS). No new significant environmental impacts were identified as a result of the comment letters; however, in response, the Department made insignificant modifications within the text of the EA for clarity. In addition, mitigation measures BIO-2 and BIO-3 were updated with minor technical revisions, providing equal or more effective measures, as permitted under State CEQA Guidelines section 15074.1. Furthermore, as no new significant effects were raised, the minor technical changes prepared by the Department would not trigger the need for recirculation of the EA/MND, as stated under State CEQA Guidelines section 15073.5. Additions within the EA/MND are shown in underline while deletions are shown in ~~strikethrough~~. The comment letters along with Department responses are attached.

Impact on Citizens and Businesses
Completion of the Project will improve drainage along the SE Channel, protecting the landfill and surrounding residents from flooding events and continued erosion.

SUPPLEMENTAL:

Additional Fiscal Information

The Engineer's estimate for this project is $900,000. The Project is designated for funding under the District's Five Year Capital Improvement Plan for Zone 2. Upon obtaining the necessary regulatory permits, the Department will, at a later date, seek authorization from the Board for bidding the Project and approving contract documents, under separate Board actions.

Attachments:
1. Resolution 2016-147
2. NOI & EA Corona No. 2015-02
3. MMP for EA Corona No. 2015-02
4. Comment Letters with Department Responses

Resolution 2016-147

RESOLUTION NO. 2016-147

ADOPTING A MITIGATED NEGATIVE DECLARATION AND APPROVING THE CORONA LANDFILL SOUTHEAST DRAINAGE CHANNEL IMPROVEMENT PROJECT

WHEREAS, the Corona Landfill site, located south of Magnolia Avenue, immediately adjacent to Interstate 15 within the City of Corona, was opened in 1951 and operated by the City of Corona (hereinafter referred to as the "City") as a trash burning facility; and

WHEREAS, in 1958, the Riverside County Road Department, on behalf of the County of Riverside (hereinafter referred to as the "County"), took over site operations from the City and started operating the site as a solid waste disposal facility in 1958; and

WHEREAS, the Riverside County Department of Waste Resources (formerly part of the County Road Department and hereinafter referred to as the "Department") assumed responsibilities for landfill operation and subsequently closed the landfill in 1988; and

WHEREAS, the Department continues to provide post-closure maintenance and environmental monitoring at the closed Corona Landfill in accordance with an approved post-closure maintenance plan; and

WHEREAS, annually with each rainy season, the Corona Landfill is subject to significant erosion and flooding as a result of the constant and increasing urban run-off and high velocity storm water coursing through the southeast drainage channel, resulting in damage to the landfill and its ancillary water/gas monitoring systems; and

WHEREAS, the Department proposes the Corona Landfill Southeast Drainage Channel Improvement Project (hereinafter referred to as the "Project") involving erosion control improvements at the inactive Corona Landfill. The Project will repair and improve landfill slope armoring and increase the capacity of the existing drainage channel; and

WHEREAS, all requirements of the California Environmental Quality Act have been met and the Department's General Manager-Chief Engineer has found that with mitigation, the

Project will not have a significant adverse effect upon the environment and has completed a Mitigated Negative Declaration; and

WHEREAS, the Environmental Assessment/Mitigated Negative Declaration thoroughly addresses the environmental effects of implementing the Project, including the construction and maintenance of the various improvements identified therein.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the Board of Supervisors of the County of Riverside, in regular session assembled on June 21, 2016 that:

A. Review Period: The County has provided the public review period for the Environmental Assessment/Mitigated Negative Declaration for the duration required under State CEQA Guidelines sections 15073 and 15105.

B. Compliance with Law: The Environmental Assessment/Mitigated Negative Declaration and Mitigation Monitoring Program were prepared, processed, and noticed in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.).

C. Independent Judgement: The Environmental Assessment/Mitigated Negative Declaration reflects the independent judgement and analysis of the County.

D. Mitigation Monitoring Program: The Mitigation Monitoring Program is designed to ensure compliance during project implementation in that changes to the Project and/or mitigation measures have been incorporated into the Project and are fully enforceable through permit conditions, agreements or other measures as required by Public Resources Code Section 21081.6

E. No Significant Effect: That the adopted mitigation measures avoid or mitigate any potential significant effects on the environment identified in the Environmental Assessment/Mitigated Negative Declaration to a point below the threshold of significance. Furthermore, after taking into consideration the adopted mitigation measures, Board of Supervisors of the County of Riverside finds that there is no

substantial evidence, in light of the whole record, from which it could be fairly argued that the Project may have a significant effect on the environment. Therefore, the Riverside County Board of Supervisors concludes that the Project will not have a significant effect on the environment.

BE IT FURTHER RESOLVED by the Board of Supervisors that it **APPROVES** the Project and **ADOPTS** the Mitigated Negative Declaration and Mitigation Monitoring Program for the Project, based on the findings incorporated in EA No. Corona 2015-02, concluding that with mitigation, the Project does not cause significant environmental impacts.

BE IT FURTHER RESOLVED by the Board of Supervisors that the custodians of the documents upon which this decision is based are the Clerk of the Board of Supervisors and the Department and that such documents are located at 14310 Frederick Street, Moreno Valley, California.

NOI & EA Corona No. 2015-02

RIVERSIDE COUNTY
DEPARTMENT OF
WASTE RESOURCES

Hans W. Kernkamp, General Manager-Chief Engineer

Notice of Intent to Adopt a Mitigated Negative Declaration For
Corona Landfill Southeast Drainage Channel Improvement Project
Environmental Assessment No. Corona 2015-02

DATE: April 11, 2016
TO: Agencies and All Interested Persons
PROJECT NAME: Corona Landfill Southeast Drainage Channel Improvement Project (Project)
REVIEW PERIOD: **April 11, 2016 to May 11, 2016**
PROJECT LOCATION: The Project is located within the southern portion of the closed Corona landfill, south of the Magnolia Avenue and Compton Avenue junction, immediately adjacent to Interstate 15, within the City of Corona.

The Riverside County Department of Waste Resources (RCDWR), on behalf of Riverside County as Lead Agency, has determined that the proposed Project will not have a significant effect on the environment with the implementation of proposed mitigation measures and recommends the adoption of a Mitigated Negative Declaration (MND) for Environmental Assessment (EA) No. Corona 2015-02.

The proposed project involves erosion control improvements to the existing Southeast Drainage Channel (SE Channel) at the inactive Corona Landfill. The project will repair and improve landfill slope armoring and increase the capacity of the existing drainage channel. In order to improve protection for the landfill slopes, the majority of the existing rip-rap protective cover will be removed and replaced with a revetment system consisting of Articulated Concrete Blocks. The total Project Area encompasses approximately 8.7 acres, 2.5 acres of which fall within the drainage area of the SE Channel, leaving the remaining 6.2 acres as a staging area for equipment, material storage, and other project related activities.

MND/EA No. Corona 2015-02 is available at the following locations: RCDWR website www.rcwaste.org or at 14310 Frederick Street in Moreno Valley and Riverside County Clerk at 2724 Gateway Drive in Riverside from 7:30 AM to 4:30 PM, Monday through Friday. The documents have also been sent to the following libraries: Corona Public Library, 650 S. Main St. Corona, CA (951) 736-2381; Riverside County Library, 3785 S. Neece St. Corona, CA (951) 279-2148; and El Cerrito Public Library, 7581 Rudell Road Corona, CA (951) 270-5012.

Any comments on the proposed project, the determination to adopt a MND, or requests for more information should be directed to: Riverside County Department of Waste Resources, Attention: Jose Merlan, Urban/Regional Planner II, 14310 Frederick Street, Moreno Valley, CA 92553. Telephone (951) 486-3200/Fax (951) 486-3250

Written comments must be received at the above address by 5:00 p.m. on May 11, 2016. Any written comments received will be forwarded to the Riverside County Board of Supervisors and will be considered, along with the EA and any oral testimony, before any action is taken on the project. The Board of Supervisors may consider this project on or after June 21, 2016. Any decision made by this body will be mailed to anyone requesting such notification.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
Hans Kernkamp, General Manager – Chief Engineer

Jose Merlan

Jose Merlan, Urban/Regional Planner II

FILED / POSTED
County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder
E-201600408
04/11/2016 08:38 AM Fee: $ 0.00
Page 1 of 1
MAY 2 5 2016
Removed: By: Deputy

Environmental Assessment No. Corona 2015-02

For

Corona Landfill Southeast Drainage Channel Improvement Project

April 2016

Riverside County Department of Waste Resources

14310 Frederick Street

Moreno Valley, CA 92553

Table of Contents

List of Appendices

List of Figures

Acronyms and Abbreviations

ALT	Alternative
ACB	Articulated Concrete Block
BRA	Biological Resources Assessment
BMP	Best Management Practices
CH_4	Methane
CO	Carbon Oxide
CO_2	Carbon Dioxide
CAA	Clean Air Act
CCR	California Code of Regulations
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CalRecycle	California Department of Resources Recycling and Recovery
CIWMP	California Integrated Waste Management Plan
County	County of Riverside
DBESP	Determination of Biologically Equivalent or Superior Preservation
DPM	Diesel Particulate Matter
DTSC	California Department of Toxic Substances Control
EAP	Emergency Action Plan
EPD	Environmental Programs Division
EPA	U.S. Environmental Protection Agency
FE	Federal endangered (species)
GHG	Greenhouse gas
HAZWOPER	Hazardous Waste Operations and Emergency Response
HHW	Household hazardous waste
HHWSCP	Household Hazardous Waste Spill Contingency Plan
IS	Initial Study
JD	Jurisdictional Determination
LBV	Least Bell's Vireo
LEA	Local Enforcement Agency
LFG	Landfill gas
LOS	Level of service
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
MSHCP	Multiple Species Habitat Conservation Plan (Western Riverside County)
ND	Negative Declaration
NO_X	Nitrogen oxides
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
PM-2.5	Fine particulate matter

PM-10	Respirable particulate matter
PLA	Permitted landfill area
PTS	Perris Transfer Station
PHHWF	Permanent household hazardous waste facility
RCA	Regional Conservation Authority
RACT	Reclaimable Anaerobic Composting Technology
RCDWR	Riverside County Department of Waste Resources
ROG	Reactive Organic Gases
SAA	Streambed Alteration Agreement
SCAG	Southern California Association of Governments
SR	State Route
ST	State threatened (species)
SOI	Sphere of Influence
SO_X	Sulfur Oxide
SSC	Species of Special Concern
STW	San Timoteo Watershed
SCAB	South Coast Air Basin
SJRW	San Jacinto River Watershed
SMARA	Surface Mining and Reclamation Act
SWFP	Solid Waste Facility Permit
SWPPP	Storm Water Pollution Prevention Plan
SCAQMD	South Coast Air Quality Management District
SARWQCB	Santa Ana Regional Water Quality Control Board
TAC	Toxic Air Contaminants
TIA	Traffic Impact Analysis
tpd	Tons per day
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
VOC	Volatile Organic Compounds
WDR	Waste Discharge Requirements
WWTP	Waste Water Treatment Plant

Chapter 1

Introduction

Purpose and Use

The purpose of the Environmental Assessment (EA) "Corona 2015-02" is to describe the proposed project, its potential environmental impacts, and feasible mitigation measures to reduce potential adverse environmental effects caused by the proposed project to below a level of significance. This EA addresses an erosion control improvement project to the existing Southeast Drainage Channel (SE Channel) at the inactive Corona Landfill. Specifically, it will replace the existing damaged grouted riprap on the Channel's side slopes with an appropriate erosion protective surface that is designed to handle the storm water flow from a 100-year, 24-hour storm event.

The County of Riverside, as Lead Agency, and other responsible and regulatory agencies with approval authority over the project, will use EA "Corona 2015-02" to make informed decisions concerning the project's intended use and operation.

Compliance with CEQA

EA "Corona 2015-02" has been prepared in accordance with the California Environmental Quality Act ("CEQA") Public Resources Code Section 21000 et seq. and the implementing Guidelines (Section 15000 *et seq.*) and will be used to satisfy the requirements of the State CEQA Guidelines Section 15063, "Initial Study."

Based on the information contained within EA "Corona 2015-02," the Riverside County Department of Waste Resources (RCDWR) on behalf of the County of Riverside, as Lead Agency, has determined that, with implementation of the mitigation measures described herein, the project will not have a significant effect on the environment and recommends that a Mitigated Negative Declaration (MND) be adopted.

EA "Corona 2015-02" is subject to a 30-day public review period by responsible and trustee agencies and interested public. All responses and comments received during this time period will be presented to the County of Riverside Board of Supervisors at the time this body considers the project.

Scope of Initial Study

This EA evaluates the following potential environmental topics:

☒ Aesthetics	☒ Greenhouse Gas	☒ Population/Housing
☒ Agriculture and Forestry Resources	☒ Hazards and Hazardous Materials	☒ Public Services
☒ Air Quality	☒ Hydrology/Water Quality	☒ Recreation
☒ Biological Resources	☒ Land Use/Planning	☒ Transportation/Traffic
☒ Cultural /Paleontological Resources	☒ Mineral Resources	☒ Utilities/Service Systems
☒ Geology/Soils	☒ Noise	☒ Mandatory Findings of Significance

Impact Terminology

The following terminology is used in the EA to describe the levels of significance of impacts that could result from the proposed Corona SE Channel Improvement Project:

- The project is considered to have ***no impact*** if the analysis concludes that the project would not affect a particular resource topic.
- An impact is considered ***less than significant*** if the analysis concludes that either the project would cause no substantial adverse change to the environment or that impacts would not require mitigation measures.
- An impact is considered ***less than significant after mitigation*** if the analysis concludes that the proposed project would cause substantial adverse change to the environment that would require the inclusion of appropriate and feasible mitigation measures to reduce the impact to a less-than-significant level.
- If the application of mitigation measures does not reduce a significant impact to a less-than-significant level, the impact would be considered ***potentially unavoidable significant*** under CEQA.

Organization of Initial Study

The content and format of this document, as described below, is designed to meet the requirements of CEQA.

- Chapter 1—**Introduction:** identifies the purpose, scope, and terminology of the document.
- Chapter 2—**Project Description:** identifies the location, background, and planning objectives of the project; describes the project in detail; and identifies the permits and approvals required for the project.

- Chapter 3—**Environmental Issues Assessment:** presents the checklist responses for each resource. This section includes a brief setting description for each resource and identifies the project's impacts on those resources and any mitigation measures deemed necessary to reduce the impact to less than significant.

Chapter 2

Project Description

Project Location

The Corona Landfill is located south of the junction of Magnolia Avenue and Sherborn Street, immediately adjacent to I-15, and within the jurisdictional boundary of the City of Corona (City) (refer to **Figure 1, Project Vicinity Map**).

The landfill site is accessed from I-15, eastbound via Magnolia Avenue at the intersection of Magnolia Avenue and Downs Way where the landfill entrance gate is located (refer to **Figure 2, Project Area Map**).

The landfill property encompasses approximately 77 acres over seven parcels, three of which are owned by the City of Corona (approximately 58 acres) while the remaining four are County owned (approximately 19 acres). It is located in a portion of Section 32 of Township 3 South, Range 6 West of the San Bernardino Base and Meridian and can also be described as Riverside County Assessor's Parcel Numbers (APN's) 107-080-040, 107-080-010, 107-080-034, 107-080-005, 107-080-042, 107-080-006, and 107-080-041.

The project site is located within the four County-owned parcels (APNs: 107-080-010, 107-080-034, 107-080-005, and 107-080-006), which altogether form the southeastern portion of the landfill property. The project area encompasses approximately 8.7-acres, of which, 2.5 acres are within the drainage area of the SE Channel. The remaining 6.2-acres are to accommodate temporary construction activities on both sides of the SE Channel, including portions of three County-owned vacant parcels located south of the SE Channel and landfill property line, adjacent to I-15. These parcels can be described as APN's 107-201-008, 107-201-009, and 107-201-010.

Zoning and Land Use

According to the City of Corona's Zoning Map Book, dated June 12, 2009, the majority of the landfill property and project site is zoned M1 (Light Manufacturing), with the exception of APN 107-080-006, which is zoned M4 (Industrial Park). The zoning for the three County-owned vacant parcels is R1-20 (Single Family Residential, 20,000 sf. lot min). According to the City's current General Plan Map Book, dated January 25, 2012, the land use designation for the landfill property is MU2 (Mixed Use- Industrial/Commercial).

The Corona Landfill property is surrounded by various land uses, ranging from a City of Corona animal shelter at the northwestern end of the landfill property, I-15 and Light Industrial uses to the west, General Industrial uses to the northeast, and Low Density Residential homes to the south.

Project Background/Characteristics

The Corona Landfill site was initially operated by the City of Corona as a trash burning facility in 1951. The County's Road Department started operating the site as a solid waste disposal facility in 1958. Upon formation in 1986, the RCDWR assumed responsibilities for landfill operation and subsequent final closure construction. The landfill accepted non-hazardous dry municipal and industrial waste until August 1986 when it was closed to the public. It is estimated that approximately 6,400,000 cubic yards of refuse were landfilled at the site.

The City was previously responsible for the operation and maintenance of the landfill gas (LFG) collection system and flare station until June 2010, when a mutual agreement (Agreement) was reached between the County and the City that established: (1) County's full responsibility to carry out post-closure maintenance, including the LFG system and flare station, to 2028; (2) City's shared financial responsibility for operation and maintenance of the LFG system and flare station; (3) equal financial responsibility for additional costs or savings associated with operation and maintenance of the LFG system and flare station caused by uncontrollable circumstance(s); and (4) full cooperation and mutual responsibility to perform any future environmental remediation efforts required by any local, state, and federal regulators during term of the Agreement.

The final closure of the Corona Landfill was carried out by the RCDWR starting in 1988, when a prescriptive final cover was constructed over the entire landfill mass for long-term protection of both the landfill and the environment. Since final closure of the landfill, the RCDWR has conducted post-closure maintenance activities, including maintenance of the landfill slopes adjacent to the SE Channel, a drainage channel running along the southern banks of the landfill's disposal footprint.

Each year the Corona Landfill suffers damage due to erosion and flooding as a result of the constant and increasing urban run-off and high velocity storm water coursing through the SE Channel. High velocity flows have caused failure of the riprap protecting the landfill slope, causing the rip rap to separate and slide down to the slope's channel several inches. Additionally, sections of the channel are undersized for a 100-year storm, as was evident from an approximate 2-year storm event in 2010, which caused flooding at the inlet resulting in damage to the landfill and its ancillary facilities/appurtenances. Subsequent site inspections and historical records revealed that the channel is under capacity near the inlet, and that the grouted riprap protecting the landfill slopes sustains repeated damage every winter.

Although no longer in active service of providing waste disposal capacity to the County and city residents and businesses, the Corona Landfill still has an impact on the system's long-term viability, environmental liability, maintenance obligations, and post-closure financial assurance for landfills under the requirements of Title 27, California Code of Regulations (CCR).

Proposed Project

The RCDWR proposes to increase the capacity of the channel to significantly reduce flooding events at the landfill and install a revetment system to protect the landfill slopes (either a concrete channel or articulated concrete blocks). As indicated in **Figure 2, Project Area**, the total Project Area/activity limit encompasses approximately 8.7 acres, 2.5 acres of which fall within the drainage area of the SE Channel, leaving the remaining 6.2 acres as staging areas for equipment parking and operation, material storage, and other project related activities. Construction of the project is targeted for summer 2016, at the earliest. Proposed project design alternatives are described below:

Channel Improvement Design Alternative 1

Alternative 1 consists of two distinct functional aspects. The first aspect involves constructing two small flood plains (approx. 0.72 acre in total) at the southwestern end of the drainage channel (encompassing portions of APNs 107-201-008, 107-201-009, 107-080-005, 107-080-006, and 107-080-034). In essence, this portion of the channel will be widened by pulling back the northern and southern banks, thus increasing the capacity of the channel to contain a 100-year, 24 hour rainstorm, preventing water from overflowing onto the adjacent landfill unit. No encroachment into the streambed will occur, nor will removal of existing vegetation within the channel be necessary during construction of the flood plains. Refer to **Figure 3, Site Plan** for location of proposed flood plains.

The second aspect consists of erosion control protection for the landfill slopes and flood plains. Erosion control will be achieved by lining the flood plains and replacing the entire existing grouted riprap along the southern slope of the landfill/channel's northern bank, with Articulated Concrete Block (ACB)- see **Figure 4, Grouted Riprap and ACB Design Cross-Sections.**

Portions of the southern channel bank are currently lined with a grouted riprap and portions consist of erosion-resistant sandstone bedrock. This project design scenario will not involve ACB installation on the southern channel bank. Instead, the existing grouted riprap on the southern channel bank will be repaired during project construction at locations where structural damage is evident. As a result, removal of existing vegetation within the channel will be necessary at those locations where ACB installation or repair to existing grouted riprap take place.

Conceptual Construction Work Plan

Construction of Alternative 1 consists of the following:

Work Item 1: Drainage Diversion Setup (on-going throughout the project)

The year-round urban runoff flow through the Project Area must be controlled as nuisance water and diverted from the working areas throughout project construction. This Work Item will be ongoing throughout the duration of the project. Work that occurs in the initial 600ft of the channel will not require water diversion since the area where the water flows, is the vegetated area to be preserved, which will not be affected by the project construction. Water will be allowed to flow freely within the initial 600 ft. of the channel. Downstream of the initial 600 ft., the water will be diverted away from the work areas, thus avoiding construction activities, by either directing the water into a pipe and running the pipe around the immediate work areas, or creating a levee around the work area to protect it from the stream.

Work Item 2: Floodplains Construction (est. 2-3 days to complete)

Two small floodplains (approximately 0.72 acre in total) will be constructed to create additional channel capacity. The floodplains will match the channel's grade and will be constructed on both sides of the channel from the inlet to approximately 600 feet downstream from the inlet. A total of approximately 2,100 cy of soil will be excavated. Since the soil within the proposed floodplain area contains a large amount of sand, gravel, and inert concrete debris, it is unknown as to how much soil may be reused for this project. For a conservative estimate, it is assumed that none of the excavated material can be used on the project and that the excavated material will be stockpiled on the landfill site. Refer to **Figure 3, Site Plan**, for the locations of all material storage areas, temporary and permanent, on-site. The soil stockpiles may be screened for suitable soil components for future drainage erosion control and/or landfill final cover maintenance works. The permanent soil stockpiles will be compacted and graded to blend into the surrounding landscape to minimize erosion and unsightliness. In addition to excavation, dirt berms from two to four feet high will be constructed in some sections of the perimeter of the floodplain on the north bank and berms from four to six feet high on the perimeter of the floodplain on the south bank to add capacity without expanding the floodplain footprints. It is estimated that approximately 1,356 cy of soil will be required to construct the berms. If the excavated material cannot be used, then this amount of material will need to be hauled to the site (in approximately 136 loads). It is assumed that the total 1,356 cy of berm construction soil, in combination with an additional 2,300 cy of clean dirt for ACB subgrade, will be imported to the site during floodplain construction and continuing through Work Item 3.

It is likely that the floodplains will be constructed one at a time, so as to avoid streambed crossing by equipment and thus impact to streambed habitat. To protect the streambed vegetation, equipment will have to be transported via surface roads and Bel Air Street to the vacant parcels to construct the southern floodplain.

Work Item 3: Vegetation Removal, Grouted Riprap Demolition, and Borrow Materials (est. 6 days to complete)

This work item consists of concurrent operations, including the removal of streambed vegetation downstream of the floodplains, except in conserved areas as denoted on **Figure 3 Site Plan** (showing the streambed preservation boundary); demolition of existing grouted riprap on the northern bank of the channel and some portions of the southern bank disposal of vegetation and transport of some riprap debris to the Badlands Sanitary Landfill, and importation of clean dirt from a borrow area nearby (< 20 miles roundtrip). Vegetation waste will be removed and transported to the nearby El Sobrante Landfill, where the vegetation may be disposed of and/or recycled. It is anticipated that all of the rocks from the grouted riprap demolition will be reused on-site or transported to other County landfills. Concurrently, clean dirt import for construction of the floodplain berms and ACB liner's subgrade from Work Item 2 will continue until completion during this Work Item. The imported dirt will be stockpiled within a designated staging area (see **Figure 3**, showing staging areas). Minimum equipment staging on the County-owned vacant parcels may be necessary during the dirt haul. Nuisance water diversion is assumed to continue during the active working hours throughout Work Item 3.

Work Item 4: ACB Revetment Subgrade Preparation (est. 5 days to complete)

This work item consists of grading the channel slopes, cut and fill, as necessary, to form an adequate subgrade for installation of the ACB revetment system. Current design does not require grading on the northern channel bank to exceed the depth of the landfill final cover, thus minimizing the possibility and amount of waste exposure. However, in order to increase stormwater flow capacity and slope stability, it is possible that grading along the northern bank may cut through the final cover. In this scenario, waste exposure and/or excavation may occur. If waste is exposed, it will be covered by the end of the day with a minimum of six inches (6") of dirt or an approved alternate daily cover, and a monolithic final cover repair, acceptable to all regulatory agencies, will be constructed over the exposed waste, forming the subgrade of the ACB revetment. If waste is encountered during excavation, proper waste excavation procedures and monitoring shall be performed, as required by a South Coast Air Quality Management District (SCAQMD) Rule 1150 Permit, to be obtained prior to construction. Waste shall be either reburied on site with an approved final cover constructed over the waste or hauled to a landfill.

The following activities are expected to be performed concurrent with construction of the ACB revetment subgrade:

- The existing grouted riprap apron at the channel's inlet will be modified to fit the inlet with the floodplains.
- Repair of the damaged portions of the grouted riprap on the southern bank will be carried out.
- Delivery and then installation of ACB revetment would begin as soon as a workable portion of the subgrade is completed.

Work Item 5: ACB Revetment Installation (est. 15 days to complete)

This work item primarily includes installation of the ACB revetment system on the prepared subgrade in the floodplains, along the entire length of the northern bank from the northern floodplain limit to the outlet by the railroad truss bridge and along some portions of the south slope. ACB materials may be stored in the staging areas prior to installation. ACB installation in the southern flood plain may require equipment staging on the adjacent County-owned vacant parcels. Energy dissipaters (such as grouted riprap aprons) may be constructed at the end of steep sections of the channel to slow down the velocity of water. Once complete, the urban drainage flow through the channel will be resumed by discontinuing water diversion.

Channel Improvement Design Alternative 2

An alternative project design scenario (Alternative 2) consists of only one aspect, where the entire channel, bed and banks, natural and created, will be lined with a concrete surface. This alternative will result in the removal of all existing vegetation and habitat within the drainage area, thus representing the environmental "worst-case" scenario of the project.

Conceptual Construction Work Plan

Construction of Alternative 2 consists of the following:

Work Item 1: Drainage Diversion Setup (occurring throughout the project)

The water diversion described in Alternative 1 would also be used with Alternative 2.

Work Item 2: Vegetation Removal, Grouted Riprap Demolition, and Borrow Materials (est. 12 days to complete)

This work item consists of concurrent operations, including the removal of all streambed vegetation, demolition of existing grouted riprap banks of the channel, disposal of vegetation, optional transport of riprap debris to Badlands, and importation of clean dirt from a borrow area nearby (< 20 miles). Vegetation waste will be transported to the nearby El Sobrante Landfill, where the vegetation may be disposed of and/or recycled. It is anticipated that all of the rocks from the grouted riprap demolition on both banks will be salvaged, either reused on-site or stockpiled for future transport to other County landfills whenever beneficial uses of these inert materials are needed after the completion of the project. Another option would be transporting all the riprap debris to the Badlands Sanitary Landfill during project construction. Clean dirt import for construction of the concrete channel's subgrade would begin during this work item. The imported dirt would be stockpiled within the designated staging areas on the north bank of the channel until used for subgrade preparation in the next work item (see Figure 3 Site Plan showing approximate staging area). Compared to the similar ACB Work Item 3, the Concrete Channel scenario has no restriction of equipment crossing of the streambed to the southern bank area, thus requiring no equipment transport to the southern bank area via haul trucks using residential streets.

Work Item 3: Concrete Channel Subgrade Preparation (est. 20 days to complete)

This work item would consist of preparing the subgrade of the channel for concrete placement, including grading the channel slopes and streambed and preparing the sandstone and limestone areas of the channel for concrete lining. Constructing an adequate subgrade in the areas containing sandstone will most likely consist of constructing an engineered fill (to achieve compaction) against the sandstone, while benching into it, and then trimming the slope back to create the final channel side slope. The limestone subgrade will most likely have to be constructed out of a concrete mix, since limestone cannot be benched into.

Work Item 4: Concrete Channel Construction (est. 15 days to complete)

This work item would consist of constructing the sub-drains and weep holes and placing concrete. Concrete will be placed throughout entire channel surface, bed and banks, from the inlet to the outlet by the railroad truss bridge. Energy dissipaters (such as grouted riprap aprons) may be constructed at the end of steep sections of the channel to slow down the velocity of water. Sub-drains and weep holes will be constructed before concrete placement.

Work Item 5: Drainage (est. 2 days to complete)

After the completion of the concrete channel, the urban drainage flow through the channel will be resumed by discontinuing the upstream diversion mechanism.

Permits and Approvals

The proposed project may be required to obtain/and or update the following permits and/or approvals from the responsible and/or trustee agencies identified.

- Mitigated Negative Declaration (MND) for EA "Corona 2015-02" *(County of Riverside)*
- Authorization to Bid Plans and Specifications *(County of Riverside)*
- Approval of Construction Contract *(County of Riverside)*
- Waste Discharge Requirements update *(Santa Ana Regional Water Quality Control Board)*
- National Pollutant Discharge Elimination System Permit (*State Water Resources Control Board*)
- Rule 403 Notification (*South Coast Air Quality Management District*)
- Rule 1150 Landfill Excavation Permit (*South Coast Air Quality Management District)*
- Permit to Construct and Operate (*South Coast Air Quality Management District),* if applicable
- ~~Encroachment Permit~~ Approvals (*Riverside County Flood Control and Water Conservation District*)
- Encroachment Permit/Easement (*Surrounding Property Owner(s)*), if applicable
- Right of Way Encroachment Permit (*California Department of Transportation)*
- Miscellaneous Permits/Approvals (*City of Corona*), if applicable.
- 404 Clean Water Act Permit (U.S. *Army Corps of Engineers*)
- 401 Water Quality Certification (*Santa Ana Regional Water Quality Control Board*)
- 1602 Streambed Alteration Permit (*California Department of Fish and Wildlife*)

Chapter 3

Environmental Checklist

1	**Project Title:**	**Corona Landfill Southeast Drainage Channel Improvement Project**
2	**Lead Agency Name:**	**County of Riverside**
3	**Contact Person and Phone Number:**	**Jose Merlan, Urban/Regional Planner II** **(951) 486-3200**
4	**Project Location:**	**Closed Corona Landfill, Corona, CA**
5	**Project Sponsor's Name and Address:**	**Riverside County Department of Waste Resources** **14310 Frederick Street** **Moreno Valley, CA 92553**
6	**General Plan Designation:**	**Mixed Use- Industrial/Commercial (MU2)**
7	**Zoning:**	**M1 (Light Manufacturing), M4 (Industrial Park), R1-20 (Single Family Residential)**

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Significant Unavoidable Impact"), as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural/Paleontological Resources	☐ Geology/Soil
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project MAY have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1)has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be address.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to the earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Jose Merlan

Signature

4/8/16

Date

Jose Merlan, Project Planner
Riverside County Department of Waste Resources

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration, pursuant to State CEQA Guidelines section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist, references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   (a) The significance criteria or threshold, if any, used to evaluate each question; and
   (b) The mitigation measure identified, if any, to reduce the impact to less than significance.

1. Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

1a. Have a substantial adverse effect on a scenic vista?

The project site currently consists of 2.5 acres that are within the drainage area of the SE Channel, and 6.2 acres that will be utilized to accommodate temporary construction. It is surrounded by the closed Corona Landfill to the north, residential housing to the south, a Robertson's Ready Mix plant to the southeast, and the 1-15 to the west of the proposed project site.

The Corona General Plan lists mountains, open space and agricultural areas, city views and scenic highways as important visual resources. Particularly, it cites the Cleveland National Forest as a major scenic resource as well as open space and agricultural areas, as they are said to "provide visual relief from urbanized areas." Several major arterials contain visual elements that provide unique vistas that characterize individual neighborhoods, such as Prado Basin, the view south to the Santa Ana Mountains from the 1-15/SR 91 (Riverside) Freeway interchange, Ontario Avenue, which encompasses panoramic views to the north and the San Gabriel Mountains, and Grand Boulevard, which provides panoramic views and visibility to the circle of palm trees from various locations.

The Project consists of two alternatives, Alternative 1, which would replace damaged riprap with ACB and construct two small flood plains (approx. 0.72 acre in total) at the southwestern end of the drainage channel; and Alternative 2, which would line the entire channel with a concrete surface. Neither project alternative during construction or operation would interfere with views from any direction, due to the low profile of the construction project.

The Corona Landfill is not considered a scenic site by the Corona General Plan nor will it impede a scenic vista. Therefore, the project would not have an adverse effect on an existing scenic vista.

FINDING: ***Less Than Significant Impact***

1b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is not located on or near a state-designated scenic highway. While Interstate 15 (I-15) is adjacent to the project site, according to the California Department of Transportation Scenic Highway Program and Mapping System, I-15 is identified as an eligible State Scenic Highway, but not officially designated. There are no rock outcroppings, large native trees, or historic buildings on the project site that would constitute a scenic resource. Furthermore, the landfill and drainage facility are not natural features or landforms, and as such, are not considered a scenic resources. Thus since scenic resources are not present, impacts to such resources will not occur.

FINDING: ***No Impact Is Identified***

1c. Substantially degrade the existing visual character or quality of the site and its surroundings?

The existing character of the project site is mostly urbanized with light industrial land uses along Sherborn St. to the southeast portion of the project, single family residential to the southwest, vacant parcels to the southeast, and the I-15 to the west. Moreover, native and non-native vegetation can be seen along the SE Channel, palm trees, tall, herbaceous riparian shrub is also present along the channel. Northerly, immediately adjacent to the SE Channel, is the closed Corona Landfill. There are no unique or scenic visual resources on the project site or in the vicinity. Furthermore, as previously stated, the landfill and drainage facility are not natural features or landforms, and thus the Corona Landfill, including the

drainage facility, are not considered scenic visual resources.

As discussed in the analysis above, question (a), the proposed improvements would not change the visual character or quality of the site and its surroundings. Further, the proposed project would not obstruct views of the surrounding areas.

FINDING: ***Less Than Significant Impact***

1d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No new light features would be introduced nor would reflective mirrors or glass be part of the construction design. Work will be conducted typically between the hours of 7:00AM and 5:00PM, thus no nighttime lighting would be needed for construction activities or during operation. No new source of substantial light or glare would be created that would adversely affect day or nighttime views in the area.

FINDING: ***No Impact Is Identified***

2. Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code (PRC) §12220(g)), timberland (as defined by PRC §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	☐	☐	☐	☒

d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

2a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project site is a closed landfill and not farmland of any kind - unique or of statewide importance. The California Department of Conservation, Farmland Mapping and Monitoring Program has designated the project site as "Urban and Built-Up Land." The project site is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance and thus no farmland will be converted to non-agricultural uses as a result of the project.

FINDING: No Impact Is Identified

2b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project site is surrounded by single family residential to the south, light manufacturing and light industrial to the northwest and west side of the project, respectively. It is zoned M1 (Light Manufacturing), M4 (Industrial Park) and SFR (Single Family Residential) and thus, because the proposed project is not in an area zoned for agriculture, the proposed project would not conflict with any agricultural zone. The proposed project site is not subject to a Williamson Act contract according to the California Department of Conservation, Riverside County Williamson Act Map. Therefore, no impacts to Williamson Act contracts or conflicts with agricultural zoning would occur as a result of the proposed project.

FINDING: No Impact Is Identified

2c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code (PRC) §12220(g)), timberland (as defined by PRC §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?

As mentioned in question (2b), the project area is zoned M1, M4 and SFR. Those zones propose light manufacturing, industrial and single family residential development and is therefore not in conflict with forest or timberland zoning. Neither the project site nor the project vicinity is zoned for harvesting timber, publicly or privately, as referenced in Government Code section 51104(e)(f)(g). Therefore, the project will not conflict with any timberland zoning or cause the rezoning of forest land.

FINDING: ***No Impact Is Identified***

2d. Result in the loss of forest land or conversion or conversion of forest land to non-forest use?

The Corona Landfill is surrounded by various land uses, ranging from a City Yard at the northwestern end of the landfill property, I-15 and Light Industrial uses to the west, General Industrial uses to the northeast, and Single Family Residential homes to the south. Forest land does not exist in or around the project site. The project will not result in the loss or conversion of forest land.

FINDING: ***No Impact Is Identified***

2e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The project site is not located in close proximity to farmland as shown in preceding sections. The project site's Land Use designation is MU2 (Mixed Use-Industrial/Commercial) under the City of Corona General Plan. The proposed project consists of erosion control improvements to the SE channel of the closed Corona landfill, approximately 1,500 linear feet in length. Thus, the proposed project would not involve changes in the existing environment as to, by location or by nature, convert Farmland to non-agricultural use. Additionally, the proposed project would not interfere with ongoing uses of the site, or surrounding land uses.

FINDING: ***No Impact Is Identified***

3. Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c. Result in a cumulative considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air	☐	☐	☒	☐

quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

An Air Quality Analysis and Global Climate Change Impact Analysis was prepared by Kunzman Associates Inc., in August 2015. The air quality report analyzed construction related criteria pollutants, and other pollutants of concern, such as toxic air contaminants (TACs), including asbestos and diesel particulate matter (DPM) for both the Alternative 1 (ACB) and Alternative 2 (concrete) design alternatives[1]. The air quality analysis prepared by Kunzman Associates, Inc. was used, in large part, to answer questions 3a through 3f of this section. The air quality analysis can be found under Appendix A, Air Quality Analysis and Global Climate Change Impact Analysis.

The project will result in a net increase in short-term criteria air emissions typical of a small construction project; however, impacts resulting from the modest increase are less than significant, as analyzed and assessed under 3a-3f. The following South Coast Air Quality Management District (SCAQMD) criteria emissions thresholds (in lbs/day) are used to evaluate the significance of the Project's short-term regional air quality impacts:

Carbon Monoxide (CO)	550 lbs/day
Reactive Organic Gases (ROG)	75 lbs/day
Nitrogen Oxides (NOx)	100 lbs/day
Sulfur Oxides (SOx)	150 lbs/day
Fine Particulate Matter (PM-10)	150 lbs/day
Fine Particulate Matter (PM-2.5)	55 lbs/day

3a. Conflict with or obstruct implementation of the applicable air quality plan?

The proposed project is located in the South Coast Air Basin (Basin), and is therefore subject to the SCAQMD which requires that all projects be consistent with the current 2012 Air Quality Management Plan (AQMP). Generally, the purpose of the AQMP is to provide policies and control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines. Specifically, the purpose of the 2012 AQMP (most currently adopted version) is to set forth a comprehensive and integrated program that will lead the Basin into attainment with the federal 24-hour particulate matter, less than 2.5 microns (PM-2.5) standard, and to provide an update to the Basin's commitments toward meeting the federal 8-hour ozone standards.

[1] The numbering of Project activities/phases discussed in this section does not correspond to the listing of Work Items described in the conceptual work plan shown in Chapter 2, Project Description. The activities/phases assessed represents an itemized accounting of all Project activities. A list of the assessed activities/phases is located in Appendix A, Air Quality Analysis and Global Climate Change Impact Analysis.

There are two distinct criteria used in determining consistency with the AQMP:

The first criteria requires an evaluation of whether project-related emissions would increase the frequency or severity of violations of existing air quality standards, or contribute to new violations, or otherwise delay the timely attainment of the air quality standards or the interim emissions reductions specified in the AQMP.

The second criterion requires an evaluation as to whether a project is consistent with the approved AQMP. The proposed project would be consistent with the 2012 AQMP if it does not exceed the growth assumptions in the 2012 AQMP. The growth assumptions in the 2012 AQMP are based on regional growth projections, state housing needs allocations, and vehicle miles traveled data from Southern California Association of Governments (SCAG), which in turn, is informed by County and City General Plan growth assumptions.

As discussed in subsequent sections, Air Quality 3 (b and c) the project is not expected to contribute to violations of any criteria pollutant thresholds, or to result in fugitive dust impacts. Moreover, compliance with Fugitive Dust Rule 403 as required by SCAQMD, will further reduce any potential construction air quality impacts to less than significant.

In considering consistency with SCAG Conformity Review Procedures for growth management, the first question is whether the proposed project is growth inducing. Second, if a project is growth inducing, it will typically trigger development of the kind that would serve the needs of population growth, e.g., housing, transportation, public facilities etc. Because emissions sources (mobile and stationary) can increase in proportion to population, it can offset the potential air pollution reduction gains made in the past decades. Projects that *are* considered growth inducing and that exceed the baseline growth for the region as projected in the 2012 AQMP would not be consistent with the AQMP.

Because the proposed project is *not* a growth-inducing project, it will not generate growth that will exceed the baseline growth for the region. Second, as discussed in subsequent sections, Air Quality 3 (b and c) the project is not expected to contribute to violations of any criteria pollutant thresholds, or to result in fugitive dust impacts. The project would be consistent with the growth assumptions of the 2012 AQMP, would comply with all applicable rules and regulations, and would not conflict or obstruct implementation of the AQMP.

FINDING: ***No Impact is identified***

3b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

A project would be in violation of an air quality standard if the air pollution emissions generated by the proposed project exceed either the Federal and/or the State Ambient Air Quality Standards, or the standards established, in this particular case, by the SCAQMD. The analysis that follows evaluates short term construction related emissions from mobile sources both on-road and off-road for both Alternative 1 (ACB) and Alternative 2 (concrete). There are no long term ongoing/operational emissions associated with the project. Short-term emissions consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles (water trucks, dump

trucks etc.). This analysis evaluates the regional air quality impacts from 1) short-term construction emissions for criteria pollutants; carbon monoxide (CO), volatile organic compounds (VOC), (reactive organic gases (ROG) are used interchangeably for VOC in this analysis), oxides of nitrogen (NOx) and sulfur oxide (SO_x); and 2) construction generated fugitive dust, particulate matter, less than 2.5 microns ($PM_{2.5}$) and particulate matter, less than 10 microns (PM_{10}).

Regional Air Quality Impact Analysis:

1. Construction Emissions (Short Term)

Construction emissions for the project were calculated according to the construction activities (phases) of the project, Activities 1-9 for Alternative 1 and Activities 1-6 for Alternative 2. Kunzman Associates Inc., analyzed all the activities of the project to determine the most intense activity which would represent the worst case scenario for analysis under the Air Quality Analysis report. The report concluded that Activity 4 would be the most intense for both Alternative 1 and 2, due to the quantity of equipment used and the overlapping of phases between Activities 2, 3, and 4. Since the analysis is designed to capture the worst case scenario in terms of air quality impacts, it is assumed that all other phases would have fewer emissions associated with them. The construction activities for the worst case scenarios (Alternative 1 and 2) are described below.

Alternative 1: ACB Scenario

It will take approximately 54 days to complete the construction of Alternative 1, over the course of 9 phases or activities, with construction activities occurring six days per week (M-S) between the hours of 7:30 AM and 4:30 PM. The following is a description of the activities (Activity 2-4, worst case scenario) for Alternative 1:

Worst case scenario (Activity 2 – 4)

These activities, which could occur simultaneously, include initial clearance of access roads, and setting up a hydrant for water access under Activity 2; vegetation and riprap removal and import of borrow material for Activity 3; and excavation and fill for Activity 4. Equipment planned for use for these activities would include off-road vehicles (Medium Excavator, Backhoe, Motor Grader, Medium Dozer, Wood Chipper, Water Truck, and Roller Compactor) and on-road vehicles (Superten trucks).

Alternative 2: Concrete Scenario

It will take approximately 57 days to complete the construction of Alternative 1, over the course of 6 phases or activities, with construction activities occurring six days per week (M-S) between the hours of 7:30 AM and 4:30 PM. The following is a description of the activities (Activities 2-4, worst case scenario) for Alternative 2:

Worst case scenario (Activity 2 – 4)

These activities, which could occur simultaneously, include initial clearance of

access roads, setting up a hydrant for water access under Activity 2; removal of vegetation and riprap and import of borrow material for Activity 3; and subgrade preparation, constructing the subdrains and weepholes and pouring concrete throughout the entire channel surface, bed and banks for Activity 4. Equipment planned for use for these activities includes off-road vehicles (Medium Excavator, Backhoe, Motor Grader, Medium Dozer, and a Water Truck,) and on-road vehicles (Superten Dump trucks).

Peak daily criteria air emissions under Alternative 1 design are expected to occur during implementation of Activity 4 (floodplain construction - vegetation removal, grouted riprap demolition, and dirt import). Likewise, peak daily criteria air emissions under Alternative 2 are expected to occur during implementation of Activity 4 (concrete channel subgrade preparation). This is due, in part, because Activity 4 for Alternative 1 overlaps with Activity 2 and Activity 3. Similarly, Activity 4, also the most intense activity for Alternative 2, overlaps with Activity 2 and Activity 3 as shown in Table A-1 and Table A-2 respectively.

a. Alternative 1 (ACB) Activity #4

Table A-1
Alternative 1 (ACB) Activity #4

Alternative 1, Activity 4	ROG	NOx	CO	SOx	PM10	PM2.5
On-Site[2]	2.63	28.82	20.2	0.02	4.18	2.69
Off-Site[3]	0.16	1.39	1.92	0.01	0.48	0.16
Total	2.8	30.21	22.12	0.03	4.66	2.85
Overlapping Total with Activities 2, 3 and 4	**6.84**	**69.31**	**47.47**	**0.07**	**9.98**	**6.44**
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Air Quality and Global Climate Change Analysis Report, Kunzman Associates Inc.

As indicated in the Table A-1, the emissions of criteria pollutants during project operation for both on-site and off-site under the ACB design scenario will not exceed any of the SCAQMD thresholds. Therefore, no significant air quality impacts from mobile sources will occur during project construction. It should be noted that if the riprap debris is stockpiled on-site instead of being exported to Badlands Landfill during project implementation, the mobile emissions associated with debris hauling will not occur thus reducing the total NOx emission to a level further below the threshold. See Appendix A, Air Quality and Greenhouse Gas Focused Analysis, for CalEEMod Model Daily Emissions Printouts.

b. Alternative 2 (Concrete Channel) Activity #4

The total project equipment and on-road emissions are estimated based on the same emission factors and methodologies used in the ACB emission analysis, as the equipment and vehicle types for both scenarios are similar. Table A-2 shows the project's maximum

[2] On-Site emission from equipment/vehicles operated on-site
[3] Off-Site emissions from equipment/vehicles operated on public roads.

daily mobile source emissions. Refer to Appendix A, Air Quality and Greenhouse Gas Focused Analysis for CalEEMod Model Daily Emissions Printouts.

Table A-2
Alternative 2 (Concrete) Activity #4

Alternative 2, Activity #4	ROG	NOx	CO	SOx	PM10	PM2.5
On-Site[4]	1.39	15.06	10.09	0.01	0.91	0.79
Off-Site[5]	0.12	0.54	1.55	0	0.34	0.1
Overlapping Total with Activities 2, 3 and 4	**5.47**	**56.66**	**38.31**	**0.06**	**6.66**	**4.47**
SQAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Air Quality and Global Climate Change Analysis Report, Kunzman Associates Inc.

As indicated in the Table A-2, which represents the worst case and most intense work activity under Alternative 2, the emissions of criteria pollutants will not exceed any of the SCAQMD thresholds. Therefore, no significant air quality impacts from mobile sources will occur during project construction. It should be noted that if the riprap debris is stockpiled on-site instead of being exported to Badlands Landfill during project implementation, the mobile emissions associated with debris hauling will not occur thus reducing the total NO_X emission to a level further below the threshold.

2. Fugitive Dust – PM-10 & PM-2.5

Daily generation of fugitive dust will be greater under the Alternative 1 (ACB) scenario than Alternative 2 (Concrete Channel) scenario, because the ACB design will result in more earth-moving activities during floodplain construction. Daily fugitive dust generation from the other activities is comparable between the two design scenarios, due to similarity of daily activities and intensity of the activities. Therefore, the Alternative 1 (ACB) scenario represents the "worst-case" in terms of daily fugitive dust generation. Under the Alternative 1 (ACB) scenario, daily peak fugitive dust generation will occur during floodplain construction (Activity 4) where earth excavation and stockpiling (2,100 cy overall), and borrow material import (1,356 cy overall) for berms construction are occurring simultaneously.

With respect to fugitive dust impact analysis for the project, fugitive dust generation sources consist of: i) earth excavation and stockpiling with a scraper; ii) grading of the floodplain surfaces with a motor grader; iii) truck unloading of import earth berm material; and iv) truck travel on an existing aggregate road on the project site.

[4] On-Site emissions from equipment/vehicles operated on-site.
[5] Off-Site emissions from equipment/vehicles operated on public roads.

Table A-3
Alternative 1 (ACB)
Total Daily Maximum On-Site Fugitive Dust Emissions

Fugitive Dust Source	PM-10	PM-2.5
Total Emissions:	9.98	6.44
SCAQMD Thresholds:	150	55
Exceed Thresholds	**No**	**No**

Source: Air Quality and Global Climate Change Analysis Report, Kunzman Associates Inc.

Table A-4
Alternative 2 (Concrete)
Total Daily Maximum On-Site Fugitive Dust Emissions

Fugitive Dust Source	PM-10	PM-2.5
Total Emissions:	6.66	4.47
SCAQMD Thresholds:	150	55
Exceed Thresholds	**No**	**No**

Source: Air Quality and Global Climate Change Analysis Report, Kunzman Associates Inc.

As shown in Tables A-3 and A-4, the project's maximum daily fugitive dust emissions were evaluated for both alternatives. As shown, both project alternatives would not exceed the regional thresholds established by the SCAQMD. No significant regional impact will result. Notwithstanding the determination of no regional impact, the project will be subject to SCAQMD Rule 403 and required to implement the applicable dust control measures mandated by the rule for all dust-generating activities during project construction.

FINDING: Less Than Significant Impact

3c. Result in a cumulative considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

The proposed project is located within the jurisdiction of the SCAQMD. The project region (Los Angeles-Riverside Area Air Basin) is nonattainment for Ozone, PM-10 and PM-2.5. A nonattainment designation refers to an area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for that pollutant.

The SCAQMD does not list any criteria thresholds for Ozone, which is formed by a photochemical reaction in the atmosphere of Ozone precursors, Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NO_x), which, in the presence of sunlight, react in the atmosphere to form Ozone. However, it does list criteria thresholds for VOC and NOx which were analyzed for the proposed project.

It is important to note, by definition, a VOC is an organic compound that can evaporate into an organic gas and can be reactive or non-reactive. Reactive VOCs are those that undergo a photochemical reaction in certain conditions, resulting in ozone. Non-reactive or negligible reactivity VOCs do not react in the atmosphere to create ozone and are exempt to the

definition of VOCs used by EPA in its regulation. ROG is an organic gas, generated from the exhaust of mobile sources that also undergoes a photochemical reaction resulting in ozone, in certain conditions. SCAQMD, per EPA regulations, regulates organic gases, primarily for their "reactive" potential in the atmosphere and to prevent the formation of ozone. Because the principle concern related to ozone is organic compounds in outdoor air, only "reactive," that is, ROGs are analyzed in this report. For the purposes of comparing the ROG value to a VOC significance threshold, the terms are used interchangeably.

This analysis evaluated design Alternative 1 (ACB) and Alternative 2 (concrete) for total mobile emissions, on-site heavy equipment and on-road trips. Total mobile source emissions including on-site heavy construction equipment and on-road trips (worker vehicles to and from work, import and export of material etc.) are below SQAQMD thresholds, as shown on Table A-5.

Table A-5
Nonattainment Criteria Pollutants SCAQMD Pounds/Day (lbs/d)

	Ozone (lbs/d)		PM-2.5 (lbs/d)	PM-10 (lbs/d)
	VOC	NO_x		
Alternative 1				
Total Mobile Emissions	6.84	69.31	6.44	9.98
SCAQMD Thresholds	**75**	**100**	**55**	**150**
Alternative 2				
Total Mobile Emissions	5.47	56.66	4.47	6.66
SCAQMD Thresholds	**75**	**100**	**55**	**150**

Source: Air Quality and Global Climate Change Analysis Report, Kunzman Associates Inc.

Since the project's emissions do not exceed the SCAQMD's regional thresholds for NOx, VOC, particulate matter (PM-2.5), and particulate matter (PM-10), the project's total mobile emissions do not contribute to the cumulative exceedance of a pollutant for which the Air Basin is in nonattainment.

FINDING: ***Less Than Significant Impact***

3d. Expose sensitive receptors to substantial pollutant concentrations?

This discussion addresses whether the project would expose sensitive receptors to construction-generated Diesel Particulate Matter (DPM), construction-generated fugitive dust (PM 10 and PM 2.5), operational related toxic air contaminants (TACs), or operational CO hotspots.

The construction equipment would emit DPM, which is a carcinogen. However, the DPM emissions are short-term in nature. Determination of risk from DPM is considered over a 70-year exposure period because carcinogenic risk is directly related to sustained exposure. In contrast, construction activities for the project are only expected to last approximately

two months. Thus, the duration of construction activities would represent only a small fraction of the 70-year exposure period used as the basis for assessing the significance of the carcinogen risk exposure and, therefore, would not represent a source of sustained DPM emissions. Therefore, considering the short time frame, exposure to DMP is anticipated to be less than significant. The project does not have operational emissions. Sensitive receptors would not be exposed to toxic sources of air pollution.

Localized Air Quality Impact Analysis:

Air pollutant concentrations at a receptor in the vicinity of a source of air pollution could cause a local air quality impact, dependent on many factors including the location of the receptor relative to the source, prevailing wind patterns, the rate at which pollutants are emitted, and the size of the area over which the pollutants are emitted. Emitted pollutants are carried by the wind and the further they travel from the source the more dispersed they become resulting in lower concentrations as the distance from the emission source increases. Pollutants emitted over a small area result in higher pollutant concentrations compared to a source that emits the same amount of pollutants over a wide area.

The nearest receptors (three residences) are located adjacent to the SE Drainage project site at an average distance of 150 feet (50 meters), with the closest residence located approximately 60 feet (18 meters) south of the project site. Notwithstanding the small size and temporary nature of the project, at this close distance air pollutants emitted during project construction could reach concentration levels that might constitute a health concern to these sensitive receptors. In order to determine the level of significance of pollutant (PM 2.5, PM 10, DPM, and TACs) concentrations near sensitive receptors, Kunzman Associates Inc., analyzed the construction activities closest to the nearest sensitive receptor, more specifically, the residence located approximately 60 feet from the proposed activity.

In 2006, the SCAQMD adopted Localized Significance Threshold (LST) methodology and mass rate look-up tables by Source Receptor Area (SRA) that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The LST's were developed based on the ambient concentrations of the pollutants for each SRA and represent the maximum emissions of NO_X, CO, respirable particulate matter (PM-10) and fine particulate matter (PM-2.5) from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards. The maximum project size and receptor distance applicable to the LST methodology are 5 acres and 500 meters, respectively, and the modeled LTS's assume a single 8-hour work shift during the daytime. Although the entire project construction area will encompass approximately 2.5 acres, the actual acreage of the site under construction will be less than 2 acres as construction is categorized and carried out according to the Activity schedule.

As a reference to this analysis, Table A-6 shows the LST's specific for the project's construction emissions at the closest modeled receptor distance of 25 meters, based on the 2006-2008 mass rate look-up tables. While activities 2, 3 and 4 (overlapping activities during Activity 4) represent the worst case in terms of emissions, as was discussed in the preceding section (3b), Activity 6, for Alternative 1, and Activity 3, for Alternative 2 represent the worst case in terms of the potential to have the greatest concentration of equipment operating in close proximity to sensitive receptors. As shown in the Table A-6, the estimated project emissions for CO, NO_X, PM10 and PM 2.5 would not exceed their corresponding LST's.

Table A-6
Local Construction Emissions at Nearest Receptor for Alternative 1 and 2

	On-Site Pollutant Emissions (pounds/day)			
Phase	**NOx**	**CO**	**PM10**	**PM2.5**
Alternative 1-Activity 6	34.99	24.53	4.53	3.13
SCAQMD Threshold for 25 meters (82 feet) or less	170	1,007	6	5
Exceeds Threshold?	No	No	No	No
	On-Site Pollutant Emissions (pounds/day)			
Phase	**NOx**	**CO**	**PM10**	**PM2.5**
Alternative 2-Activity 3	30.23	18.2	4.13	2.86
SCAQMD Threshold for 25 meters (82 feet) or less	170	1,007	6	5
Exceeds Threshold?	No	No	No	No

Source: Air Quality and Global Climate Change Analysis Report, Kunzman Associates Inc.

Air Quality Impacts, as shown in Table A-6, during the worst case scenario would not exceed thresholds of significance for NOx, CO, PM 2.5 or PM 10. Impacts would be less than significant.

CO Hotspots and Toxic Air Contaminants:

"CO hotspots" and toxic air contaminants (TACs) are two other pollutants that could cause localized air quality impacts on sensitive receptors in the vicinity of the project emission sources.

"CO hotspots" are typically associated with project traffic causing an unacceptable level of service (LOS) at public road intersections. In this case, the project traffic will primarily consist of material hauling trips on Sherborn Street, Downs Way, Magnolia Avenue, and I-15, all of which are paved urban roadways (Secondary, Major, and freeway) with traffic light control at the used intersections (i.e., Magnolia Avenue/Downs Way; Magnolia Avenue/Sherborn Street; and Magnolia/I-15). As analyzed in Section 16 (Transportation and Traffic) of this EA, the project will not cause an unacceptable LOS at any of these intersections. Lastly, the material hauling truck traffic of the project will occur in an industrial/commercial region of the City of Corona with no sensitive receptors in the vicinity of the used intersections. Therefore, the project will not cause a significant air quality impact from "CO hotspots."

According to the California Air Resource Board, (CARB), sources of TACs include, "industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust." Given that the project is a small and temporary drainage improvement construction operation, it will not generate TAC or cause an increase in generation of TAC from an existing source to a level that can cause a significant public health or environmental impact. The current LFG flare station at the closed Corona Landfill is fully permitted and complies with SCAQMD Rule 1150.1. There are no issues or concerns regarding TAC emissions from either the landfill or the proposed project. Therefore, no air quality impacts associated with TAC will result from the project.

FINDING: ***Less Than Significant Impact***

3e. Create objectionable odors affecting a substantial number of people?

The SCAQMD CEQA Handbook states that an odor impact would occur if the proposed project creates an odor nuisance pursuant to SCAQMD Rule 402, which states: "A person shall not discharge from any source whatsoever such quantities or air contaminants or other material which may cause injury, detriment, nuisance, or annoyance to any considerable number of persons to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which causes, or have a natural tendency to cause, injury or damage to business or property." If the proposed project results in a violation of Rule 402 with regards to odor impacts, the proposed project would create a significant odor impact.

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement and diesel exhaust emissions. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed project. Furthermore, in the event that landfill excavation is necessary during subgrade preparation, objectionable odors are not expected to be significant due to the age of the landfill and limited extent of excavation and exposure.

FINDING: **Less Than Significant Impact**

4. Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. 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 Game or U.S. Fish and Wildlife Services?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Services?	☐	☒	☐	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

A Jurisdictional Delineation (JD) and Biological Resources Assessment (BRA) were completed by Gonzales Environmental Consulting, LLC (GEC), final reports dated April 24, 2014. Breeding season focused surveys for the Least Bell's Vireo (LBV) and Southwestern Willow Flycatcher (SWF) were conducted by AMEC during the nesting season of 2014. The Environmental Program Division (EPD) of the Riverside County Planning Department prepared a Determination of Biologically Equivalent or Superior Preservation (DBESP), dated October 1, 2014, as well as a nesting bird season survey, dated May 9th, 2014.

The following discussions are based on these biological studies, all of which are appended to the EA (electronic copy only) and, in addition, hard copies of these reports are available at the RCDWR Headquarters in Moreno Valley.

4a. 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 Game or U.S. Fish and Wildlife Services?

Federally and State Listed Endangered and Threatened Species:

Least Bell's Vireo, Southwestern Willow Flycatcher, Western Yellow-Billed Cuckoo

During the BRA study conducted by GEC in August 2013, potential habitat for the federally listed riparian bird species of LBV, SWF, and Western Yellow-Billed Cuckoo (WYBC) was identified within the project site. In the nesting season of 2014, from April thru August, AMEC found that no suitable breeding habitat existed for the WYBC. Focused protocol surveys for LBV and SWF were conducted and found the presence of occupied habitat by LBV but not the SWF.

The AMEC survey report, dated August 12, 2014, identified eight detections of LBV; seven of those detections (90%) were in an area designated as "streambed preservation" (**Figure 3, Site Plan**) and in an area immediately north of an off-site pond. The fact that most detections were adjacent to this pond, and that LBV's were missed on two site visits, suggests that the presumed LBV pair/territory was centered somewhere along the pond, with the on-site drainage being a 'territory edge' used for foraging. The foraging territory (where 90% of the detections where observed) would not be disturbed from project construction activities under design Alternative 1 (ACB); however, under Alternative 2, all existing vegetation and habitat within the drainage would be removed[6]. The one detection inside the project area was of a calling (not singing) LBV at the east end of the study area in July. Since there were no other previous detections, it is probable that this bird represented a dispersing young bird of the year or a post-breeding adult. The majority of LBV detections

[6] In February 2016, a contractor for a residential development adjacent to the project site removed vegetation and placed material (rocks and fill) within the area designated for preservation under Alternative No.1. This activity was performed without any authorization or approval from the RCDWR. Approximately 0.3 acre of the drainage was impacted- 0.2 acre on the adjoining property and 0.1 acre on County landfill property (see Figure 3, Site Plan for location). The Resource Agencies are addressing the matter with the Developer. While these unauthorized impacts did not affect any proposed mitigation or design considerations for the Project, they did result in revisions to the text and Figure 3 in this EA, accounting for the impacts by identifying the locations and adjusting acreages accordingly.

were in an area immediately north of an offsite pond. LBV are present within proximity to the project site but no direct impacts will occur to occupied LBV habitat. Indirect impacts to LBV would be reduced to a level of less than significant with the implementation of mitigation measures BIO-1, BIO-2, BIO-3, BIO-4 and BIO-5.

Federal Species of Concern:

Burrowing Owls (BuOwl):

The project site falls within the habitat range of the BuOwl, a federal Species of Concern under the Endangered Species Act and a Planning Species protected under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). According to the GEC study, suitable BuOwl habitat exists within and beyond the project's construction activity footprint. The EPD nesting season survey on May 9, 2014 did not identify any occupied BUOW habitat in/or around the project site.

Migratory Birds:

According to the GEC and AMEC studies, the project site has the potential to support nesting songbirds, raptors, and riparian bird habitat. Nesting activity typically occurs from February 15th to August 31st. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact.

The project would extend the floodplain on the west end portion of the channel and replace the existing grouted rip rap with ACB under Alternative 1. Under Alternative 2, the entire channel's stream bed and banks would be replaced from the existing grouted rip rap to concrete. Under Alternative 1, an area has been designated as "streambed preserved" where no disturbance would occur, this is the area where 90% of the LBV detections occurred as explained in the preceding paragraph. No burrowing owls would be impacted from either Alternative 1 or Alternative 2, because burrowing owls are not know to inhabit the site and clearance surveys would be carried out prior to any ground disturbance/construction activities. With implementation of the following mitigation measures, impacts to burrowing owls and birds covered under the MBTA would be reduced to a level less than significant.

MITIGATION MEASURES:

BIO-1 A qualified biologist shall be retained to monitor construction activities and to make recommendations on how to minimize biological impacts prior to and during construction or disturbance activities. (ALT1/ALT2)

BIO-2 In order to avoid impacts to Least Bell's Vireo, construction activity or any activities that could potentially impact LBV should not be carried out during the LBV nesting season (~~April~~ March 15 through July 31). If construction or other activities must occur during the LBV nesting season, preconstruction surveys shall be carried out. ~~If the site is determined to be presently occupied by LBV,~~