

~~appropriate avoidance measures shall be adopted to avoid any potential impacts. (ALT1/ALT2)~~

- BIO-3 ~~If LBV are detected within or in close proximity to the worksite, all work that could potentially impact the LBV will be stopped until the biologist determines that the LBV has left the site. If needed, relocation of LBV shall only occur after consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), following all USFWS and CDFW relocation protocols. (ALT1/ALT2)~~
- BIO-4 Within 30 days prior to construction or disturbance activities, a burrowing owl clearance survey shall be conducted within suitable areas in the construction areas, including a 150 meter buffer area. (ALT1/ALT2)
- BIO-5 If any burrowing owls or occupied burrows are found during the burrowing owl preconstruction survey, no disturbance will occur within 50 meters of occupied burrows during the non-breeding season of September 1 through January 31 or within 75 meters during the breeding season of February 1 through August 31. If construction or ground disturbance must occur within the specified no disturbance areas a qualified biologist may relocate affected burrowing owls only during the non-breeding season and after approval from the California Department of Fish and Wildlife. (ALT1/ALT2)
- BIO-6 In order to avoid impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA) and State Fish and Wildlife Codes, removal of vegetation or any other potential nesting bird habitat should be conducted outside of the avian nesting season (February 1<sup>st</sup> through August 31<sup>st</sup>) if practical. If habitat must be cleared during the nesting season, a preconstruction nesting bird survey shall be conducted by a qualified biologist. If nesting activity is observed, appropriate avoidance measures shall be adopted to avoid any potential impacts to nesting birds. (ALT1/ALT2)
- BIO-7 All LBV and riverine/riparian habitat that will remain undisturbed during and after implementation of the proposed project shall be enhanced by treating and monitoring for target non-native invasive species. A Habitat Mitigation and Monitoring Plan shall be prepared during the permitting process. (ALT1)
- BIO-8 To offset the permanent loss of potential LBV habitat, approximately 1.64 acres of riverine/riparian habitat will be created at the Pedley Landfill restoration site. Success of the restoration site will be ensured through an Invasive Species Management and Monitoring Plan that shall be produced during the resource agency permitting process. (ALT1/ALT2)
- BIO-9 For Alternative 2, if selected, in addition to the off-site creation of the 1.64 acres of riverine/riparian habitat created at the Pedley Landfill restoration site, RCDWR shall contribute to an approved in-lieu fee payment or mitigation banking program, at a minimum of a 1:1 ratio, with the exact ratio negotiated with the resource agencies during the 1602 Streambed Alteration Agreement and Clean Water Act sections 401/404 permitting process. (ALT2)

Compliance with mitigation measures will ensure that sensitive species such as the LBV, burrowing owl, in addition to other nesting birds protected by the MBTA, will not be harmed or otherwise harassed by construction activities because if found on-site, a qualified biologist will assess the situation and, if necessary, consult with USFWS and CDFW staff on procedures for isolating the individuals from the activities until they vacate the site, or if necessary, relocate the individuals in accordance with established USFWS and CDFW protocol (mitigation measures BIO-1 through BIO-6). Implementation of mitigation measures BIO-7, BIO-8, and BIO-9 will ensure that potential LBV habitat is improved or replaced by performing enhancement activities within remaining on-site riparian areas (BIO-7), creating of riverine/riparian habitat at the Pedley Restoration Site, and/or by purchasing in-lieu fee or mitigation bank credits. Therefore, with implementation of these mitigation measures, any impacts to sensitive species or habitats would be less than significant.

***FINDING: Less Than Significant Impact After Mitigation***

**4b. 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?**

The BRA prepared by GEC analyzed the potential for riparian habitat and other sensitive natural communities identified by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service. GEC did find riparian habitat present on the project site. Vegetation within the project channel consists of four (4) riparian communities, namely, the Salix Alliance composing of arroyo willow (*Salix lasiolepis*) and Goodding's willow (*Salix gooddingii*); Mulefat Alliance dominated by mulefat (*Baccharis salicifolia*); *Washingtonia robusta* (California fan palm) Alliance that occupies approximately a third of the SE Drainage Channel; and Tamarisk Alliance dominated by *Tamarix ramosissima* and located primarily in the eastern portion of the SE Drainage Channel. The following discussion identifies applicable local and regional plans/policies addressing riparian habitat and other sensitive natural communities.

Western Riverside County Multiple Species Habitat Conservation Plan Riverine/Riparian Habitat:

Section 6.1.2 of the MSHCP defines riverine/riparian Areas as "lands which contain habitat dominated by trees, shrubs, persistent emergents or emergent mosses, which occur close to or which depend upon soil moisture from a nearby fresh water source, or areas with fresh water flow during all or a portion of the year." This definition includes unvegetated ephemeral streams which are common in the generally arid region of Southern California if it can be demonstrated through observation that annual flows occur within the feature. This definition also considers the limits of moisture dependent or riparian vegetation and closely coincides with the limits of CDFW jurisdiction. According to the BRA and Jurisdictional Delineation prepared by GEC, the entire channel contains approximately 2.56 acres of riverine/riparian habitat, as defined by the MSHCP. The MSHCP allows for impacts to riverine/riparian habitat and resources defined under section 6.1.2 for the Plan if the impacts are deemed to be unavoidable via a DBESP. Impacts to riverine/riparian habitat vary with the project design scenarios. As shown in Table B-1, Alternative 1 (ACB) will

impact approximately 0.82 acres of riverine/riparian habitat; whereas Alternative 2, the concrete channel scenario, would impact the entire 2.56-acre drainage channel. While 100% avoidance of impacts is not feasible for either Alternative 1 or Alternative 2, the ACB design preserves approximately 1.74 acres (68%) of MSHCP riverine/riparian habitat in the project site (see footnote #6). Project impacts to MSHCP riverine/riparian resources from either project alternative are less than significant with implementation of mitigation measures BIO-1, BIO-8, BIO-9, and BIO-10.

#### Sensitive Natural Communities

The CDFW classifies sensitive natural communities, those that exhibit a certain degree of imperilment (as measured by rarity, trends or threats) using a series of unique codes used to rank all vegetation communities. These ranks are the Global (G) and State (S) ranks, ranging from G1 - G4, and S1- S4. Alliances with G1-G3 and S1-S3 designation, and their corresponding associations within them, are considered to be highly imperiled and thus sensitive natural communities. The Alliances identified within the project area are not classified as sensitive natural communities by CDFW; therefore, no impacts to sensitive natural communities, other than the riparian habitat mentioned in the preceding paragraph, would occur as a result of the project. To mitigate impacts to jurisdictional waters/wetlands containing riparian habitat under the control of CDFW, the RCDWR will enter into a 1602 Streambed Alternation Agreement with CDFW, as identified in Mitigation Measure BIO-12.

#### Other Local and Regional Plans

The project is located within the City of Corona (City). The City and County are Permittees to the MSHCP, and as such, County projects, as well as those within the City, must demonstrate consistency with the MSHCP. By the completion of MSHCP required biological studies and modification of the project design to reduce impacts to resources covered under the MSHCP along with mitigation measures BIO-2 through BIO-11, impacts associated with the MSHCP would be reduced to level less than significant.

The proposed project under design Alternative 1 would expand the floodplain area at the southwestern end of the project. Existing riparian vegetation within the channel adjacent to the floodplain areas will not be impacted. Furthermore, Alternative 1 would preserve approximately 1.74 acres of MSHCP riparian habitat (see footnote #6) that would, otherwise, under Alternative 2, be destroyed. As such, Alternative 2, if selected, shall require the preparation and submittal of a new DBESP to USFWS and CDFW. Impacts to riparian habitat will be mitigated to less than significant following the recommended mitigation measures. No impacts to sensitive natural communities, as defined in the California Natural Diversity Data Base will occur from implementation of either project alternatives.

#### **MITIGATION MEASURES:**

- BIO-10 The Riverside County Department of Waste Resources shall comply with the terms and mitigation measures described in the approved DBESP written by the Riverside County Planning Department Environmental Programs Division on October 1, 2014 and approved by the USFWS and the CDFW. (ALT 1)

BIO-11 Prior to initiation of construction activities within MSHCP riverine/riparian areas, the Riverside County Department of Waste Resources shall submit a new DBESP to USFWS and the CDFW for review and approval. Construction activities shall not occur within MSHCP riverine/riparian areas until the DBESP is approved. (ALT 2)

Compliance with mitigation measures will ensure that riparian habitat found on-site will not be significantly impacted by the project. The biological monitoring, species surveys, in addition to both the enhancement and replacement of riparian habitat, as discussed in mitigation measures BIO-1 through BIO-9, will ensure that impacts to riparian habitats are less than significant. Furthermore, adherence to the measures identified in the approved DBESP under project alternative 1, or the submittal and adherence to a new DBESP for project alternative 2, required under mitigation measures BIO-10 and BIO-11, will ensure impacts to riparian habitat remain less than significant.

***FINDING: Less Than Significant Impact After Mitigation***

**4c. 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?**

The project site is a partly natural and partly created drainage channel, which merges with an unnamed blue-line stream from the south, according to the historical United States Geological Survey (USGS) maps for the area. The channel receives primarily urban landscape runoff throughout the year and conveys storm runoff during the winter season. Vegetation within the project channel consists of four communities, namely, the riparian Salix Alliance consisting of arroyo willow (*Salix lasiolepis*) and Goodding's willow (*Salix gooddingii*); riparian Mulefat Alliance dominated by mulefat (*Baccharis salicifolia*); *Washingtonia robusta* (California fan palm) Alliance that occupies approximately a third of SE Drainage Channel; and Tamarisk Alliance dominated by *Tamarix ramosissima* and located primarily in the eastern portion of the SE Drainage Channel.

The JD study by GEC found that the site contains features that lend themselves to California Department of Fish & Wildlife (CDFW) and U.S. Army Corps of Engineers (USACE) jurisdiction:

- a) 1.11 acres of Waters of the U.S. (0.39 acre of waters and 0.72 acre of jurisdictional wetlands) under the jurisdiction of the USACE and Regional Water Quality Control Board, Santa Ana Region (SARWQCB);
- b) 2.56 acres of Waters of the State (1.99 acres of riparian scrub wetlands and 0.57 acre of jurisdictional streambed) under the jurisdiction of the CDFW; and,
- c) 2.56 acres of MSHCP Section 6.1.2 Riverine/Riparian habitat occur on the project site.

The JD's findings are summarized in Table B-1 below.

**Table B-1  
Jurisdictional Delineation Results and Impacts  
Corona SE Channel Project**

Project Design	Short Description	Permanent Impact	
		(Acre)	(Linear Feet)
Alternative 1 (ACB)	Federal Waters	0.05	335
	Federal Wetlands	0.28	1,898
Alternative 2 (Concrete Channel)	Federal Waters	0.39	2,108
	Federal Wetlands	0.72	2,108
Alternative 1 (ACB)	CDFW Streambed	0.10	1,898
	CDFW Wetlands	0.72	1,898
Alternative 2 (Concrete Channel)	CDFW Streambed	0.57	2,108
	CDFW Wetlands	1.99	1,218
Alternative 1 (ACB)	RWQCB Waters	0.05	335
	RWQCB Wetlands	0.28	1,898
Alternative 2 (Concrete Channel)	RWQCB Waters	0.39	2,108
	RWQCB Wetlands	0.72	2,108
Alternative 1 (ACB)	MSHCP 6.1.2	0.82	1,898
Alternative 2 (Concrete Channel)	MSHCP 6.1.2	2.56	2,108

Source: Jurisdictional Delineation Report, Gonzalez Environmental

**Jurisdictional Waters, Wetlands, and Streambed:**

As shown in Table B-1, the project site contains jurisdictional waters, wetlands, and riparian habitat. Maximum permanent impacts would occur under Alternative 2 scenario, including: 0.39 acre of federal waters and 0.72 acre of federal wetlands; 0.57 acre of CDFW streambed and 1.99 acres of CDFW wetlands; and 2.56 acres of MSHCP riverine/riparian habitat. Impacts under design Alternative 1 would be less than impacts under the design Alternative 2 scenario. In either case, impacts are considered significant and mitigation measures will be required to reduce impacts to less-than-significant levels.

Project construction could cause short term impacts to surface water quality, which, in turn, would affect waters, wetlands, and streambed resources downstream from the project site. Mitigation measures will be required as part of this EA to reduce these short term impacts to less-than-significant levels. In addition, compliance with the NPDES, Construction Guidelines provided in Section 7.5.3 of the MSHCP, and the BMPs in Appendix C of the MSHCP shall ensure that no impacts to MSHCP covered riverine/riparian species occur off-site and downstream of the project site. Further discussion on BMPs can be found in the analysis for water quality, under question 9(a).

Vernal pools are seasonal depressional wetlands, common in the West Coast, and underlain by hard clay or bedrock that allow water to be retained in the pool. They provide habitat for numerous rare plants and animals including fairy shrimp. They collect most of their water during the rainy season in winter, and may be completely dry for most of the summer and fall. The project site does not contain any vernal pool and fairy shrimp habitat, as physical evidence characteristic of vernal pools and seasonal ponds, such as water stained, closed-contour depressions, cracked clays, aquatic invertebrate carapaces, or vernal pool indicator plant species, were not observed. The lack of evidence of these indicators suggest that

water observed onsite is not characteristic of vernal pools. Therefore, the project will not result in impacts to vernal pools or Fairy Shrimp habitat.

**MITIGATION MEASURES:**

- BIO-12 Prior to project construction, a Streambed Alteration Agreement (SAA) shall be reached between the California Department of Fish and Wildlife (CDFW) and the Riverside County Department of Waste Resources (RCDWR) regarding mitigation for direct loss of 0.10 or 0.57 acre of jurisdictional streambed and 0.72 acre or 1.99 acres of CDFW wetlands from the project under the ACB or Concrete Channel scenario, respectively. The SAA will require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the CDFW. (ALT1/ALT2)
- BIO-13 Prior to project construction, a Clean Water Act Section 404 Permit shall be obtained from the US Army Corps of Engineers (USACE) and the RCDWR regarding mitigation for direct loss of 0.05 or 0.39 acre of Waters of the US and 0.28 or 0.72 acre of jurisdictional wetlands from the project under the ACB or Concrete Channel scenario, respectively. The 404 Permit will require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the USACE. (ALT1/ALT2)
- BIO-14 Prior to project construction, a Clean Water Act Section 401 Certification shall be obtained from the Santa Ana Regional Water Quality Control Board (SARWQCB) and the RCDWR regarding mitigation for direct loss of 0.05 or 0.39 acre of Waters of the US and 0.28 or 0.72 acre of jurisdictional wetlands from the project under the ACB or Concrete Channel scenario, respectively. The 401 Certification may require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the SARWQCB. (ALT1/ALT2)

Compliance with mitigation measures will ensure that impacts to federal and state jurisdictional waters, under the control of the US Army Corps of Engineers, Regional Water Quality Control Board, and the CDFW, are less than significant. Mitigation measures BIO-12 through BIO-14 require the RCDWR to enter into agreements or obtain permits that address and mitigate impacts to the jurisdictional waters. Therefore, with implementation of these mitigation measures, in addition to measures BIO-1 through BIO-9 addressing biological monitoring, species surveys, and replacement/enhancement of jurisdictional riparian areas, impacts to the both federal and state jurisdictional waters will be less than significant.

**FINDING:** *Less Than Significant Impact After Mitigation*

**4d. Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery site?**

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Corridors mitigate the effects of habitat fragmentation by: (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The Proposed Constrained Linkage 4 is through Cells 1923, 1924, and 1926, all of which are located east and north of the project site and directly associated with the Temescal Wash, which is the region's main wildlife dispersal and migration corridor.

The project's SE Channel is located in an urban area surrounded by commercial and industrial developments on the north, east, and south, and I-15 to the west. In other words, the project site is not contiguous with open space and, therefore, does not support the movement of larger mammals that require larger home range areas and dispersal distances or dense vegetative cover (e.g., mountain lion and bobcat). Species that do not require large home ranges and those species that are less restricted in movement pathway requirements (e.g. raccoon, skunk, coyote, bird) are likely to move through the landfill site via the SE Channel. The project site is not considered a "wildlife corridor" because it does not connect two or more habitat patches that would otherwise be fragmented or isolated from one another.

The proposed project would consist of two aspects, 1) the widening of the flood plain on the southwestern end of the SE Channel and 2) either ACB installation under Alternative 1 or the use of concrete as an erosion control revetment system under Alternative 2. The ACB installation work as described in Section 2.4.1.1 Conceptual Construction Plan, would only occur on the northern banks of the project, and would not impact the streambed by obstructing or blocking the movement of any wildlife species within the project boundary that may be found there. The proposed project is not expected to substantially affect the movement of wildlife in the Corona region or affect the use of Proposed Constrained Linkage 4. Therefore, impacts to wildlife movement are considered less than significant.

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

**4e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

The project is located within the City of Corona (City). The City and County are Permittees to the MSHCP, and as such, County projects, as well as those within the City, must demonstrate consistency with the MSHCP. As discussed above, the Project is consistent with the MSHCP, and has provided adequate mitigation ensuring protection of biological resources.

Furthermore, the project would not conflict with local policies or ordinances related to tree preservation; therefore, no impacts would occur.

**FINDING:** *No Impact Identified*

**4f. Conflict with the provision of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

On October 7th, 2003 the County of Riverside adopted an area wide MSHCP that serves as a Habitat Conservation Plan pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act of 1973 that also works as a Natural Communities Conservation Plan under the NCCP Act of 1991. The following are findings from the BRA prepared by GEC and the DBESP, prepared by EPD.

**MSHCP Consistency:**

All projects within the MSHCP Plan area must prove consistency with the Plan. Proving consistency with the plan requires identifying the biological resources present on the project site and determining if the project will impact any resources that are protected by the MSHCP. In addition to meeting MSHCP species objectives the project must prove compliance with the conservation objectives within the Plan's Criteria areas. The proposed project carried out all necessary biological studies and analysis as required by the MSHCP.

**(1) MSHCP Conservation Objectives:**

A portion of project site falls within MSHCP Criteria Cell 1923 which is part of the Temescal Canyon Area Plan. Conservation within cell 1923 has three objectives. Conservation within cell 1923 shall contribute to assembly of Proposed Constrained Linkage 4; conservation will focus on water and riparian habitat associated with Temescal Wash and conservation within the cell will be connected to water proposed for conservation to the north in cell 1826, and to riparian habitat proposed for conservation in cell 1924 to the east. Conservation within cell 1923 will range between 10 and 20 percent focusing on the northern and eastern portion of the cell. The subject parcel where the proposed project is located is only slightly within the western portion of cell 1923. Proposed Constrained Linkage 4 is located in the opposite portion of the criteria cell within the northeast corner, therefore conservation objectives will not be affected by the proposed project.

During a pre-DBESP meeting that took place on April 9, 2014 between the RCDWR, the Western Riverside Regional Conservation Authority, Regional Water Quality Control Board (RWQCB), USACE, CDFW and the U.S. Fish and Wildlife Service, it was determined that this project would not have to go through the MSHCP Joint Project Review process because only a small portion of the site (less than 0.5 acres) is located within the cell and conservation was not described within the project area.



## **(2) Section 6.1.2 of MSHCP**

Section 6.1.2 of the MSHCP specifies the requirements for riverine/riparian habitat, vernal pools, fairy shrimp and associated riparian species.

### Riverine/Riparian Habitat and Species:

According to the GEC JD, the entire channel contains approximately 2.56 acres of riverine/riparian habitat, as defined in Section 6.1.2, Protection of Species Associated with riverine/riparian Areas and Vernal Pools, of the MSHCP. Impacts to the riverine/riparian habitat varies with the project design scenario. As indicated in Table B-1, the ACB scenario will impact approximately 0.82 acre of riverine/riparian habitat whereas the Concrete Channel scenario the entire 2.56-acre drainage channel.

The basic functions of the riverine habitat onsite are for conveyance with some limited flood attenuation, and nutrient and sediment transport. Project impacts to these riverine functions are considered temporary, because the proposed project will not alter the basic drainage patterns and capacity, it would eventually improve the flood attenuation capacity of the channel, and not impede its nutrient and sediment transport ability. However, the loss of some or all of the existing vegetation within the channel would mean a permanent impact to Riparian/wetland habitat.

### Vernal Pools and Fairy Shrimp Habitat

The project site does not support vernal pools. In addition, no depressional areas conducive to the development of vernal pools or fairy shrimp habitat occur on site.

### MSHCP Narrow Endemic Plant Species:

The project site is located within a MSHCP Narrow Endemic Plant Species Survey Area. The RCIP Conservation Summary Report Generator identified three NEPSSA species San Diego Ambrosia, Brands Phacelia and San Miguel Savory. The MSHCP requires that focused surveys be carried out if suitable habitat exists within appropriate areas of the project site. Habitat assessments conducted by GEC in August of 2013 found no individuals or suitable habitat for the three NEPSSA species. No further surveys are required for any NEPSSA species.

### MSHCP Criteria Area Species:

The Project site is not located within a Criteria Area Plant Species Area, according to the RCIP Conservation Summary Report Generator.

### MSHCP BuOwl Survey Area:

A small portion of the project site is located within a designated MSHCP BuOwl survey area. GEC did find suitable habitat present on the site; however, no signs of current or past BuOwl activity were observed. In addition to the GEC survey, EPD conducted MBTA surveys in May of 2014 and found no evidence of past or current BuOwl occupation within or adjacent to

the project site. As described in the Federal Species of Concern section, mitigation measures will be exercised to avoid potential BuOwl impacts.

**(3) Determination of Biologically Equivalent or Superior Preservation (DBESP):**

The MSHCP allows for impacts to riverine/riparian habitat and associated resources as defined in Section 6.1.2 of the Plan if the impacts are deemed unavoidable via a DBESP. Implementation of design Alternative 1 will result in the permanent impact to 0.82 acre of riverine/riparian resources. Due to the potential risk for human health and safety as well as adverse effects on existing riverine/riparian resources both on site and downstream, it was determined that the proposed impacts are unavoidable; therefore, the project had to prove compliance with the MSHCP by proposing biologically equivalent or superior preservation in a DBESP. The DBESP was prepared by EPD in October 2014 and subsequently reviewed by the USFWS and the CDFW during a 60 day review period that ended on December 7, 2014. Prior to completion of the DBESP, the RCDWR met with the RCA, USFWS, CDFW, USACE and the SARWQCB to present the proposed project, discuss avoidance alternatives and receive recommendations for mitigation, which were later incorporated into the DBESP, as well as the site design.

The proposed project demonstrates avoidance as required by the MSHCP; however, unavoidable impacts to 0.82 acre (ALT 1) or 2.56 acres (ALT 2) of riverine/riparian habitat will occur. With USFWS and CDFW acceptance of the DBESP, it has been determined that the measures proposed by RCDWR shall provide biologically equivalent or superior preservation to offset any impacts for the project design under Alternative 1. As required under mitigation measure BIO-11, Alternative 2, if selected, shall require the preparation and submittal of a new DBESP to USFWS and CDFW for approval, demonstrating compliance with the MSHCP for Alternative 2.

**(4) SECTION 6.1.4 - Urban/Wildlands Interface:**

According to the MSHCP, the Urban/Wildlands Interface Guidelines are intended to address indirect effects (edge effects) associated with locating development in proximity to the MSHCP Conservation Area. A small portion of the proposed project site falls within MSHCP Criteria Cell 1923. The Urban/Wildlands Interface Guidelines, as discussed below, will be incorporated into the project to ensure that project-related edge effects involving drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development are avoided, minimized, and less than significant under either design alternative.

**Drainage:**

The proposed project will not result in any changes in existing conditions of storm water runoff. Best Management Practices (BMPs), as described in more detail in the water quality analysis under question 9(a), shall be employed throughout the project area during the duration of the project. A biological monitor shall be present throughout the earthwork and revetment system installation (ALT 1) or channelization (ALT 2).

**Toxics:**

According to the MSHCP, measures shall be incorporated to ensure that application of chemicals does not result in discharge to the MSHCP Conservation Area. During construction, some potentially hazardous materials, typical of a construction project (fuels, oils, etc.) may be present on the site. An Emergency Response Plan, as discussed in Section 8 under Hazards and Hazardous Materials, question 8(a), shall be compiled for the project that provides for containment actions that must be undertaken in the event of a spill or other accident.

**Lighting:**

The project does not propose lighting either during construction or operation.

**Noise:**

As addressed in Section 12 Noise, construction-related noise will be mitigated consistent with the County's Noise Ordinances by limiting construction activities to daytime hours and requiring construction equipment to be tuned and equipped with mufflers.

**Invasive Plant Species:**

The project does not propose any onsite landscaping or re-vegetation; however, as stated in Mitigation Measure BIO-7, remaining riverine/riparian habitat shall be enhanced by treating and monitoring for target non-native invasive species.

**Barriers:**

Barriers are not required for the proposed drainage improvements.

**Grading/Land Development:**

Grading will only occur in designated areas necessary to carry out the project. Clean fill material, rip-rap, ACB (ALT 1), or concrete (ALT 2), may be used within the repair, stabilization, and flood plain areas.

**Fuels Management:**

The project does not require any fuels management areas.

**(5) MSHCP Consistency Conclusion:**

The project site is within the Temescal Canyon Area Plan of the MSHCP; however, the majority of the project site falls outside of a criteria cell. The MSHCP does not describe conservation in the portion of the criteria cell in which the project site is located. Implementation of the proposed project will not impact MSHCP conservation objectives. No suitable habitat was found for any NEPSSA species and potential impacts to BUOW will be avoided by implementation of mitigation measures stated below.

In addition, the project will not adversely affect MSHCP riverine resources, since existing drainage patterns will not be altered by the project, regardless of which alternative is implemented, and as discussed above in (4), impacts relating to edge effects are less than significant. For these reasons, the RCA, along with staff from the USFWS and CDFW, determined in a pre-application committee hearing in April 2014 that the project would not be subject to the Joint Project Review. Impacts to riparian/wetland habitat will be mitigated at an off-site location within a MSHCP conservation assembly area, thus contributing to the conservation objectives of the MSHCP.

#### Cumulative Biological Impacts:

To determine if the identified project direct impacts are significant on a cumulative basis, it needs to be considered in the context of existing and future surrounding developments within the area. Most land development in the surrounding area is urban. Immediately adjacent to the project site is a sand and gravel and concrete batch operation, which contains the only remaining non-residential source of run-off. Cumulative impacts could result from the marginalization of quality of the streambed habitat in close proximity to the project site by introducing urban pollutants into existing riparian habitat off of the project site.

However, the cumulative effects of the proposed project on streambed resources are considered beneficial for the following reasons:

1. The proposed project will improve an existing urban drainage channel for purposes of erosion control as a post closure maintenance responsibility for the inactive Corona Landfill. Therefore, the proposed project is part of the requirement by the Santa Ana Regional Water Quality Control Board for protection of surface water quality and its habitat values in the Santa Ana Watershed from sediments and potential release of landfill contents caused by erosion of the SE Channel by urban stormwater runoff.
2. If the project were not constructed, impacts to the existing habitat and streambed, as well as downstream habitats, would still occur, as existing eroded conditions of the landfill and surrounding habitat continue to propagate according to the natural evolution mechanism of alluvial streams (i.e., Lane's relationship,  $QS = Qsds$ ). In other words, without the proposed erosion control project, greater than 2-year stormwater events will erode the streambed, on-site habitat, and landfill slope, releasing both sediment and waste contaminants. Consequently, both on-site and downstream habitat and streambed resources will be adversely impacted. The proposed project will actually mitigate these off-site impacts.

Without the project, on-site riparian/wetland and LBV habitat will be subject to periodic erosion or destruction due to recurrent high volume storm flows caused by existing and future development.

Therefore, the proposed impacts associated with the MSHCP are considered less than significant with the implementation of mitigation measures BIO-1 through BIO-11, which address biological monitoring, required MSHCP species surveys, replacement/enhancement of jurisdictional features and riparian areas, in addition to the adherence to, or development of, a DBESP, for project design Alternatives 1 and 2 respectively.

**FINDING:** *Less Than Significant Impact After Mitigation*

## 5. Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5??	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

In August 2014, a Phase 1 field survey and historical records research report was generated by L&L Environmental to evaluate the site for the potential presence of historical resources and determine if previously recorded historical resources were located within the project area. The Phase 1 field survey and archeological records research yielded negative results for archaeological or historical resources. No archaeological resources were found during the field survey and the closest cultural resources were a building and two freight cars within the one-mile radius record search area.

The project site is a closed landfill facility and is surrounded by urban development. The city of Corona does not list the project site as a historical or culturally significant site. The project site would not cause a substantial adverse change in the significance of a historical resource as referenced in the California Code of Regulations.

**FINDING: No Impact Is Identified**

**5b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

The project site is a closed landfill facility and is surrounded by urban development. Land uses include, light industrial to the east, single family residential to the south and the I-15 to the west. Project construction will take place primarily within a previously excavated area, and would consist of replacing grouted rip rap with ACB under design Alternative 1 or line the entire channel with concrete under design Alternative 2. The project site is therefore not considered a highly sensitive area for archaeological resources. As mentioned in question (a) above, a Phase 1 field survey and historical records search was conducted by L&L Environmental. The report found that no archaeological resources were present on site; however, if any archaeological resources are found during ground disturbance activities on or near the project site, work shall be stopped immediately until a qualified archaeologist evaluates the cultural resource. Cultural resource(s) found and deemed to be significant by a qualified archaeologist shall be treated in accordance with California Code of Regulations, Section 15126.4(b) and if necessary, the artifact(s) reported and collected in accordance with the local register of historic resources.

In compliance with AB 52, relating to tribal notification of projects under CEQA, RCDWR sent project notification letters (July 2015) to three requesting Tribes; Soboba, Rincon and Pechanga. The Tribes each reviewed the project and concluded that formal consultation was not required. AB 52 notification letters can be found in Appendix B, Cultural Resources Assessment. There were no concerns regarding known cultural resources in the project area.

**MITIGATION MEASURES:**

CR-1 If subsurface cultural resources are encountered during any excavation, or if evidence of an archaeological site or other suspected historic resources are encountered, all ground disturbing activity will cease within 100 feet of the resource. A qualified archaeologist will be retained by the operator to assess the find, and to determine whether the resource requires further study. Additionally, any potentially significant cultural resource(s), discovered on site shall require notification to the three (3) requesting Tribes under AB 52. Potentially significant cultural resources could consist of, but are not limited to, stone, bone, fossils, wood or shell artifacts or features, including structural remains, historic dumpsites, hearths and middens. Midden features are characterized by darkened soil, and could conceal material remains, including worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials and special attention should always be paid to uncharacteristic soil color changes. Any previously undiscovered resources found during construction should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated

by a qualified archaeologist retained by the County for significance under all applicable regulatory criteria. (ALT 1/ALT 2)

- CR-2 No further grading will occur in the area of the discovery until the County, along with the applicable Tribe(s), approves measures to protect the resources. Any archaeological artifacts recovered as a result of mitigation will either be donated to a qualified scientific institution approved by the County where they would be afforded long-term preservation to allow future scientific study or if the resource is determined to be a tribal cultural resource, then the final disposition of the resource shall require approval of applicable Tribe(s). (ALT 1/ALT 2)

Based on the activities that have already occurred during the life of the landfill/project site (landfill operations, grading, drainage improvements, etc.), in addition to the negative results of the recent field survey and Tribal notification responses, the likelihood of uncovering cultural resources is low. However, if uncovered, adherence to the mitigation measures CR-1 and CR-2, which require the operator to stop work immediately and set up a 100-foot buffer if subsurface cultural resource(s) are encountered, retain a qualified archaeologist to assess the find, and notify the requesting Tribes, would ensure that impacts to cultural resources would be less than significant.

***FINDING: Less Than Significant Impact After Mitigation***

- 5c. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

The vicinity where the project is located is classified as having high paleontological sensitivity which is based on geologic formations known to contain fossilized biotic remains of ancient environments according to a countywide inventory for paleontological sensitivity. The project site is a closed landfill facility and surrounded by urban developments. The proposed project involves minor grading and excavation into disturbed areas such as the existing landfill. The excavation activities would essentially cut into areas where waste has been buried and/or remove of the existing rip-rap which covers portions of the south slope of the landfill. Due to the limited depth of the excavation, presence of paleontological resources is unlikely in the site-specific soil (landfill cap and buried waste) and land use conditions (rip rap covered stream banks). Therefore, impacts to unique geological features, and unique paleontological resources directly or indirectly would not be impacted.

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

- 5d. **Disturb any human remains, including those interred outside of formal cemeteries?**

There are no known burial grounds located onsite. However in the event that in the construction process human remains are discovered, the project proponent shall act in accordance to California State Health and Safety Code Section 7050.5 which dictates that in the event of an accidental discovery or recognition of any human remains during ground-disturbing activities, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to §15064.5 (e) of the California Code of Regulations.

**MITIGATION MEASURE:**

CR-3 In the event of an accidental discovery or recognition of any human remains, PRC Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98, or;
2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:
  - o The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; The descendant identified fails to make a recommendation; or the landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner. (ALT 1/ALT 2)

The proposed project was not identified by the NAHC or the Tribes, who requested notification of the project, as being a potential burial ground. The potential presence of any human remains, including those interred outside of formal cemeteries is very unlikely on the project site (in light of the evidence from the historical records search and the field survey). Mitigation Measure C-3 would be implemented to ensure the proper protocols are taken in the event human remains (Native American or otherwise) are discovered. The proposed project does not reasonably anticipate, with all the available evidence stated above, to cause a disturbance of any human remains, including those interred outside of formal cemeteries. As such, the proposed project would be less than significant after mitigation.

**FINDING:** *Less Than Significant Impact After Mitigation*



## 6. Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**6ai. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

The Elsinore Fault Zone is the closest major fault system to the City of Corona. Historically, the Elsinore Fault zone has also been one of the least active systems.<sup>7</sup> At its northern end, near the City, the Elsinore Fault zone splays into two segments, the Chino-Central Avenue Fault and the Whittier Fault. Along the southwestern portion of the City, the Elsinore Fault zone is referred to as the Glen Ivy Fault. The Chino-Central Avenue Fault is the closest to the project site, approximately 1.9 miles west of central Corona, whereas the Whittier Fault and Glen Ivy Fault are 3.4 miles and 4.6 miles, respectively, from central Corona. Figure 5.1-1, Geology, of the General Plan Technical Background Report, dated March 2004, clearly shows that no seismic faulting has been identified near the project site and surrounding areas.

The project will not add any structures; therefore, the project will not result in or expose people to potential impacts involving seismic fault rupture.

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

**6aii. Strong seismic ground shaking?**

Ground shaking is the horizontal or vertical ground movement caused by an opposite movement of the ground along an active seismic fault. The intensity of shaking is usually measured in terms of peak horizontal ground acceleration (pga) as a percentage of gravity (g). Seismic faulting has not been identified on or near the project site. Since the landfill site is and will remain an open space, and the fact that the project itself will not add any structures, the project will not result in or expose people to potential adverse impacts involving strong seismic ground shaking.

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

**6aiii. Seismic-related ground failure, including liquefaction?**

According to the City General Plan Technical Background Report, Figure 5.1-1, Geology, the entire Corona Landfill property and surrounding developments to the north and east are located within a Low Potential area with respect to liquefaction hazard. Since the landfill site is and will remain an open space, and the project itself will not involve any occupied structures, the project will not result in or expose people to potential adverse impacts involving ground shaking and liquefaction.

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

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<sup>7</sup> City of Corona General Plan

**6aiv. Landslides?**

According to the City General Plan, the potential for earthquake-induced landslides in hillside terrain in the City exists. As indicated in Figure 5.1-1 of the Technical Background Report, in general, areas such as the steep slopes of the Santa Ana Mountains and the steep slopes within the Elsinore Fault zone are considered to be relatively susceptible to earthquake-induced landslides. The closed landfill and project site are located in an urbanized area. In the absence of hillside terrain, the potential that the project would result in or expose people to landslides, mudflows or rock fall is minimal. In fact, the project itself is a proposal to protect and enhance the integrity of the landfill slopes that abut the channel against streambank erosion as part of the post-closure maintenance of the Corona Landfill. Therefore, the project will not result in or expose people to potential adverse impacts involving landslides.

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

**6b. Result in substantial soil erosion or the loss of topsoil?**

The proposed project is underlain by Arbuckle loam (AIC) and Rough Broken Land (RuF) soil series with good to fair top soil. Top soil would either be applied back where fill is needed, spread around in other areas adjacent to the SE Channel on landfill property, or applied on top of the ACB. The proposed project would improve soil stability, thereby reducing the potential for soil erosion, with negligible impacts to top soil; therefore, a less than significant impact is anticipated as a result of the project.

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

**6c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

The stability of cut and fill slopes is primarily a function of the steepness of the slope, and the character of the material that the slope is composed of. Land subsidence is the lowering of the land-surface elevation from changes that take place underground. Common causes of land subsidence in California from human activity are pumping water, oil, and gas from underground reservoirs, as well as initial wetting of dry soils (hydro-compaction).

Neither design scenario of the project will involve unstable soil condition from excavation, grading or fill, because excavation and grading will be limited in scale and to either flat terrain south of the channel or short, compacted fill slopes on the landfill side of the channel. In addition, all cut and fill slopes within the two flood plains and on the improved channel banks will be no taller than 12' and constructed at a stable 2:1 grade.

Landfill settlement will not affect the project because the construction area is largely beyond the refuse footprint and confined to the final cover slope that abuts the channel. In conclusion, the project will not result in or expose people to potential impacts involving on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

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

**6d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risk to life and property?**

The shrink-swell potential of soil refers to the change in volume of the soil, which results from a change in moisture content and can be determined on the basis of the amount and type of clay in the soil layers. Some clay soils expand when moisture is added and shrink when dry. High shrink-swell characteristics affect construction of roads, foundations of structures, and sites for reservoirs. The Corona South 7.5' Quadrangle, Riverside and Orange Counties, California, published by the United States Geologic Survey, shows that the first 675 feet of the channel (approximate) lies in young alluvial fan deposits and consists of pale-gray, unconsolidated, cobble to granule-sized gravel. The remaining portion of the channel lies in young alluvial channel deposits (gray, unconsolidated alluvium) and consists of medium- to fine-grained sand. These unconsolidated alluvium soils have low shrink-swell potential. Therefore, the potential impacts involving expansive soil are considered insignificant.

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

**6e. Have soils incapable of adequately supporting the use of septic tanks, or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

The project is adjacent to existing development properties, light industrial and single family residential that utilize existing wastewater disposal infrastructure. During construction, temporary toilets would be used and there is no need for septic tank systems as part of this project. Implementation of the project would not require septic tanks or alternative waste water disposal systems.

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

**7. Greenhouse Gas Emissions**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**7a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

First and foremost in the evaluation of climate change impacts from a project's GHG emissions, the nature of the emitted GHG must be determined. Since GHG emissions, for example, CO<sub>2</sub> and CH<sub>4</sub>, occur naturally in the manner of the carbon cycles, these emissions are biogenic in nature and not considered the primary cause of the existing global warming and climate change trends.<sup>8</sup> It is the man-made, or anthropogenic, portion of the GHG emissions, which are primarily from burning of fossil fuels, that is considered the primary cause of global warming and climate change. The project will generate greenhouse gases (GHG), such as CO<sub>2</sub> and CH<sub>4</sub>, during construction. Although the project's GHG emissions are only temporary and in a very small amount, the project could still contribute to global warming and climate change because the emissions will add to the existing anthropogenic GHG inventory in the atmosphere.

It is now a scientific consensus that real and measureable changes to the climate due to global warming are occurring.<sup>9</sup> It is expected that if left unchecked, these climate changes will continue to intensify, causing catastrophic, worldwide impacts on natural habitats and resources and coastal cities in the coming decades. Although climate change is a global issue, which naturally requires global responses for permanent and effective solutions, both the California legislature and governor recognize the urgency of the issue in that some of its adverse effects on State resources and the environment, public health and safety, and economic well-being are already happening. As a result, several legislative actions have occurred. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and proactive approach to reduce GHG emissions from vehicular sources, which are responsible for greater than 40% of the total GHG pollution in the State. Moreover, former Governor Arnold Schwarzenegger signed Executive Order S-3-05 (E.O. S-3-05) on June 1, 2005, whose primary objectives are to reduce California's GHG emissions according to the following schedule: 1) 2000 levels by 2010, 2) 1990 levels by the 2020; and 3) 80% below the 1990 levels by the year 2050. In 2006, the governor's goal of contributing to the solutions for global warming was further reinforced with the legislature's passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same statewide, phased GHG emissions reduction targets to be achieved by 2020 and stipulates that the California Air Resources Board (CARB) enforce these targets by creating a plan that will implement rules and programs that utilize regulatory mandates and market mechanisms to achieve "real, quantifiable, cost-effective reductions of greenhouse gases" from stationary sources, as well as mobile sources, in addition to rule making mandated by AB 1493.<sup>10</sup> Although the bill does not include GHG reduction targets for beyond 2020, it does clearly spell out the intent of the legislature that GHG emissions reduction be continued thereafter.

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<sup>8</sup> The permafrost deposit in Artic region is a good example of the biogenic CH<sub>4</sub> emissions (sequestered in this case) from natural decomposition of organic matter.

<sup>9</sup> CAPCOA White Paper on CEQA and Climate Change, January 2008.

<sup>10</sup> Although adopted in 2002, rule making had been in a stalemate. On June 30, 2009, the US EPA reversed its previous position and granted the waiver.

The purpose of the project is to protect the landfill slopes by controlling erosion and repairing existing structural damage on the southern bank of the SE Channel as a part of the Corona Landfill post-closure maintenance program. Other permitted post-closure maintenance activities, such as groundwater monitoring, fugitive landfill gas (LFG) emissions monitoring and LFG collection and disposal system maintenance, are not part of the project, and therefore, not subject to this CEQA review. In addition, it should be noted that the closed Corona Landfill continues to generate LFG, which consists primarily of CO<sub>2</sub> and CH<sub>4</sub>. However, CARB considers the CO<sub>2</sub> in the LFG and emitted from the LFG flare as biogenic in nature, thus not contributing to global warming. Only the CH<sub>4</sub> in the LFG that has escaped from the landfill surface and become fugitive in the atmosphere is considered by CARB as an anthropogenic GHG that could cause global warming. In this light, the project produces GHG emissions from two direct sources: 1) CO<sub>2</sub> and CH<sub>4</sub> in engine exhaust emissions from on-site equipment; and 2) CO<sub>2</sub> in the engine exhaust emissions from workers' vehicles and hauling trucks. Under normal circumstances, existing baseline fugitive LFG emissions from the closed Corona Landfill should not be affected by the channel improvement activities. However, if unexpected circumstances arise and demand that the northern bank of the channel be excavated further than the levels required by the grading plans of the ACB and Concrete Channel scenarios to expose buried waste and release trapped LFG into the atmosphere, the CH<sub>4</sub> in the fugitive LFG emissions will be considered a third and incidental source of GHG emissions from the project.

A. Direct GHG Emissions:

Maximum GHG emissions from the two direct sources (i.e., equipment and on-road vehicles) for both design scenarios are evaluated in the EA. Due to the small scale and temporal nature of the project, GHG emissions are expressed in metric ton (MTCO<sub>2</sub>E) instead of the international standard unit of million metric ton (MMTCO<sub>2</sub>E) for ease of reading and understanding. Global Warming Potential of CH<sub>4</sub> is assumed 21 times that of CO<sub>2</sub>.

As stated previously, the proposed project consists of two alternatives; Alternative 1 consists of the construction of two small floodplains at the southwestern end of the drainage canal and erosion control protection for landfill slopes and floodplains. The second alternative (Alternative 2) consists of the entire channel, bed and banks, natural and created, being lined with a concrete surface. The proposed project is anticipated to generate GHG emissions from construction equipment only, as it is not a source of long-term operational emissions.

Methodology

As stated previously, an Air Quality and Global Climate Change Impact Analysis report was prepared by Kunzman Associates, Inc., which the following analysis on GHG emissions is based on. Currently there is no greenhouse gas threshold for construction emissions. The construction-related GHG emissions were calculated by CalEEMod Version 2013.2.2, and were based on a 30 year amortization rate (as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009). The project's emissions were compared to the SCAQMD draft screening threshold of 3,000 metric tons CO<sub>2</sub>e per year. The CalEEMod Annual Output for both phases of the project is available in Appendix A of the Air Quality and Global Climate Change Impact Analysis.

Project Greenhouse Gas Emissions

A summary of the results are shown below in Table G-1 and Table G-2. Table G-1 shows that Alternative 1 would generate approximately 1.77 metric tons of CO<sub>2</sub>e per year (when amortized over 30 years per SCAQMD protocol) and Alternative 2 would generate approximately 2.67 metric tons of CO<sub>2</sub>e per year (when amortized over 30 years per SCAQMD protocol). According to the thresholds of significance established in Section V, of the Air Quality and Global Climate Change Impact Analysis, a cumulative global climate change impact would potentially occur if the GHG emissions created from the project would exceed the screening threshold of 3,000 metric tons per year of CO<sub>2</sub>e. As the project's emissions are well below the screening threshold (even when the total emissions are not amortized over 30 years), no mitigation is required.

**Table G-1  
Project-Related Greenhouse Gas Emissions for Alternative 1**

Category	Greenhouse Gas Emission (Metric Tons/Year)					
	Bio-CO2	NonBio-CO2	CO2	CH4	N2O	CO2e
Alternative 1	0.00	52.96	52.96	0.01	0.00	53.24
CO <sub>2</sub> e emissions amortized over 30 years						1.77
Screening Threshold						3,000
Exceeds Threshold?						No

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

**Table G-2  
Project-Related Greenhouse Gas Emissions for Alternative 2**

Category	Greenhouse Gas Emission (Metric Tons/Year)					
	Bio-CO2	NonBio-CO2	CO2	CH4	N2O	CO2e
Alternative 2	0.00	79.70	79.70	0.02	0.00	80.11
CO <sub>2</sub> e emissions amortized over 30 years						2.67
Screening Threshold						3,000
Exceeds Threshold?						No

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

**B. Incidental GHG Emission:**

In the event that the northern bank of the channel needs to be excavated beyond the design limits of either the ACB or Concrete Channel scenarios and into the landfill mass in order to meet specific engineering parameters, buried waste may be exposed and LFG released. It is anticipated that the over-excavation may expose no more than 4,000 square feet/acreage of landfill content for up to 8 hours. Refuse near the channel is older, thinner and produces much less LFG than the larger body of the landfill. This has been evident, during LFG readings, where LFG detection probes on the south side of the channel have not detected

any trace of methane in over a decade. Moreover, the project will require a SCAQMD Rule 1150 Permit to Excavate, which sets maximum emission rates allowed, in parts per million. The RCDWR will comply with all SCAQMD Rule 1150 LFG emission limits and permit requirements.

One way to minimize fugitive LFG/CH<sub>4</sub> emissions is to limit the duration and/or exposure area by covering up the exposed area with dirt or tarp as soon as practical. Another way to reduce fugitive emissions, when exposure duration and area cannot be practically restricted, is to apply greater suction in the LFG collection system to remove more LFG faster through the system, thus reducing the amount of fugitive emissions at the exposed area. Lastly, as mentioned in the preceding paragraph, the landfill excavation operation will require a Permit to Construct/Operate from the SCAQMD, which will impose appropriate mitigation measures to limit air emissions from the operation. Compliance with the SCAQMD permit requirement will reduce the LFG/CH<sub>4</sub> emissions to insignificant levels.

**Conclusion:**

Although CEQA does not require a lead agency to establish significance thresholds for GHG, the absence of an adopted threshold does not relieve the agency from the obligation to address project GHG emissions and determine impact significance. CEQA Guidelines § 15064(b) states: "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved. This judgment must, however, be based on scientific information and other factual data to the extent possible." The RCDWR, as the project's lead agency as well as operator of the closed Corona Landfill, has determined that the proposed project will not have a significant impact on global warming/climate change on the basis that the project's GHG emissions, based on the results of the quantitative analysis prepared above (insignificant project emissions) as well as that the project is a small and temporary ( $\pm$  50 days) drainage repair construction project. Moreover, the project will provide a permanent solution to the chronic drainage erosion problem, which is a long term threat to the surface integrity of the closed Corona Landfill. Maintenance of the landfill surface integrity is crucial to minimize fugitive LFG emissions into the atmosphere (i.e., sequester GHG), thus protecting against impacts on climate change. Therefore, project impacts associated with the generation of emissions that lead to the development of greenhouse gasses is less than significant.

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

**7b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

The County of Riverside adopted the County of Riverside Draft Climate Action Plan (CAP) in December of 2015. The Plan presents the goal to reduce the County's internal and external GHG emissions to levels consistent with the target reductions of AB 32. The overarching goals of the County of Riverside CAP is to address cumulative GHG emissions, set reduction targets and provide an implementation plan to implement the stated reduction measures of the CAP. A project would be in conflict with the CAP if the project's operational emissions exceed established standards of significance.



The goals and policies of the CAP include:

### 1.3 Goals

- Provide a list of specific actions that will reduce GHG emissions, giving the highest priority to actions that provide the greatest reduction in GHG emissions and benefits to the community at the least cost.
- Reduce emissions attributable to Riverside County to levels consistent with the target reductions of AB 32.
- Establish a quantified reduction plan for which future development within Riverside County can tier and thereby streamline the environmental analysis necessary under CEQA.

The standards of significance are multilevel, first if a development project contributes less than 3,000 MT CO<sub>2</sub>e per year, it is categorized as a small project under the CAP and is therefore considered less than significant under CEQA (pursuant to CEQA Guidelines Section 15064.7(a), “each public agency is encouraged to develop and publish thresholds of significant that the agency uses in the determination of the significance of environmental effects”) which allows for counties to set significant threshold standards. The second level is triggered if the development project is above the 3,000 MT CO<sub>2</sub>e per year, which would then be subject to the Screening Tables or alternative GHG mitigation analysis.

The screening tables are based on a point system of GHG reduction options ranging from home insulation, to the use of energy efficient windows, all providing a point scale, with higher points earned for high achieving energy efficient, water conserving products/programs etc., and lower points earned for the less effective products/programs, etc. If a project can obtain 100 points from the screening table, the mitigated project will implement pertinent reduction measures such that it meets the reduction goals of the CAP and a less than significant finding can be made for the project.

Development projects exceeding the 3,000 MT CO<sub>2</sub>e emissions level and not using the screening table, will use the latest version of the California Emissions Estimator Model (CalEEMod) to conduct the GHG analysis and calculate the project’s GHG emissions.

However, the SE Channel Project is a construction-based project and the CAP does not have any thresholds for construction-based emissions. Furthermore, the project’s amortized emissions do not exceed the draft SCAQMD threshold for all land uses, and is consistent with the goals of the County of Riverside Climate Action Plan as mentioned above. To be conservative, and to assist in determining whether the project would have a significant impact, the GHG analysis conducted by Kunzman Associates Inc., used the SCAQMD draft local agency tier 3 threshold and Riverside County’s CAP screening threshold of 3,000 MT CO<sub>2</sub>e (as mentioned in the preceding paragraph) per year for all land use types. The project would generate CO<sub>2</sub>e emissions below the 3,000 MT CO<sub>2</sub>e thresholds as shown in tables G-1 and G-2 and would therefore be less than significant.

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

## 8. Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

**8a. Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?**

The project consists mainly of erosion control improvements to an existing drainage channel. The project will not involve the use of hazardous substances, such as oil, pesticides, chemicals, or radioactive materials. Due to its small scale and short duration, the project may not even need to store diesel fuel onsite for equipment operation, since periodic mobile fueling from a fuel truck will suffice. Therefore, the project would not ordinarily involve a risk of accidental explosion or release of hazardous substances.

However, there is a possibility that grading on the landfill side of the channel's bank could expose buried waste within the landfill, which while unlikely, could be deemed hazardous material. In the event that buried waste is encountered during subgrade preparation on the northern bank, the exposed material will be evaluated by RCDWR staff trained in recognizing hazardous waste. If the waste is determined to be hazardous, or there is any doubt on the nature of the material, a trained hazardous waste inspector from the RCDWR shall evaluate the material for the potential presence of hazardous elements. If no hazardous elements are identified, at the least, the exposed trash will be re-buried on the spot, compacted, and covered with a layer of clean dirt, on top of which the ACB or concrete subgrade is placed. If for legitimate engineering concerns that the exposed waste be removed from the channel bank, the hazardous waste inspector will monitor the excavation process to verify the absence of hazardous elements in the excavated waste, which will then be either disposed on-site, if approved by the LEA and SAWQCB, or transported along with the vegetation waste to the El Sobrante Landfill for disposal. In light of the possibility of landfill excavation, the grading operation may require a SCAQMD Rule 1150 Permit. In the event a Rule 1150 Permit is needed, RCDWR shall consult with SCAQMD and apply for the Permit accordingly.

In the event that hazardous materials are identified in the exposed waste, RCDWR's Environmental Compliance Manager (ECM), along with experienced hazardous waste staff, will conduct an in-depth investigation of the situation to assess severity in terms of risk of a release of hazardous substances and/or potential explosion. If the ECM makes a determination that a legitimate risk of the release of hazardous substances or accidental explosion, the site will be deemed an "uncontrolled hazardous waste site" and hence subject to the regulation of CCR Title 8, Section 5192(q). The uncontrolled hazardous waste area will be off limits to project construction and operations staff until it is cleaned up and clear of the hazardous substances by implementing the applicable procedures and requirements of Section 5192(q). These procedures and requirements are listed below as mitigation measures to reduce the hazard to the public and the environment.

**MITIGATION MEASURES:**

- HAZ-1 If exposed trash is encountered during grading of the channel's northern slope, RCDWR staff, trained in recognizing hazardous waste, will investigate for potential presence of hazardous elements in the trash. Clearance of hazardous elements in the trash by RCDWR staff trained in recognizing hazardous waste, is required for proper re-burial of the trash on-site or disposal of the trash at the El Sobrante Landfill. (ALT1/ALT 2)
- HAZ-2 If potential hazardous materials are identified but no acutely hazardous materials are present in the exposed trash, the location will be handled as an "uncontrolled hazardous waste site" and subject to the regulation and applicable requirements of CCR Title 8, Section 5192(q). Specifically, the Environmental Compliance Manager (ECM) and the hazardous waste inspection team of the RCDWR shall implement the department's Emergency Action Plan's hazardous waste emergency response procedures to clear all hazardous materials and then decontaminate the site, when warranted. The excavated hazardous materials will be temporarily stored on a protected surface in the Project Area, and either the Department's licensed hazardous material transport vehicles or a licensed hazardous waste hauler will be retained to evacuate the materials within 24 hours of excavation to a permitted facility for storage, processing or disposal. A final clearance from the ECM is required before the slope grading and subgrade construction work can resume. (ALT 1/ALT 2)
- HAZ-3 In the unlikely event that acutely hazardous materials are identified in the exposed trash, the Hazardous Materials Response Team of the County Environmental Health Department will be immediately notified. The slope grading and subgrade construction will not resume until a final clearance from the Environmental Health Department is issued. (ALT 1/ALT 2)

While grading on the landfill side of the channel's bank could expose buried waste, based on the historical record of the types of accepted waste at the landfill, it is unlikely, that the exposed waste would be considered hazardous. Regardless, through implementation of the RCDWR's hazardous waste emergency response procedures, as identified in the Emergency Action Plan, as well as compliance with mitigation measures HAZ-1 through HAZ-3, which identifies that exposed waste shall be evaluated and addressed by trained personnel, impacts relating to hazardous materials are less than significant.

**FINDING: *Less Than Significant Impact After Mitigation***

- 8b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

During construction there will be a limited risk of accidental release of hazardous materials such as oil, gasoline or other fluids during operation and maintenance of construction equipment. Compliance with State and local hazardous waste control laws such as proper handling, transport, storage, disposal and clean-up of hazardous waste in the event of

accidental releases, would reduce the risk of any damage or injury from these potential hazards to a less than significant level.

Excavation and grading during floodplain construction may accidentally expose buried waste, which may contain hazardous materials. As mentioned in the preceding section (8a), in the unlikely event that hazardous materials are accidentally exposed during excavation, the implementation of mitigation measures HAZ-1 through HAZ-3 would ensure that a swift response is implemented to reduce the risk of hazardous materials from being released into the environment, and therefore would reduce the impact to less than significant.

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

**8c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter-mile of an existing or proposed school?**

The nearest schools to the project site are Centennial High School, located approximately 0.46 miles from the site, and John Stalling Elementary School, located approximately 0.84 miles from the project site. Both schools are a greater distance than one-quarter mile. Therefore no impacts would occur from the emission of hazardous materials or substances within 0.25 of an existing or proposed school.

**FINDING:** *No Impact Identified*

**8d. Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) to compile a list (known as the "Cortese List") of known sites containing hazardous materials and submit to the Secretary for Environmental Protection for the availability to cities, counties and individuals. Review of the CalEPA's Cortese<sup>11</sup> list confirms that; 1) according to the Department of Toxic Substances Control (EnviroStor database) the project site is not located on the list of Hazardous Waste and Substance sites nor is it on the list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 for the Health and Safety Code; 2) the project site is not listed under the State Water Resources Control Board's (SWRCB) GeoTracker website to contain any leaking underground storage tanks; 3) it is not on the list of sites identified with waste constituents above hazardous waste levels outside the waste management unit; and 4) it is not on the list of active Cease and Desist (CDO) or Clean Up and Abatement (CAO) orders under from the Water Board. Thus, the proposed project would not create a significant hazard to the public or the environment.

**FINDING:** *No Impact Identified*

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<sup>11</sup> CalEPA (2014) Cortese List Data Sources. Accessed online, July 23, 2014 at: <http://www.calepa.ca.gov/SiteCleanup/CorteseList>

- 8e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

The project is not located within two miles of a public use airport or an area subject to an airport land use plan. The nearest public use airport is the Corona Municipal Airport, located at 1886 Butterfield Dr. Corona, approximately 4.7 miles from the project site. Therefore, no impacts related to airport safety hazards would occur.

**FINDING:** *No Impacts Identified*

- 8f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

The project is not located within the vicinity of a private airstrip that would result in a safety hazard for people working in the project area. A review of federal aviation airports facilities data show a public airport, only for the landing of helicopters, approximately 11 miles from the project site, located on Riverside County Community Hospital property. Therefore, the proposed project would not result in a safety hazard for people working at the project site. No impacts would occur.

**FINDING:** *No Impacts Identified*

- 8g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

The Corona Landfill is located in an urbanized area and near major transportation corridors, including I-15 and State Highway 91. Since the project does not involve external hazardous features sufficient to pose a major threat to public health and safety or create an environmental impact of catastrophic nature, nor will it require any road closure or detour during construction, it is not expected to interfere with the City's or County's emergency response plan or emergency evacuation plan. As discussed in the above section, the unlikely event of release of hazardous substances during grading of the landfill slope can be safely handled on-site. Access to the site shall be maintained. Therefore, the proposed project would not interfere with an emergency response plan or emergency evacuation plan for the region.

**FINDING:** *No Impacts Identified*

- 8h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands area adjacent to urbanized areas or where residences are intermixed with wildlands?**

The Corona Landfill site is not located within a fire hazard area, as it is surrounded by industrial and residential developments. Existing riparian vegetation within the project channel will not present a fire hazard as this vegetation type is not prone to fire like chaparral and weeds are. In general, the project itself is a drainage repair and will not involve activities and materials that are fire hazardous. Therefore, the project is not

anticipated to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

**FINDING:** *No Impacts Identified*

## 9. Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| g. Place housing within a 100-year flood hazard area as mapped on a federal Flood hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j. Inundation by seiche, tsunami, or mudflow?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**9a. Violate any water quality standards or waste discharge requirements?**

The project is intended to repair and improve the existing conditions of the SE Channel, in order to provide a long-term solution to recurrent erosion of the streambed and channel banks. Besides sediment loading, of particular concern is erosion to the landfill slope that abuts the channel, which could result in discharge of landfill content into surface waters, and thus possibly causing an adverse effect on downstream surface water quality. Due to the current substandard hydraulic attributes of the SE Channel to handle stormwater flows from urban development upstream, overflowing and serious damage to the existing grouted riprap on the banks have been caused by storms much smaller than a 100-year storm magnitude. Either project design alternative can correct the present conditions and improve the hydraulics of the channel to handle stormwater flows from up to a 100-year 24-hour storm event. Therefore, the project will contribute to long-term positive effect on surface water quality.

However, project construction could cause short term impacts to surface water quality from activities such as demolition, grading, cutting etc. which would generate sediment created by soil disturbance which in turn could affect waters, wetlands, and streambed resources downstream from the project site. These short term impacts will be mitigated through implementation of the required Storm Water Pollution Prevention Plan (SWPPP) under the National Pollutant Discharge Elimination System (NPDES) Program, which regulates water quality when associated with construction activities. The SWPPP addresses all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity and controlled through the implementation of BMPs. Effective September 2, 2011, the NPDES's new Construction General Permit (CGP) requires SWPPPs to be prepared for construction sites over one (1) acre of disturbed area. The project will be subject to the CGP requirements for protection of water quality and associated habitat. In addition, during construction, the



project supervisor may implement the following RCDWR standard construction BMPs which include, but are not limited to:

- Earth Dike and Drainage Swales (EC-9)
- Velocity Dissipation Devices (EC-10)
- Slope Drains (EC-11)
- Silt Fence (SE-1)
- Check Dams (SE-4)
- Fiber Rolls (SE-5)
- Street Sweeping and Vacuuming (SE-7)
- Stabilized Construction Entrance / Exit (TC-1)
- Drain Inserts (MP-52)
- Hydroseeding (EC-4)
- Streambank Stabilization (EC-12)
- Clear Water Diversion (NS-5)
- Sediment Trap (SE-3)
- Straw Bale Barrier (SE-9)

Details regarding the listed BMPs can be found in Appendix K. In addition, the RCDWR shall continue to implement the landfill post-closure maintenance program that includes maintenance of the SE Channel and associated water quality protection requirements. Therefore, the project is not anticipated to violate any water quality standard or waste discharge requirements.

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

- 9b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there could be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g. , the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?)**

The proposed project would not change existing land uses to the type that would necessitate the use of groundwater sources from an underlying basin, nor would it require construction of production wells. The project will not require the use of groundwater for either project construction or implementation. Project implementation of Alternative 1 consists of increasing the width of the drainage channel, and installing ACB, which would allow water to filter through the ACB. Alternative 2 would require cementing of the streambed and streambank which might reduce the amount of filtration. Alternative 2 would reduce infiltration from precipitation or from surface runoff from development upstream. The size of the impervious surface in Alternative 2 is small and would not substantially impact recharge to the local groundwater basin such that lowering of the local groundwater table is anticipated. Furthermore, the channel area is not a resource for substantial groundwater recharge. Surface water will continue to percolate in the ground by flowing into natural plant cover basins, open space, and urban landscaped areas upstream and downstream of the project area.

Therefore the proposed project would have a less than significant impact on depletion of groundwater supplies or interference with groundwater recharge.

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

**9c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

The project proposes to construct two small floodplains, approximately 0.72 acre in total, at the southwestern end of the drainage channel along with the application of ACB for erosion control. In order to facilitate construction and improvements on the SE Channel, water may be diverted around active construction areas to locations further downstream. Diversion of the nuisance water is temporary during construction and will resume its natural course once the project is complete. The same would occur during construction of design Alternative 2. Temporary water diversion would be accomplished by re-directing 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.

The conceptual design of Alternative 2 consists of a trapezoidal channel, which tends to confine low flows thus maintaining higher velocities which may decrease the amount of sediment and trash deposits. Second, the concrete channel alternative is also effective in protecting the channel against erosion. Therefore, the project would not result in substantial erosion or siltation on-site.

The existing drainage pattern, for either alternative, would not be substantially altered since water would be allowed to continue its course along the SE Channel alignment both during and after construction of the project. During construction, as explained above, water would be diverted during the construction of both alternatives and would only be temporary. Water would continue its course past the project area into existing concrete channelized tunnels and culverts, thus not resulting in substantial erosion off-site. Therefore, this project is not expected to have a significant adverse impact on the existing drainage pattern and impacts would be less than significant.

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

**9d. Substantially alter the existing drainage pattern of the site or area, including, through the alteration of the course of a stream or river, or substantially increase the rate of amount of surface runoff in a manner, which would result in flooding on- or off-site?**

The proposed project proposes to install an erosion control surface on the eroded banks and bed of the SE Channel for protection from 100-year 24-hour storm events. As such, the project would not result in significant changes in drainage patterns and surface runoff rate and amount with respect to the adjacent landfill unit. In contrast, the absorption rates of the channel's surfaces will be affected by the project, dependent upon which design scenario is installed in the channel. Under the Alternative 1 design, the existing impervious grouted riprap on the banks and certain incised streambed areas will be replaced with an ACB liner, whereby a mesh of chained hollow concrete blocks is laid over a drainage layer

on top of an engineered subsurface along the northern bank and streambed. In addition, the construction of two (2) small floodplains, though ACB-protected, would likely increase the absorption rate of the floodplain areas slightly compared to their existing conditions. Therefore, the overall surface absorption rate of the reconstructed channel is expected to be slightly higher than that of the pre-project channel. Given that the channel's primary function is for regional stormwater drainage, this moderate increase in surface absorption rate is not expected to have an adverse impact on hydrology, channel hydraulics, and drainage patterns.

Conversely, under Alternative 2, the whole length of the current channel, banks and bed, will be lined with concrete, a highly impervious surface. As a result, the overall surface absorption rate of the channel will be lower than that of the pre-project channel. But since the net increase in the impervious surface area is largely limited to the lining of the streambed of the channel, plus several currently unlined portions of the southern bank (not exceeding 1/4 acre in total), when compared to the existing conditions, the resulting net increase in surface runoff volume from the added impervious surfaces is insignificant and more than sufficiently be handled by the increased flow capacity of the channel. Therefore, this project scenario is not expected to have an adverse impact on the hydrology, channel hydraulics, and drainage patterns which would result in flooding on-site or off-site.

**FINDING:** *Less than Significant Impact*

**9e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

The proposed project will improve an existing storm water drainage system and with the construction of the flood plains, slightly increase the capacity of the system. As discussed in the response to question 9(a), the project will comply with NPDES requirements and would not result in significant impacts related to additional sources of polluted runoff; therefore, the project would not create substantial sources of polluted run-off or result in exceeding storm water drainage system capacity.

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

**9f. Otherwise substantially degrade water quality?**

Construction activities related to the proposed project could introduce pollutants, such as gasoline and oil from accidental spills from construction equipment and vehicles in addition to potential sediment into the stream from the project site. As discussed in the response to question 9(a), as part of the development of the proposed project, a SWPPP, in compliance with the NPDES's new Construction General Permit (CGP) as mentioned above, would be prepared, to ensure the proper application of BMPs is enforced to reduce the degradation of water quality. Therefore, impacts would be less than significant.

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

**9g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

The Flood Insurance Rate Map<sup>12</sup> identifies flood hazard areas as Special Flood Hazard Area (SFHA). These areas (SFHA) are defined as areas that would be inundated by a 100-year flood or a flood with a 1-percent chance of occurring. Areas of minimal flood hazard, which are areas outside the SFHA and higher than elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X.

A review of the Flood Insurance Rate Map for the project area, Map No. 06065C1356G, (revised August 8th, 2008) shows the project site to be designated as Zone X- an area that is determined to be outside the 1 percent and 0.2 percent annual chance floodplains or the 100-year flood, and 500-year flood, respectively. Furthermore, there is no housing located on the project site nor is housing proposed as part of project implementation. Thus no housing will be placed within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map.

***FINDING: No Impact Identified***

**9h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

The proposed project does not propose erected structures (buildings, fences etc.) that would impede or redirect flood flows. The project improvements would be below grade, erosion control installation of ACB under design Alternative 1, or lining the entire channel with concrete under design Alternative 2. Furthermore, as explained in (g), above, the project site is outside of the 100-year flood hazard area, and does not propose to build structures which would impede or redirect flood flows. Thus no impacts would occur as a result of project implementation.

***FINDING: No Impact Identified***

**9i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

The proposed project is not located within an area susceptible to flooding as indicated in (g) above, the project site is located in Flood Insurance Rate Map, Zone X, areas designated to be outside the 0.2% annual chance floodplain. The proposed project is intended to reduce erosion during heavy rains and to reduce flooding and improve stream flows. The proposed project would not expose people or structures at a significant risk of loss, injury or death involving flooding.

***FINDING: No Impact Identified***

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<sup>12</sup> Federal Emergency Management Agency, Flood Insurance Rate Maps, Community Panel No. 2028, Map No. 06065C1356G

**9j. Inundation by seiche, tsunami, or mudflow?**

The project is located approximately 27 miles from the Pacific Coast, precluding the possibility of significant impacts from a tsunami. The closest lake is Lake Mathews, approximately 4.2 miles where a potential seiche could occur. According to the City of Corona General Plan, the flow pattern from this dam is westward away from the project site.<sup>13</sup> Furthermore, the project site and project vicinity is relatively flat and urbanized, thus mudflows are not of concern. There will be no impacts related to a seiche, tsunami or mudflow.

**FINDING: No Impact Identified**

**10. Land Use and Planning**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigation an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**10a. Physically divide an established community?**

The proposed project would repair and improve the existing drainage channel and armor the landfill slopes at the closed Corona Landfill. The proposed project will not disrupt or divide the physical arrangement of an established community.

**FINDING: No Impact Is Identified**

<sup>13</sup> City of Corona General Plan, Public Health and Safety, Flood Hazards.

**10b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinances) adopted for the purpose of avoiding or mitigating an environmental effect?**

The Corona Landfill property encompasses a total of 76.86 acres on 7 parcels, all of which are designated as "MU2" (Mixed Use: Industrial & Commercial) in the current City of Corona General Plan (General Plan). According to the City's Zoning Map Book, dated June 12, 2009, the majority of the landfill property is zoned M1 (Light Manufacturing), with the exception of one of the project's parcels, namely, 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.).

The landfill site is surrounded by light industrial and commercial developments on the east, north, and west, and single family residence in the south. The proposal is a drainage maintenance/improvement project, not a project that would change the existing land use. The Corona Landfill will remain as open space after the project. Therefore, the project is consistent with existing zoning and no land use compatibility issues will result.

**Countywide Integrated Waste Management Plan (CIWMP)**

All solid waste projects must be consistent with the goals, policies, and programs of the Riverside Countywide Integrated Waste Management Plan (CIWMP), dated September 1996, which was approved by the CIWMB on September 23, 1998. The CIWMP, which is composed of a Summary Plan, Siting Element, Source Reduction and Recycling Element, Household Hazardous Waste Element, and Nondisposal Facility Element, was prepared in compliance with the Integrated Waste Management Act of 1989 (AB 939, et.seq.) for the purpose of defining programs and policies to reduce waste disposal by 25 percent in 1995 and 50 percent (%) by 2000 through source reduction, recycling, and composting. As such, the CIWMP is primarily a planning and policy document for guiding the existing Countywide solid waste system forward to meet the AB 939 mandates. It does not provide much policy guidance for closed or inactive landfills, such as the Corona Landfill, with the exception in the Siting Element, Policy 2-3, which states that: "Comply with applicable local, state, and federal policies, laws, statues, and regulations in order to protect the public health and the environment from impacts from the solid waste disposal system."

Although no longer in active service of providing waste disposal capacity to the County and city residents and businesses, the Corona Landfill is still an integral part of the Countywide landfill system, as it has some bearing on the system's long-term viability, environmental liability, maintenance obligations, and post-closure financial assurance for landfills under the requirements of CCR, Title 27.

Since the project will facilitate long-term maintenance of the landfill's structural integrity by minimizing erosional damage to the SE Channel and landfill slope, thus ensuring public health and protection of the environment, it is consistent with Policy 2-3 of the Siting Element of the CIWMP and in compliance with post-closure maintenance requirements of Title 27.

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

**10c. Conflict with any applicable habitat conservation plan or natural community conservation plan?**

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

As discussed in detail in Section 4, Biology, question 4(f), with the implementation of mitigation measures BIO-1 through BIO-11, which address biological monitoring, required MSHCP species surveys, replacement/enhancement of jurisdictional features and riparian areas, in addition to the adherence to, or development of, a DBESP, for project design Alternatives 1 and 2 respectively, the project would not conflict with the MSHCP.

**FINDING:** *Less Than Significant Impact After Mitigation*

**11. Mineral Resources**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**11a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

The Surface Mining and Reclamation Act (SMARA) provides the standard method for classifying areas that may contain mineral resources of local or statewide importance. The Corona General Plan, Technical Report was consulted to assess the presence of areas containing mineral resources in the project site. Zones that are classified as MRZ-2 are areas having regional or statewide significance. Areas mapped as MRZ-2 are located west of Highway 71 and north of SR-91.

The Mineral Resource Zone Classification for the project site is MRZ-2a and b for crushed stone and sand & gravel. The site does not appear to be "Designated" as being of regional or statewide significance for mineral resources. Therefore, no impact to mineral resources of value to the region and the residents of the state would occur as a result of the proposed project.

**FINDING: No Impacts Identified**

**11b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

According to the City of Corona General Plan there is a substantial amount of minerals available within the City, occurring in the hillsides east of Temescal Creek and in the Santa Ana Mountains. However the project site is not located in an area where mining reclamation would occur. Thus the result of the loss of availability of a locally important mineral resource recovery site would not result from the implementation of this project.

**FINDING: No Impacts Identified**

**12. Noise**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



- f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

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A Noise Impact Analysis Report was prepared by Kunzman Associates Inc., dated July 2015, which assessed the noise and vibration impacts that may occur with the construction of the proposed Corona SE Channel Project. Notwithstanding that this project is a public project on County property, and applicable County of Riverside entitlements and standards apply, the Report also identified applicable City of Corona policies and ordinances for discussion purposes. Noise measurements were taken on the project site adjacent to the closest residential properties. Ambient noise levels were compared to modeled noise levels that would occur during construction of the proposed project in order to assess noise impacts. The analysis that follows was based on the results of the Report.

- 12a. **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies?**

Construction

The proposed project consists of erosion control improvements and widening of the SE channel. Construction activities would generate noise typically associated with this type of construction such as excavation, grading, and hauling of material. Construction noise levels would only be temporary and intermittent during construction depending on the nature or phase of construction and when the activities are being performed (See Appendix J, Noise Impact Analysis).

The proposed use is not considered a noise-sensitive use; however, noise standards applicable to the project are the Riverside County General Plan, and Ordinance No. 847, *Regulating Noise*, codified under Chapter 9.52, Section 9.52.020 of the County of Riverside Municipal Code (both are used interchangeably). Although public projects are not subject to Ordinance No. 847 during construction, the project will comply with the restrictions addressing construction hours contained within the ordinance.

The County of Riverside General Plan lists the following policies (enumerated in bold, followed by a consistency discussion) related to noise impacts which are applicable to the SE Channel project:

- N 1.4** Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

The project is not a land development project that would generate noise past the initial construction phase. Compatibility of land uses most aptly applies to land uses such as residential, commercial, or industrial, where people will live or work, paired with other land uses, that if incompatible (such as siting multifamily housing next to a commercial railroad hub) would result in noise impacts in conflict with Land Use Compatibility Matrix of the County of Riverside General Plan Noise Element. Notwithstanding, a site survey (noise

study) was conducted by Kunzman Associates Inc., in June 2015, in compliance with this policy. The Project will not result in noise incompatibility issues with surrounding uses.

- N 1.5** Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

Several mitigation measures were developed to prevent and mitigate noise impacts on surrounding uses. With the implementation of the project's mitigation measures, noise impacts on surrounding uses are expected to be less than significant.

- N 12.1** Minimize the impacts of construction noise on adjacent uses within acceptable practices.

Construction noise impacts on adjacent uses will be minimized primarily by: 1) the installation of temporary sound barriers; and, 2) limiting construction activities between the hours of 7:00AM to 6:00PM, in compliance with Ordinance No. 847.

- N 12.2** Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.

Construction hours for the project shall be in compliance with Ordinance No. 847 (see mitigation measure N-1 for specific hours).

- N 12.4** Require that all construction equipment utilizes noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

Mitigation measure N-2 specifically addresses this policy.

The proposed project is consistent with applicable County policies and ordinances and will therefore, not result in significant noise impacts associated with inconsistency with the County General Plan policies or a violation of County Code.

#### Operation

Long-term operation of the proposed facility would not involve the use of any major stationary noise sources or activities. No impact would occur. No mitigation is required.

#### **MITIGATION MEASURES:**

- N-1 Although not required as a public project, the project construction manager, in accordance with Ordinance No. 847, shall limit construction activities to between the hours of 6:00AM and 6:00PM, during the months of June through September; and between the hours of 7:00AM to 6:00PM during the months of October through May. (ALT 1/ALT 2)

- N-2 All equipment, fixed or mobile, used on site during project activities shall be equipped with properly operating and maintained mufflers to the satisfaction of the Riverside County Health Services Agency, Occupational Health and Safety Department and RCDWR. (ALT 1/ALT 2)
- N-3 The project shall mandate that the construction contractor prohibit the use of music or sound amplification on the project site during construction. (ALT 1/ALT 2)
- N-4 Equipment operators and other facility personnel subject to excessive noise levels will be provided with hearing protection (i.e., ear plugs, etc.). Equipment operators are required to wear ear protection in open cabs. (ALT 1/ALT 2)
- N-5 During project construction, the use of heavy equipment adjacent to parcels 107-201-021, 107-201-022 and 107,201,023 shall not occur on Saturday or Sunday. (ALT 1/ALT 2)
- N-6 Contractor shall comply with RCDWR's Idling Policy, which states that no diesel on-road vehicle, equipment, or engine that is used for any Department operation in an off-road capacity may idle for more than five (5) consecutive minutes. (ALT 1/ALT 2)
- N-7 Delivery of equipment and materials to the project site shall occur between the hours of 7:30AM to 4:30PM. (ALT 1/ALT 2)
- N-8 For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign shall be posted at the project site with the contact phone number. (ALT 1/ALT 2)

As shown, the project is consistent with the County of Riverside General Plan. Although this project is a public project and not subject to Ordinance No. 847, the project will comply with the restrictions addressing construction hours as stated in the ordinance, and with implementation of mitigation measures N-1 through N-8, which include limiting construction hours, prohibiting music or sound amplification, requiring workers to wear hearing protection, enforcing RCDWR's idling policy and prohibiting the operation of heavy equipment on Saturday or Sunday within specific parcels in close proximity to residences, impacts relating to excessive noise would be mitigated to less than significant.

***FINDING: Less Than Significant Impact After Mitigation***

**12b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?**

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibration that spreads through the ground and diminishes in strength with distance. Buildings respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table N1 gives approximate vibration levels for particular construction activities. Typically, Peak Particle Velocity (PPV) is used to

describe vibration. This data provides a reasonable estimate for a wide range of soil conditions.

**Table N1  
Vibration Source Levels for Construction Equipment**

<b>Equipment</b>	<b>Peak Particle Velocity (inches/second) at 25 feet</b>
	1.518 (upper range)
Pile driver (impact)	0.644 (typical)
	0.734 upper range
Pile driver (sonic)	0.170 typical
Clam shovel drop (slurry wall)	0.202
Hydromill	0.008 in soil
(slurry wall)	0.017 in rock
Vibration Roller	0.21
Hoe Ram	0.089
Large bulldozer	0.089
Caisson drill	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003

Source: Noise Impact Analysis, Kunzman Associates Inc.

Due to the proximity of the single-family detached residential dwelling units south of the project, construction activities associated with either project alternative may result in ground borne vibration that is noticeable, but would be limited to activities within 100 feet of sensitive receptors and would only occur during site grading and preparation activities.

As shown in Table N2, the threshold at which there may be a risk of architectural damage to normal houses with plastered walls and ceilings is 0.20 PPV, relative to the distance and the equipment used. For example, it is possible for a vibration roller to cause architectural damage to a home if it is operating at 10 feet, but if the same vibratory roller is operating at 150 feet away from the property, damage to the home is unlikely. The primary source of vibration during construction would be from the use of the medium dozer. As shown in Table N1, a large dozer could produce up to 0.089 PPV at 25 feet. Under either project alternative, use of vibratory equipment within 25 feet of adjacent residential structures and improvements could result in structural damage. However, construction activities will *not* occur within 25 feet of any of the adjacent properties. To ensure that all construction activity is restricted from being conducted within 25 feet, mitigation measure N-9 shall be implemented, which requires a 30 foot buffer from the construction site to residences along the SE channel alignment.

**Table N2  
Typical Human Reaction and Effect on Buildings Due to Groundborne Vibration**

<b>Vibration Level Peak Particle Velocity (PPV)</b>	<b>Human Reaction</b>	<b>Effects on Buildings</b>
0.006-0.019 in/sec	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08 in/sec	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10 in/sec	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20 in/sec	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling - houses with plastered walls and ceilings
0.4-0.6 in/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Noise Impact Analysis, Kunzman Associates Inc.

**MITIGATION MEASURES:**

- N-9 Construction contractor shall delineate and maintain a 30 foot buffer between construction activities and the residences adjacent to SE channel alignment. (ALT 1/ALT 2)

During the construction of the project, standard construction equipment will be utilized to remove vegetation, grade the site, and either install ACB or construct the concrete channel. Noise and vibration generated by the construction of the project may increase; however, due to the temporary and short duration of varying phases of construction, limited amount of construction equipment, limited work space, restricted construction hours, and with implementation of mitigation measures N-1 through N-8, as well as N-9, which requires a 30-foot buffer from the construction site to residences along the SE channel alignment, impacts resulting from ground-borne vibration or ground-borne noise would be less than significant.

**FINDING:** *Less Than Significant Impact After Mitigation*

**12c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

The project is expected to temporarily increase the landfill site's ambient noise levels during construction of the drainage improvements. The increases in ambient noise levels and associated impacts are not expected to be significant because of the low level equipment use and temporal nature of the project. Upon construction of the drainage improvements, the project site will continue to function as a closed landfill and storm water drainage channel for urban run-off; therefore, the project will not result in a substantial permanent increase in ambient noise levels in the project vicinity.

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

**12d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

Construction of the south floodplain portion of the channel under design Alternative 1, has the potential to be the most noise intensive phase of either design Alternative. The activity will only occur for a period of less than three days. The construction project is linear in nature and will move away from sensitive receptors during the duration of the construction project. While noise levels will be higher than ambient during construction of the project, public projects are exempt from the noise standards and thresholds established under Ordinance No. 847 during construction. Regardless, mitigating factors such as (1) the noise magnitude from the construction equipment used during construction will be less than the highest magnitude noise generating equipment, e.g., pile drivers, jack hammers etc.; (2) the time of occurrence when the project will take place will be during a time allowed by the County Noise ordinance, and a time when people are less susceptible to noise; and, (3) the short duration of the project, ensures that surrounding residents will not be significantly impacted by the Project.

To further reduce ambient noise levels for surrounding residences, temporary sound barriers will be installed along the southern property line, as required under mitigation measure N-10. Additionally, operation of heavy construction equipment will not be allowed on Saturday or Sunday within the project area south of the SE Channel, as identified in mitigation measure N-5.

**MITIGATION MEASURE:**

N-10 Construction contractor shall construct/install a temporary sound barrier along the southern property line where it meets parcels 107-201-007 and 107-201-011 and where feasible, along any other residential properties directly adjacent to the landfill property where there is currently no solid barrier. (ALT 1/ALT 2)

With the three mitigating factors discussed above; magnitude, time of occurrence and duration of the project, in addition to implementation of mitigation measures N-1 through N-10, which include limiting construction hours, prohibiting music or sound amplification, enforcing RCDWR's idling policy, prohibiting the operation of heavy equipment on Saturday or Sunday within specific parcels in close proximity to residences, delineation of a 30-foot

construction buffer, and installation of a sound barrier, impacts relating to ambient noise would be mitigated to less than significant.

**FINDING:** *Less Than Significant Impact After Mitigation*

- 12e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

The Riverside County Airport Land Use Compatibility Plan Policy Document establishes policies applicable to land use compatibility planning in the vicinity of airports throughout Riverside County. The project area falls outside of the area of influence for the Corona Municipal Airport, which is approximately 4.7 miles from the project site. The project would not expose people residing or working in the project area to excessive noise levels.

**FINDING:** *No Impact Identified*

- 12f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

The proposed project is not located within the vicinity of a private airstrip that would expose people residing or working in the project area to excessive noise levels. The nearest airport is a public use airport located approximately 4.7 miles from the project site. The proposed project would not expose people to excessive noise levels emitted from a private airstrip.

**FINDING:** *No Impact Identified*

### 13. Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?
- 

**13a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The project does not propose a land use change, or propose new housing or business development. The project consists of a drainage improvement to reduce erosion and improve water flows. Additionally, the proposed project does not propose new infrastructure, roads, rail, airports or any other type of infrastructure that would induce population growth. The proposed project is in place to fulfil an existing condition. No impacts are identified.

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

**13b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

The project would consist of drainage improvements to reduce erosion and increase the amount of water flow to reduce flooding in the SE Channel of the Corona Landfill. 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. No housing units would be displaced as a result of the project, nor necessitate the construction of replacement housing elsewhere. No impact is identified.

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

**13c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?**

The proposed improvements to the landfill slopes and SE Channel would not result in any displacement of people or require replacement housing elsewhere.

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



## 14. Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response time or other performance objectives for any of the public services:				
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Fire protection?

The proposed improvements to the landfill slopes and SE Channel would not have an effect upon, or result in, a need for new or altered fire protection services. The project would not impact acceptable service ratios, response times, or performance objectives.

**FINDING: No Impact Is Identified**

### Police protection?

The project will not impact police protection services. The project would not impact acceptable service ratios, response times, or performance objectives.

**FINDING: No Impact Is Identified**

### Schools?

The project is not a growth-inducing development; therefore, it will not generate additional students to the local school districts.

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

**Parks?**

The project is not a growth-inducing development; therefore, it will not generate the need for new parks to satisfy the city’s open space requirements.

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

**Other public services/facilities?**

Although the project will generate some truck-haul traffic, the traffic level is not significant. In addition, the Corona Landfill site is located within an industrial area equipped with commensurate transportation infrastructure. Therefore, no adverse effects upon maintenance of public roads from the project are expected.

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

**15. Recreation**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**15a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

The project will not induce population growth; therefore, it will not increase the demand for neighborhood or regional parks or other recreational facilities. Furthermore, neither the

project construction nor operation will impact any recreational facilities.

**FINDING: No Impact Is Identified**

**15b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

The project will not result in a need for recreational opportunities. Therefore, it will not affect existing recreational opportunities for the residents in the area.

**FINDING: No Impact Is Identified**

**16. Transportation and Traffic**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Alter waterborne, rail or air traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

uses (e.g., farm equipment)?

- e. Result in inadequate emergency access?
- f. Conflict with adopted policies, plans, or programs regarding public transit, bicycles, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

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The following traffic and circulation analysis is based on the July 2015 Traffic Analysis report prepared by Kunzman Associates Inc. The report analyzed the construction activities for both alternatives to assess potential traffic and transportation impacts from the proposed SE Channel Improvement project<sup>14</sup>. The Traffic Impact Analysis is included as Appendix H. Traffic generated from the proposed project was analyzed for the following four (4) intersections:

- 1) Magnolia Avenue (EW) and I-15 Freeway SB (NS)
- 2) Magnolia Avenue (EW) and I-15 Freeway NB (NS)
- 3) Magnolia Avenue (EW) and El Camino Avenue (NS)
- 4) Magnolia Avenue (EW) and Sherborn Street (NS)

**16a/b Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system; or conflict with an applicable congestion management program?**

Existing weekday morning and evening peak hour traffic counts were collected for the project. The weekday peak hour traffic volumes reflect typical weekday operations during current conditions. Level of Service (LOS) standards are used to indicate the quality of traffic flow on street or highway systems and the capacity of a roadway. LOS ranges from LOS "A" (free flow, little congestion) to LOS "F" (forced flow, extreme congestion). Study area intersections currently operate at acceptable Levels of Service during the peak hours for existing traffic conditions.

The Corona Landfill is located south of the junction of Magnolia Avenue and Sherborn Street, immediately adjacent to I-15. 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. Magnolia Avenue is an east-west 6-lane divided roadway classified as a Major Arterial and Truck Route on the City of Corona General Plan Circulation Element, and an Urban Arterial on the County of Riverside General Plan. It currently carries approximately 19,400 to 46,600 vehicles per day in the study area. Sherborn Street is a north-south two-lane undivided roadway and is unclassified on the City of Corona General

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<sup>14</sup> 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 represent an itemized accounting of all Project activities. A list of the assessed activities/phases is located in the Appendix H, Traffic Impacts Analysis.

Plan Circulation Element. It currently carries approximately 2,700 vehicles per day in the study area.

### Multimodal

The regional transit operator, Riverside Transit Authority has 4 lines that serve the City of Corona, however, none of the lines service the project intersections mentioned above. The City of Corona's shuttle bus service, the 'Corona Cruiser-Blue Line,' services Magnolia Avenue and traverses the intersections mentioned above, carrying passengers north-south along Main St. before turning east bound along Magnolia Ave. to the terminal at the corner of Promenade Ave. and McKinley St.

According to the City of Corona Bicycle Master Plan, the city presently has few bikeways and nothing that could be called a bikeway network.

Pedestrian circulation is very minimal and is limited to a small number of people walking intermittently from their point of origin to their destination. The project area intersections are not prominent pedestrian circulation nodes.

The multimodal circulation system would not be adversely impacted by the proposed project.

### Traffic Analysis

The proposed project would only consist of a demolition and construction component, and would not have an operational component. The construction phase of the proposed SE Channel project will involve construction workers traveling to and from the site and deliveries of equipment and export of refuse to local landfills and import of borrow material. However, the increase in worker trips would not last for longer than the duration of the construction period and, as such, would only result in a temporary increase in traffic.

Activity 6, (subgrade construction and dirt hauling) for Alternative 1, represents the worst case scenario, which has the highest daily trip generation for both worker vehicles and dump truck deliver/export trips. Under this worst case scenario the proposed project is projected to generate a maximum total of approximately 142 daily vehicle Passenger Car Equivalent trips of which 32 Passenger Car Equivalents will occur during the morning peak hour and 18 Passenger Car Equivalents of which occur during the evening peak hour as shown in Table T-1.

Activity 3 (vegetation removal, grouted riprap demolition and hauling of borrow material) represents the worst case scenario for Alternative 2. This activity would consist of the highest amount of worker trips and dump truck haul trips. The proposed development is projected to generate a maximum total of approximately 110 daily vehicle Passenger Car Equivalent trips of which 26 Passenger Car Equivalents will occur during the morning peak hour and 16 Passenger Car Equivalents of which occur during the evening peak hour as shown in Table T-2.

**Table T-1  
Alternative 1 Peak Hour Worst Case Scenario Phase/Activity**

Land Use	Trips	PCE Factor	Units	Peak Hours						Daily
				Morning			Evening			
				Inbound	Outbound	Total	Inbound	Outbound	Total	
Phase/Activity 6	30	1	PCE	10	0	10	0	10	10	30
	56	2	PCE	11	11	22	4	4	8	112
	0	3	PCE	0	0	0	0	0	0	0
<b>Total</b>	<b>86</b>			<b>21</b>	<b>11</b>	<b>32</b>	<b>4</b>	<b>14</b>	<b>18</b>	<b>142</b>

Source: Focused Traffic Analysis, Kunzman Associates Inc.

**Table T-2  
Alternative 2 Peak Hour Worst Case Scenario Phase/Activity**

Land Use	Trips	PCE Factor	Units	Peak Hours						Daily
				Morning			Evening			
				Inbound	Outbound	Total	Inbound	Outbound	Total	
Phase/Activity 3	30	1	PCE	10	0	10	0	10	10	30
	40	2	PCE	8	8	16	3	3	6	80
	0	3	PCE	0	0	0	0	0	0	0
<b>Total</b>	<b>70</b>			<b>18</b>	<b>8</b>	<b>26</b>	<b>3</b>	<b>13</b>	<b>16</b>	<b>110</b>

Source: Focused Traffic Analysis, Kunzman Associates Inc.

Intersection Analysis Methodology

Level of Service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Highway Capacity Manual (HCM) analysis methodology is utilized to determine the operating LOS of the study intersections as shown in Table T-3.

**Table T-3  
LOS Thresholds**

Level of Service	Volume to Capacity Ratio
A	0.000 - .60
B	0.61 - 0.70
C	0.71 - 0.80
D	0.81-0.90
E	0.91 - 1.00
F	>1.01

Source: Focused Traffic Analysis, Kunzman Associates Inc.

It is the policy of Riverside County to maintain a countywide target LOS "C" along all County maintained roads and conventional state highways, with the exception of LOS "D" that may be allowed at any combination of Major Arterials, Expressways, or conventional State Highways as specified in the County of Riverside Congestion Management Plan, 2011. When a project causes the existing traffic to exceed the level of service designated for that roadway, it is not consistent the policies and goals of the congestion management program and therefore would be considered a significant impact.

Consistent with County of Riverside guidelines, an impact is considered significant if the proposed project causes an intersection to drop below the target Levels of Service as described above. The project would contribute less than one (1) percent of the existing average daily trips (as shown in Table T-4) and the duration for the maximum traffic impacts associated with the project under this worst case scenario would only be for five (5) days. Currently (at the time the focused traffic analysis was conducted) roadway intersections operate at LOS A, except for the Magnolia Avenue (West of I-15 Fwy to I-15 Fwy), which operates at LOS D. The traffic generated from the SE Channel project would maintain the existing level of service for all intersections, as shown in Table T-4; therefore, the project would not have a significant impact on the performance of the circulation system, as assessed using LOS.

**Table T-4  
Existing Roadway Capacity plus Project Generated Traffic**

Roadway	Capacity	ADT	Existing Condition V/C	Current Level of Service	Total ADT from Alternative 1, Phase 6	Existing plus project generated traffic V/C	Exceeded LOS Threshold with project ADT?
Magnolia Avenue (West of 1-15 Fwy to 1-15 Fwy)	53,900	46,600	0.86	D	142	0.86	No Impact
Magnolia Avenue 1- (15 Fwy to El Camino Ave)	53,900	32,200	0.60	A	142	0.60	No Impact
Magnolia Avenue El (Camino Avenue to Sherborn Street)	53,900	22,000	0.41	A	142	0.41	No Impact
Magnolia Avenue (Sherborn St. to East of Sherborn)	53,900	19,400	0.35	A	142	0.36	No Impact

Source: Focused Traffic Analysis, Kunzman Associates Inc.

Left Turn Lane Analysis

Kunzman Associates Inc., as part of the focused traffic analyses, also conducted a left turn lane analysis to assess the need for an increase in the left lane storage length at Magnolia Ave. In general, a left lane is needed for conditions with more than 100 turning vehicles per hour, and dual left turn lanes are recommended if the left turn volume exceeds 300 vehicles per hour during peak hours. Eastbound and westbound left hand turn storage lengths on Magnolia Avenue were analyzed by Kunzman Associates Inc., to verify the storage capacity. The analysis found that the left turn storage lanes at westbound I-15 Freeway SB

Ramps/Magnolia Avenue and westbound El Camino Avenue/Magnolia Avenue, as well as left turn storage at westbound El Camino Avenue/Magnolia Avenue intersection (the project would not add left turns westbound El Camino Avenue/Magnolia Avenue) currently appear to provide, without the project, inadequate storage for turning vehicles during peak hours for existing traffic conditions.

In general, in order to improve circulation, left turn storage capacity is needed at both intersections, westbound I-15 Freeway SB Ramps/Magnolia Avenue and westbound El Camino Avenue/Magnolia Avenue, which currently provide inadequate storage capacity for turning vehicles during peak hours. The proposed project, however, does *not* contribute left turn traffic to the I-15 Freeway SB Ramps and Magnolia Avenue intersection during the morning peak hours. However, it would contribute three (3) vehicles during the evening peak hour, which is less than one percent of the turning vehicles and is statistically insignificant for a short-term maintenance/upgrade project. Furthermore, the project does *not* contribute left turn traffic to the El Camino Avenue and Magnolia Avenue intersection. Therefore, improvements to left turn lanes within the project study are not warranted based on the insignificant and short-lived- 5 days vehicle trips generated, based on the worst case scenario, from the Project.

#### Conclusion

As mentioned above, the traffic generated from the SE Channel project would not change the current traffic LOS conditions, as shown in Table T-4, and improvements to left turn lanes within the project study are not warranted. In addition, the total project duration for either option is approximately 50 days. Therefore, impacts associated with the performance of the circulation system will be less than significant.

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

#### **16c. Alter waterborne, rail or air traffic?**

The project area is not located in an Airport Master Plan and will not require review by the Airport Land Use Commission. The project involves improvements to a closed landfill and small storm water drainage channel. There will be no impacts to air or waterborne traffic. An AT & SF Railroad track runs adjacent to and along the entire length of the northeastern border of the landfill site and passes over the outlet of the SE Channel on a truss bridge. The railroad track and the truss bridge are outside of the project's construction footprint; therefore, these rail facilities will not be impacted. However, completion of the Project will improve drainage within the site, thereby lending protection to the truss bridge and railroad tracks from flooding events.

The subgrade dirt import traffic will cross the railroad track at Sherborn Street to access the drainage site. That is an active level crossing and equipped with 2 boom gates and flashing signals. Therefore, the grade crossing at Sherborn Street by the project's hauling trucks is safe. Haul trucks shall comply with standard procedures for loading, unloading, and hauling material. Loads will be properly covered and secured, in accordance with all applicable motor vehicle codes.



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

**16d.   Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

The project is a drainage improvement operation at a closed landfill site and will not involve design features that would result in hazards to vehicular traffic on roadways. For construction on the south side of the channel, a few pieces (no more than 4) of off-road equipment may need to be transported by truck to the vacant parcels through the residential neighborhood south of the landfill property. Occasionally, it may be necessary to haul materials to or out of the south side of the channel thru the same residential neighborhood. This will generate some truck traffic on residential streets, particularly on Bel Air Street, which provides vehicular access to the three County-owned vacant parcels on the south side of the channel (APN's 107-201-008, 107-201-009, and 107-201-010). The contractor shall implement the following mitigation measures to ensure project traffic safety in residential neighborhood.

***MITIGATION MEASURES:***

- T-1    Equipment and material transport traffic shall be limited to 15 mph on residential streets en route to and from the south side of the project channel. (ALT 1/ALT 2)
- T-2    Appropriate truck traffic signs shall be posted by the contractor along the truck route within the residential neighborhood to alert pedestrians and bicyclists of temporary heavy truck traffic thru their neighborhood. (ALT 1/ALT 2)
- T-3    Where necessary, flagmen shall be provided by the contractor at critical locations to direct/separate residential and truck traffic to ensure safety. (ALT 1/ALT 2)
- T-4    At the end of the work day, the contractor shall inspect the residential haul route for debris or litters fall-out from the hauling trucks. All dropped debris and litters shall be picked up and removed from the neighborhood. (ALT 1/ALT 2)
- T-5    When warranted, the contractor shall clean up the dirt track-out created by the project's vehicles on Bel Air Street at the end of the work day. (ALT 1/ALT 2)

As stated in the analysis section, the project will not involve design features that would result in hazards to vehicular traffic on roadways. However, the project may need to utilize Bel Air Street as an access point to the County-owned parcels. The use of Bel Air Street will be limited in duration, approximately 1 to 2 days, and will only occur during construction of the south floodplain. As described in mitigation measures T-1 through T-5, traffic will be limited to 15 mph, appropriate truck traffic signs will be provided, and when necessary, flagmen will be provided as well as inspection of Bel Air Street for signs of track-out debris or litter fallout. These mitigation measures will reduce the hazards due to dangerous intersections or incompatible uses to less than significant.

**FINDING:      *Less Than Significant Impact After Mitigation***

**16e. Result in inadequate emergency access?**

The project site will have three gated access points: Landfill entrance at Downs Way; vacant parcels entrance at Bel Air Street; and southeast entrance from Sherborn Street. Therefore, there will be adequate emergency access or access to nearby uses.

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

**16f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

There are no designated bike lanes or pedestrian trails located in the vicinity of the landfill. Alternative transportation policy does not apply to the project. No impacts are identified and no mitigation will be required.

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

**17. Utilities and Service Systems**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Comply with federal, state, and local statutes and regulations related to solid waste?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**17a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

The proposed project would repair the north slope of the Corona SE channel, and would extend the north and south floodplains at the west end of the channel. Furthermore, the Corona SE channel improvement project is not a development project, with land uses that would necessitate wastewater treatment services. Therefore, it wouldn't exceed applicable Regional Water Quality Control Board wastewater treatment requirements.

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

**17b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The proposed project is a construction project that would repair the north slope of the Corona SE channel and extend the north and south floodplains at the west end of the channel. The project would not necessitate wastewater treatment services, and therefore would not require or result in the construction of new water or waste water treatment facilities. No impact would occur as a result of the proposed project.

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

**17c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The project itself is a repair and improvement action to minimize erosional impacts to an existing storm water drainage channel and will not result in a need for new storm water drainage facilities.

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

**17d. Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?**

Water for project construction will be obtained from a hydrant adjacent to the project site. The RCDWR will coordinate with the City of Corona for use of the hydrant, and obtain a temporary construction meter. At no time shall the use of the hydrant interfere with emergency access/use of the hydrant. Water will be pumped into a water tower, located on the project site. A 3,500 gallon water truck will be utilized during construction, and it is estimated that at most, up to three truckloads of water will be used daily for dust suppression and moisture conditioning for engineered fill. Since there is no operational phase (construction only), there is no need for an on-going water source related to the project. Water needs for the project are negligible and based on the project size and limited construction period, sufficient water supplies are available for construction purposes. No new water entitlements, or expansion of entitlements are required.

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

**17e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

The project does not require waste water treatment and would not increase the demand for wastewater treatment services. No impacts are identified.

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

**17f/g Be served by a landfill system with sufficient permitted capacity to accommodate the project's solid waste disposal needs; Comply with federal, state, and local statutes and regulations related to solid waste?**

The project is part of the post-closure maintenance program for the Corona Landfill, providing long-term protection of the SE Channel. Development of the proposed project would generate solid waste during the construction phase, for which it would be serviced by multiple landfills including Badlands, Lamb Canyon, and the El Sobrante landfills, which are not expected to reach capacity until 2024, 2021, and 2045 respectively. During construction, the proposed project will not generate significant amounts of solid waste as to exceed local landfill capacity. Therefore, the project will not result in a need for new solid waste systems, or substantial alterations to existing solid waste disposal system. Furthermore, the project itself is a direct result of compliance with state and local statutes and regulations regarding solid waste.

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

## 18. Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**18a Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

As indicated in the preceding analysis, through project design, adherence to standard regulatory practices and compliance with proposed mitigation measures as listed throughout this document, no significant impacts are expected to occur. As such, implementation of the Project would not degrade the quality of the environment, reduce the habitat of fish or wildlife species or cause their population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major

periods of California history or prehistory. Therefore, the impact is considered less than significant.

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

- 18b Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulative considerable” means that the incremental effects of a project are considerable when viewed in connection with effects of past projects, the effects of other current projects, and the effects of probable future projects)**

Due to the project’s size and temporal nature (no on-going/operational impacts), there are no impacts that are cumulatively considerable as it relates to past, current, or probable future projects.

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

- 18c Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

The project involves the repair and improvement of the Corona Landfill and the SE Channel, which left unchecked, may result in impacts to downstream resources that could have a negative effect on habitat and people. Therefore, the project mitigates the potential for substantial adverse effect to both humans and natural habitat. As assessed in this EA, no substantial adverse environmental effects on human beings, directly or indirectly, are anticipated to occur as a result of this project.

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

## Summary of Mitigation Measures

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The following environmental factors are determined to have *A Less than Significant Impact After Mitigation*: Biological Resources, Cultural Resources, Hazards & Hazardous Materials, Hydrology and Water Quality, Noise, and Traffic and Transportation.

### Biological Resources

- 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. (ALT 1/ ALT 2)
- 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, appropriate avoidance measures shall be adopted to avoid any potential impacts.~~ (ALT 1/ALT 2)
- BIO-3 If LBV are detected within or in close proximity to the worksite, all work that could potentially impact the LBV will be stopped until the biologist determines that the LBV has left the site. ~~If needed, relocation of LBV shall only occur after consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), following all USFWS and CDFW relocation protocols.~~ (ALT 1/ALT 2)
- BIO-4 Within 30 days prior to construction or disturbance activities, a burrowing owl clearance survey shall be conducted within suitable areas in the construction areas, including a 150 meter buffer area. (ALT 1/ALT 2)
- BIO-5 If any burrowing owls or occupied burrows are found during the burrowing owl preconstruction survey, no disturbance will occur within 50 meters of occupied burrows during the non-breeding season of September 1 through January 31 or within 75 meters during the breeding season of February 1 through August 31. If construction or ground disturbance must occur within the specified no disturbance areas a qualified biologist may relocate affected burrowing owls only during the non-breeding season and after approval from the California Department of Fish and Wildlife. (ALT 1/ALT 2)
- BIO-6 In order to avoid impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA) and State Fish and Wildlife Codes, removal of vegetation or any other potential nesting bird habitat should be conducted outside of the avian nesting season (February 1<sup>st</sup> through August 31<sup>st</sup>) if practical. If habitat must be cleared during the nesting season, a preconstruction nesting bird survey shall be conducted by a qualified biologist. If nesting activity is observed, appropriate avoidance measures shall be adopted to avoid any potential impacts to nesting birds. (ALT 1/ALT 2)
- BIO-7 All LBV and riverine/riparian habitat that will remain undisturbed during and after implementation of the proposed project shall be enhanced by treating and monitoring

for target non-native invasive species. A Habitat Mitigation and Monitoring Plan shall be prepared during the permitting process. (ALT 1)

- BIO-8 To offset the permanent loss of potential LBV habitat, approximately 1.64 acres of riverine/riparian habitat will be created at the Pedley Landfill restoration site. Success of the restoration site will be ensured through an Invasive Species Management and Monitoring Plan that shall be produced during the resource agency permitting process. (ALT1/ALT2)
- BIO-9 For Alternative 2, if selected, in addition to the off-site creation of the 1.64 acres of riverine/riparian habitat created at the Pedley Landfill restoration site, RCDWR shall contribute to an approved in-lieu fee payment or mitigation banking program, at a minimum of a 1:1 ratio, with the exact ratio negotiated with the resource agencies during the 1602 Streambed Alteration Agreement and Clean Water Act sections 401/404 permitting process. (ALT2)
- BIO-10 The Riverside County Department of Waste Resources shall comply with the terms and mitigation measures described in the approved DBESP written by the Riverside County Planning Department Environmental Programs Division on October 1, 2014 and approved by the USFWS and the CDFW. (ALT 1)
- BIO-11 Prior to initiation of construction activities within MSHCP riverine/riparian areas, the Riverside County Department of Waste Resources shall submit a new DBESP to USFWS and the CDFW for review and approval. Construction activities shall not occur within MSHCP riverine/riparian areas until the DBESP is approved. (ALT 2)
- BIO-12 Prior to project construction, a Streambed Alteration Agreement (SAA) shall be reached between the California Department of Fish and Wildlife (CDFW) and the Riverside County Department of Waste Resources (RCDWR) regarding mitigation for direct loss of 0.10 or 0.57 acre of jurisdictional streambed and 0.72 acre or 1.99 acres of CDFW wetlands from the project under the ACB or Concrete Channel scenario, respectively. The SAA will require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the CDFW. (ALT1/ALT2)
- BIO-13 Prior to project construction, a Clean Water Act Section 404 Permit shall be obtained from the US Army Corps of Engineers (USACE) and the RCDWR regarding mitigation for direct loss of 0.05 or 0.39 acre of Waters of the US and 0.28 or 0.72 acre of jurisdictional wetlands from the project under the ACB or Concrete Channel scenario, respectively. The 404 Permit will require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the USACE. (ALT1/ALT2)
- BIO-14 Prior to project construction, a Clean Water Act Section 401 Certification shall be obtained from the Santa Ana Regional Water Quality Control Board (SARWQCB) and the RCDWR regarding mitigation for direct loss of 0.05 or 0.39 acre of Waters of the US and 0.28 or 0.72 acre of jurisdictional wetlands from the project under the ACB or Concrete Channel scenario, respectively. The 401 Certification may require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-



lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the SARWQCB. (ALT1/ALT2)

## **Cultural Resources**

- CR-1 If subsurface cultural resources are encountered during any excavation, or if evidence of an archaeological site or other suspected historic resources are encountered, all ground disturbing activity will cease within 100 feet of the resource. A qualified archaeologist will be retained by the operator to assess the find, and to determine whether the resource requires further study. Additionally, any potentially significant cultural resource(s), discovered on site shall require notification to the three (3) requesting Tribes under AB 52. Potentially significant cultural resources could consist of, but are not limited to, stone, bone, fossils, wood or shell artifacts or features, including structural remains, historic dumpsites, hearths and middens. Midden features are characterized by darkened soil, and could conceal material remains, including worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials and special attention should always be paid to uncharacteristic soil color changes. Any previously undiscovered resources found during construction should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated by a qualified archaeologist retained by the County for significance under all applicable regulatory criteria. (ALT 1/ALT 2)
- CR-2 No further grading will occur in the area of the discovery until the County, along with the applicable Tribe(s), approves measures to protect the resources. Any archaeological artifacts recovered as a result of mitigation will either be donated to a qualified scientific institution approved by the County where they would be afforded long-term preservation to allow future scientific study or if the resource is determined to be a tribal cultural resource, then the final disposition of the resource shall require approval of applicable Tribe(s). (ALT 1/ALT 2)
- CR-3 In the event of an accidental discovery or recognition of any human remains, PRC Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:
1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98, or
  2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with

the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 24 hours after being notified by the commission; The descendant identified fails to make a recommendation; or the landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner. (ALT 1/ALT 2)

### **Hazards and Hazardous Materials**

HAZ-1 If exposed trash is encountered during grading of the channel's northern slope, RCDWR staff, trained in recognizing hazardous waste, will investigate for potential presence of hazardous elements in the trash. Clearance of hazardous elements in the trash by RCDWR staff trained in recognizing hazardous waste, is required for proper re-burial of the trash on-site or disposal of the trash at the El Sobrante Landfill. (ALT 1/ALT 2)

HAZ-2 If potential hazardous materials are identified but no acutely hazardous materials are present in the exposed trash, the location will be handled as an "uncontrolled hazardous waste site" and subject to the regulation and applicable requirements of CCR Title 8, Section 5192(q). Specifically, the Environmental Compliance Manager (ECM) and the hazardous waste inspection team of the RCDWR shall implement the department's Emergency Action Plan's hazardous waste emergency response procedures to clear all hazardous materials and then decontaminate the site, when warranted. The excavated hazardous materials will be temporarily stored on a protected surface in the Project Area, and either the Department's licensed hazardous material transport vehicles or a licensed hazardous waste hauler will be retained to evacuate the materials within 24 hours of excavation to a permitted facility for storage, processing or disposal. A final clearance from the ECM is required before the slope grading and subgrade construction work can resume. (ALT 1/ALT 2)

HAZ-3 In the unlikely event that acutely hazardous materials are identified in the exposed trash, the Hazardous Materials Response Team of the County Environmental Health Department will be immediately notified. The slope grading and subgrade construction will not resume until a final clearance from the Environmental Health Department is issued. (ALT 1/ALT 2)

### **Noise**

N-1 Although not required as a public project, the project construction manager, in accordance with Ordinance No. 847, shall limit construction activities to between the hours of 6:00AM and 6:00PM, during the months of June through September; and between the hours of 7:00AM to 6:00PM during the months of October through May. (ALT 1/ALT 2)

N-2 All equipment, fixed or mobile, used on site during project activities shall be equipped with properly operating and maintained mufflers to the satisfaction of the Riverside

County Health Services Agency, Occupational Health and Safety Department and RCDWR.  
(ALT 1/ALT 2)

- N-3 The project shall mandate that the construction contractor prohibit the use of music or sound amplification on the project site during construction. (ALT 1/ALT 2)
- N-4 Equipment operators and other facility personnel subject to excessive noise levels will be provided with hearing protection (i.e., ear plugs, etc.). Equipment operators are required to wear ear protection in open cabs. (ALT 1/ALT 2)
- N-5 During project construction, the use of heavy equipment adjacent to parcels 107-201-021, 107-201-022 and 107-201-203 shall not occur on Saturday or Sunday. (ALT 1/ALT 2)
- N-6 Contractor shall comply with RCDWR's Idling Policy, which states that no diesel on-road vehicle, equipment, or engine that is used for any Department operation in an off-road capacity may idle for more than five (5) consecutive minutes. (ALT 1/ALT 2)
- N-7 Delivery of equipment and materials to the project site shall occur between the hours of 7:30AM to 4:30PM. (ALT 1/ALT 2)
- N-8 For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign shall be posted at the project site with the contact phone number. (ALT 1/ALT 2)
- N-9 Construction contractor shall delineate and maintain a 30 foot buffer between construction activities and the residences adjacent to SE channel alignment. (ALT 1/ALT 2)
- N-10 Construction contractor shall construct/install a temporary sound barrier along the southern property line where it meets parcels 107-201-007 and 107-201-011 and where feasible, along any other residential properties directly adjacent to the landfill property where there is currently no solid barrier. (ALT 1/ALT 2)

### **Traffic and Transportation**

- T-1 Equipment and material transport traffic shall be limited to 15 mph on residential streets en route to and from the south side of the project channel. (ALT 1/ALT 2)
- T-2 Appropriate truck traffic signs shall be posted by the contractor along the truck route within the residential neighborhood to alert pedestrians and bicyclists of temporary heavy truck traffic thru their neighborhood. (ALT 1/ALT 2)
- T-3 Where necessary, flagmen shall be provided by the contractor at critical locations to direct/separate residential and truck traffic to ensure safety. (ALT 1/ALT 2)
- T-4 At the end of the work day, the contractor shall inspect the residential haul route for debris or litters fall-out from the hauling trucks. All dropped debris and litters shall be

picked up and removed from the neighborhood. (ALT 1/ALT 2)

T-5 When warranted, the contractor shall clean up the dirt track-out created by the project's vehicles on Bel Air Street at the end of the work day. (ALT 1/ALT 2)

## Chapter 4

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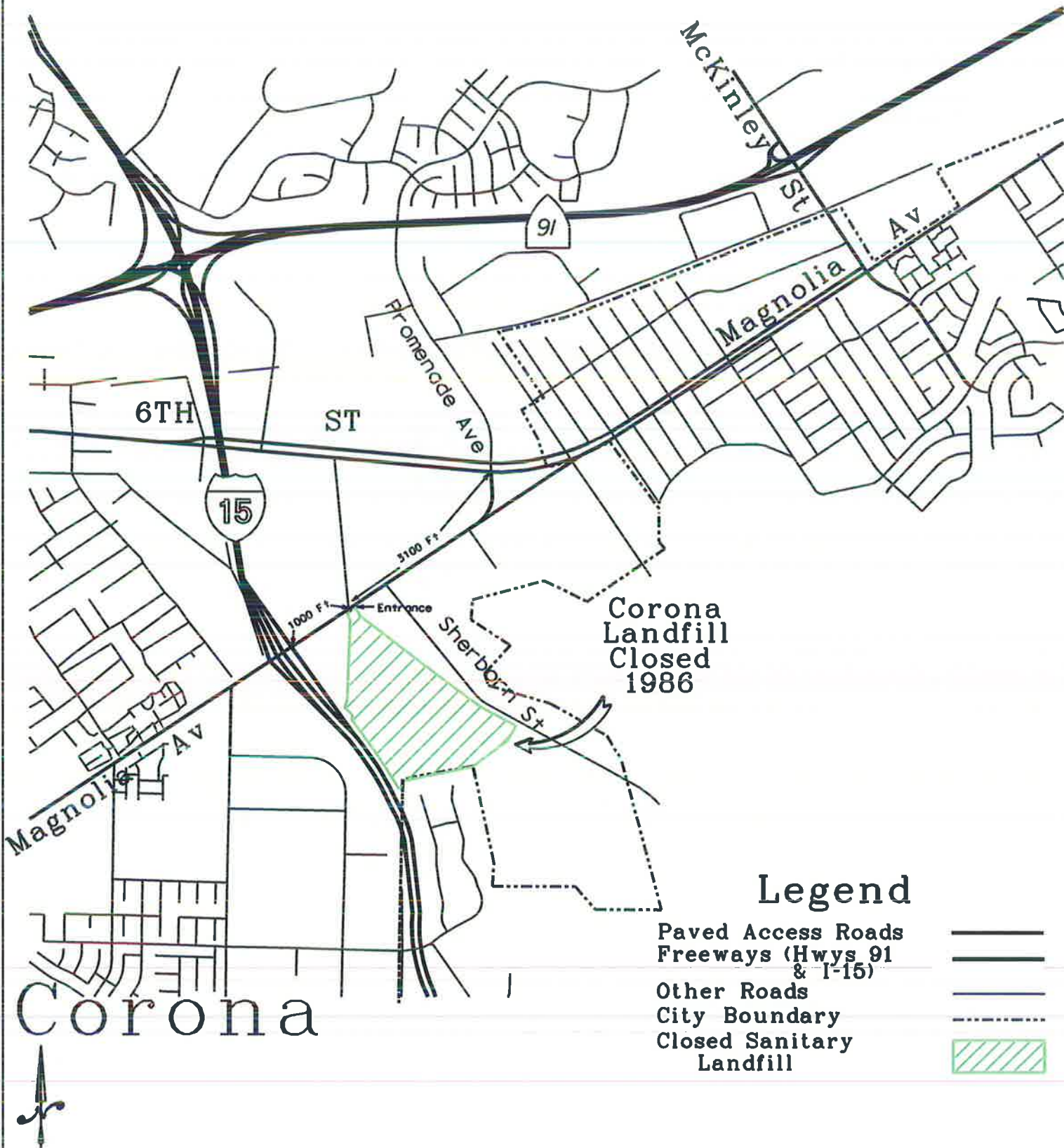
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## Chapter 5

### Figures

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### Legend

- Paved Access Roads
- Freeways (Hwys 91 & I-15)
- Other Roads
- City Boundary
- Closed Sanitary Landfill



Datum is mean sea level. NAD 83 (2007) NAVD 88

Corona Sanitary Landfill  
SE Channel Improvement Project

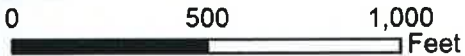
### Vicinity Map

File Directory: /sites/Corona13cr/Projects/SEDrainageChannel/PermittingMaps	Date: July 2015
File: Vicinity Map.dgn	Model: Default   Topo Date: N.A.   Scale: 1" = 2000'



**Legend**

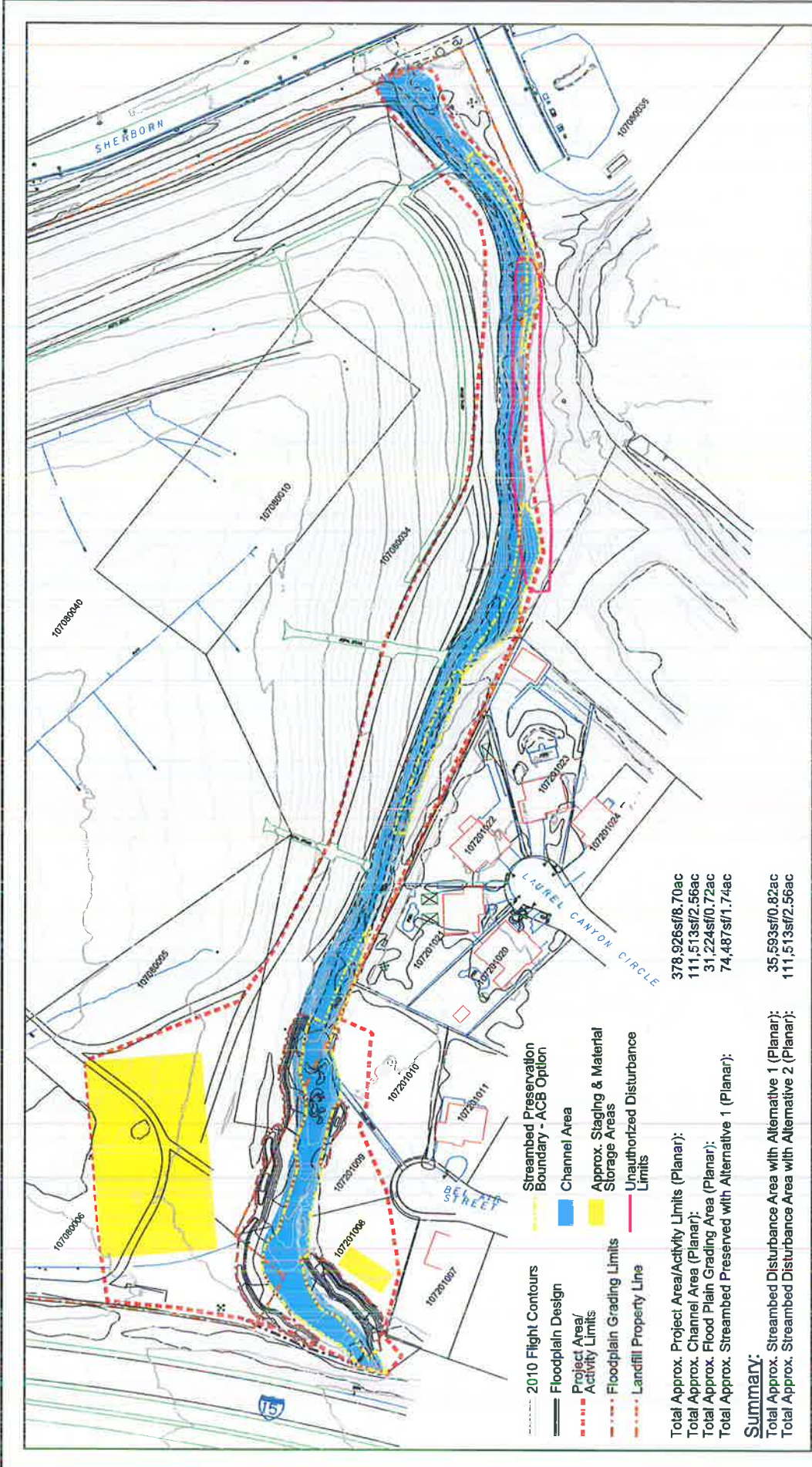
- Project Area/Activity Limits
- Corona Landfill Property Line



Corona Sanitary Landfill  
SE Channel Improvement Project

**Project Location Map**

File Directory: /sites/Corona13cr/Projects/SEDrainageChannel/PermittingMaps	Date: JULY 2015
File: project location Map.dgn	Model: Default
Topo Date: N.A.	Scale: see legend



- 2010 Flight Contours
- Floodplain Design
- Project Area/Activity Limits
- Floodplain Grading Limits
- Landfill Property Line
- Streambed Preservation Boundary - ACB Option
- Channel Area
- Approx. Staging & Material Storage Areas
- Unauthorized Disturbance Limits

Total Approx. Project Area/Activity Limits (Planar): 378,926sf/8.70ac  
 Total Approx. Channel Area (Planar): 111,513sf/2.56ac  
 Total Approx. Flood Plain Grading Area (Planar): 31,224sf/0.72ac  
 Total Approx. Streambed Preserved with Alternative 1 (Planar): 74,487sf/1.74ac  
**Summary:**  
 Total Approx. Streambed Disturbance Area with Alternative 1 (Planar): 35,593sf/0.82ac  
 Total Approx. Streambed Disturbance Area with Alternative 2 (Planar): 111,513sf/2.56ac

NO.		REVISIONS		BY	APPROVED	DATE	DESIGNED BY:	SAL
							DRURY BT:	SKL/BN
							SKETCHED BY:	SKL/BN
							DATE	March 2016
							DATE OF Flight:	October 2010
							Customer Interest:	2

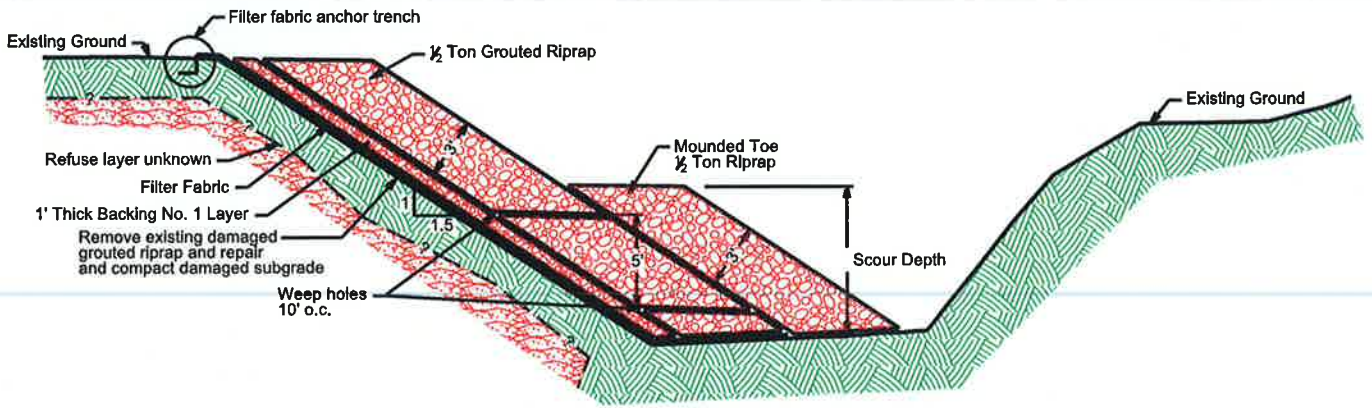
DEPARTMENT OF WASTE RESOURCES  
 Russ Strickland, General Manager and Chief Engineer  
 Steve F. ABE, Mayor  
 Office: 916.438.2600

0 10 20 30 40 50 Feet

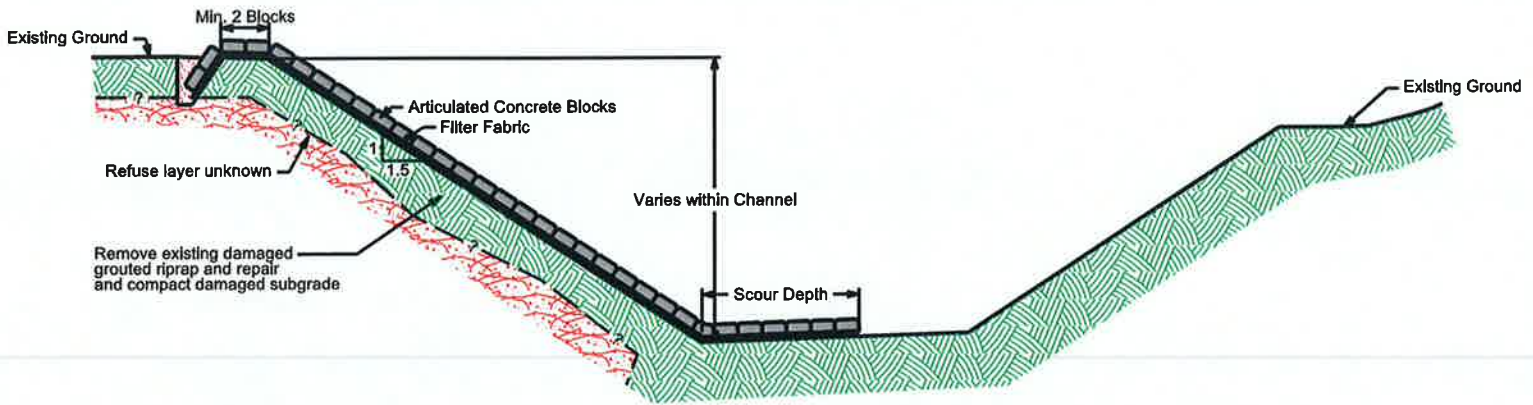
Corona Sanitary Landfill  
 SE Channel Improvement Project  
**Site Plan**

Figure 3

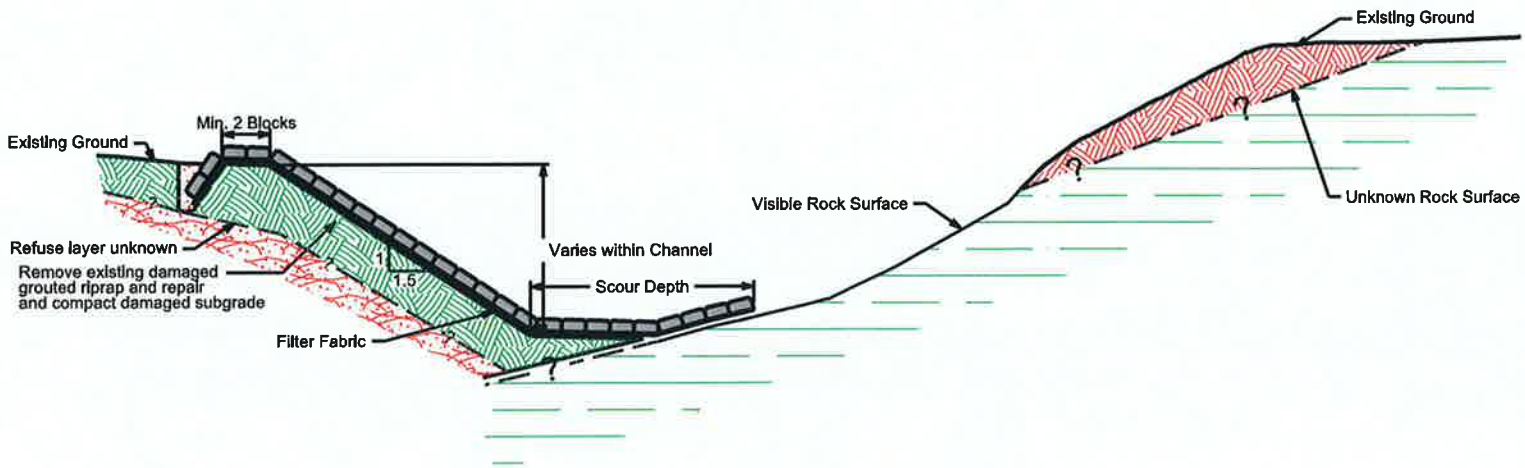
SCALE:	1" = 100'
DIRECTOR:	AbdulCorneal/SE/Project
PROJECT MANAGER:	SE Channel Permit Check/
FILE:	Project/Infra/Bio/09/2016 Check/Sign
NOV:	Freeboard



**Typical Section - Grouted Riprap with Mounded Toe**



**Typical Section - Articulated Concrete Block Revetment**



**Typical Section - Articulated Concrete Blocks Revetment on Rock**



Hans Kerakamp, General Manager and Chief Engineer

Corona Sanitary Landfill  
SE Channel Improvement Project  
**Grouted Riprap and ACB Design  
Cross-Sections**

Figure 4

File Directory: /sites/Corona13cr/Projects/SE DrainageChannel/Analysis/Figures	Date: May 2013
File: ConceptualRiprap.dgn	Model: Default Topo Date: N.A. Scale: N.T.S

***MMP for EA Corona No. 2015-02***

**Corona Landfill Southeast Drainage Channel  
Improvement Project  
Mitigation Monitoring Program**

**(Environmental Assessment No. 2015-02)**



Riverside County Department of Waste Resources  
14310 Frederick Street  
Moreno Valley, CA 92553

April 2016

## BACKGROUND

This Mitigation Monitoring Program (MMP) has been prepared to comply with Section 21081.6 of the California Environmental Quality Act (CEQA). Section 21081.6 requires that public agencies adopt a monitoring program for measures that are required to mitigate or avoid significant effects to the environment from the project.

The MMP serves three functions:

1. Assures completion of mitigation measures during project implementation.
2. Provides feedback to designated agencies and decision makers regarding the effectiveness of the mitigation measures.
3. Identifies the need for enforcement action before irreversible environmental damage occurs.

In the event it is determined that a mitigation measure is not effective or feasible, the MMP can be amended on an as-needed basis to incorporate additional or revised measures that the decision makers or agencies adopt.

## FORMAT OF PROGRAM

The MMP includes the following information:

**Mitigation Measure:** Identifies project-specific mitigation measures described in Environmental Assessment (EA) 2015-02.

Mitigation measures are grouped under the environmental impact areas, which are represented by the following "Impact Codes":

BIO	=	Biological Resources
CR	=	Cultural Resources
HAZ	=	Hazards & Hazardous Materials
N	=	Noise
T	=	Traffic and Transportation

**Monitoring Timeframe:** Indicates the timeframe in which the mitigation measure should be performed or completed.

**Enforcement Authorities:** Designates the agency/agencies responsible for overseeing and/or monitoring the implementation of the mitigation measure(s) included in the MMP. In the case of this project, monitoring responsibilities are shared among various tribal, local, state, and federal agencies. As the owner and operator, the RCDWR is responsible for implementing all the identified mitigation measures in this MMP.



The following abbreviations and acronyms are used in this MMP:

AB 52	Native Americans: California Environmental Quality Act
ACB	Articulated Concrete Block
ALT 1	Alternative 1
ALT 2	Alternative 2
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
DBESP	Determination of Biological Equivalent or Superior Preservation
DPR	Department of Parks and Recreation
ECM	Environmental Compliance Manager
LBV	Least Bell's Vireo
LEA	Local Enforcement Agency (Department of Environmental Health)
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan (Western Riverside County)
NAHC	Native American Heritage Commission
PCR	Public Resources Code
RCDWR	Riverside County Department of Waste Resources
SAA	Streambed Alteration Agreement
SARWQCB	Santa Ana Regional Water Quality Control Board
USFWS	United States Fish and Wildlife Service
USACE	United States Army Corps of Engineers

**MITIGATION MONITORING PROGRAM MATRIX**

<b>Impact Code</b>	<b>No.</b>	<b>Mitigation Measure</b>	<b>Monitoring Timeframe</b>	<b>Enforcement Authorities</b>
<b>BIO</b>	<b>1</b>	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. (ALT 1/ ALT 2)	Prior and During Construction Activities	RCDWR
<b>BIO</b>	<b>2</b>	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 (March 15 through July 31). If construction or other activities must occur during the LBV nesting season, preconstruction surveys shall be carried out. (ALT 1/ALT 2)	Prior to Construction Activities	RCDWR
<b>BIO</b>	<b>3</b>	If LBV are detected within or in close proximity to the worksite, all work that could potentially impact the LBV will be stopped until the biologist determines that the LBV has left the site. (ALT 1/ALT 2)	Prior and During Construction Activities	RCDWR, CDFW, USFWS
<b>BIO</b>	<b>4</b>	Within 30 days prior to construction or disturbance activities, a burrowing owl clearance survey shall be constructed within suitable areas in the construction areas, including a 150 meter buffer area. (ALT 1/ALT 2)	30 Days Prior to Construction Activities	RCDWR
<b>BIO</b>	<b>5</b>	If any burrowing owls or occupied burrows are found during the burrowing owl preconstruction survey, no disturbance will occur within 50 meters of occupied burrows during the non-breeding season of September 1 through January 31 or within 75 meters during the breeding season of February 1 through August 31. If construction or ground disturbance must occur within the specified no disturbance areas a qualified biologist may relocate affected burrowing owls only during the non-breeding season and after approval from the California Department of Fish and Wildlife. (ALT 1/ALT 2)	Prior and During Project Construction Activities	RCDWR, CDFW

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
<b>BIO</b>	<b>6</b>	In order to avoid impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA) and State Fish and Wildlife Codes, removal of vegetation or any other potential nesting bird habitat should be conducted outside of the avian nesting season (February 1 <sup>st</sup> through August 31 <sup>st</sup> ) if practical. If habitat must be cleared during the nesting season, a preconstruction nesting bird survey shall be conducted by a qualified biologist. If nesting activity is observed, appropriate avoidance measures shall be adopted to avoid any potential impacts to nesting birds. (ALT 1/ALT 2)	Prior and During Project Construction Activities	RCDWR
<b>BIO</b>	<b>7</b>	All LBV and riverine/riparian habitat that will remain undisturbed during and after implementation of the proposed project shall be enhanced by treating and monitoring for target non-native invasive species. A Habitat Mitigation and Monitoring Plan shall be prepared during the permitting process. (ALT 1)	Ongoing	RCDWR
<b>BIO</b>	<b>8</b>	To offset the permanent loss of potential LBV habitat, approximately 1.64 acres of riverine/riparian habitat will be created at the Pedley Landfill restoration site. Success of the restoration site will be ensured through an Invasive Species Management and Monitoring Plan that shall be produced during the resource agency permitting process. (ALT1/ALT2)	Ongoing until Habitat is deemed to be established.	RCDWR, CDFW, USACE, SARWQCB
<b>BIO</b>	<b>9</b>	For Alternative 2, if selected, in addition to the off-site creation of the 1.64 acres of riverine/riparian habitat created at the Pedley Landfill restoration site, RCDWR shall contribute to an approved in-lieu fee payment or mitigation banking program, at a minimum of a 1:1 ratio, with the exact ratio negotiated with the resource agencies during the 1602 Streambed Alteration Agreement and Clean Water Act sections 401/404 permitting process. (ALT2)	Before Construction Activities	RCDWR, CDFW
<b>BIO</b>	<b>10</b>	The Riverside County Department of Waste Resources shall comply with the terms and mitigation measures described in the approved DBESP written by the Riverside County Planning Department Environmental Programs Division on October 1, 2014 and approved by the USFWS and the CDFW. (ALT 1)	For a total of three years at the Corona Landfill after project completion and ongoing at the Pedley Landfill restoration site (non-native invasive species maintenance)	RCDWR, CDFW, USFWS

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
<b>BIO</b>	<b>11</b>	Prior to initiation of construction activities within MSHCP riverine/riparian areas, the Riverside County Department of Waste Resources shall submit a new DBESP to USFWS and the CDFW for review and approval. Construction activities shall not occur within MSHCP riverine/riparian areas until the DBESP is approved. (ALT 2)	Prior to Construction Activities	RCDWR, CDFW, USFWS
<b>BIO</b>	<b>12</b>	Prior to project construction, a Streambed Alteration Agreement (SAA) shall be reached between the California Department of Fish and Wildlife (CDFW) and the Riverside County Department of Waste Resources (RCDWR) regarding mitigation for direct loss of 0.10 or 0.57 acre of jurisdictional streambed and 0.72 acre or 1.99 acres of CDFW wetlands from the project under the ACB or Concrete Channel scenario, respectively. The SAA will require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the CDFW. (ALT1/ALT2)	Prior to Construction Activities	RCDWR, CDFW
<b>BIO</b>	<b>13</b>	Prior to project construction, a Clean Water Act Section 404 Permit shall be obtained from the US Army Corps of Engineers (USACE) and the RCDWR regarding mitigation for direct loss of 0.05 or 0.39 acre of Waters of the US and 0.28 or 0.72 acre of jurisdictional wetlands from the project under the ACB or Concrete Channel scenario, respectively. The 404 Permit will require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the USACE. (ALT1/ALT2)	Prior to Construction Activities	RCDWR, USACE

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
<b>BIO</b>	<b>14</b>	Prior to project construction, a Clean Water Act Section 401 Certification shall be obtained from the Santa Ana Regional Water Quality Control Board (SARWQCB) and the RCDWR regarding mitigation for direct loss of 0.05 or 0.39 acre of Waters of the US and 0.28 or 0.72 acre of jurisdictional wetlands from the project under the ACB or Concrete Channel scenario, respectively. The 401 Certification may require a mitigation program that may include on-site enhancement, and/or off-site in-kind replacement acreage, in-lieu fee payment or mitigation banking, based on an appropriate ratio negotiated with the SARWQCB. (ALT1/ALT2)	Prior to Construction Activities	RCDWR, SARWQCB
<b>CR</b>	<b>1</b>	If subsurface cultural resources are encountered during any excavation, or if evidence of an archaeological site or other suspected historic resources are encountered, all ground disturbing activity will cease within 100 feet of the resource. A qualified archaeologist will be retained by the operator to assess the find, and to determine whether the resource requires further study. Additionally, any potentially significant cultural resource(s), discovered on site shall require notification to the three (3) requesting Tribes under AB 52. Potentially significant cultural resources could consist of, but are not limited to, stone, bone, fossils, wood or shell artifacts or features, including structural remains, historic dumpsites, hearths and middens. Midden features are characterized by darkened soil, and could conceal material remains, including worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials and special attention should always be paid to uncharacteristic soil color changes. Any previously undiscovered resources found during construction should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated by a qualified archaeologist retained by the County for significance under all applicable regulatory criteria. (ALT 1/ALT 2)	During Project Construction	RCDWR, three (3) requesting Tribes under AB 52

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
CR	2	<p>No further grading will occur in the area of the discovery until the County, along with the applicable Tribe(s), approves measures to protect the resources. Any archaeological artifacts recovered as a result of mitigation will either be donated to a qualified scientific institution approved by the County where they would be afforded long-term preservation to allow future scientific study or, if the resource is determined to be a tribal cultural resource, then the final disposition of the resource shall require approval of applicable Tribe(s). (ALT 1/ALT 2)</p>	During Project Construction	RCDWR, three (3) requesting Tribes under AB 52
CR	3	<p>In the event of an accidental discovery or recognition of any human remains, PRC Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:</p> <ol style="list-style-type: none"> <li>1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98, or</li> </ol>	During Project Construction	RCDWR

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
		<p>2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:</p> <ul style="list-style-type: none"> <li>o The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 24 hours after being notified by the commission; The descendant identified fails to make a recommendation; or the landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner. (ALT 1/ALT 2)</li> </ul>		
<b>HAZ</b>	<b>1</b>	<p>If exposed trash is encountered during grading of the channel's northern slope, RCDWR staff, trained in recognizing hazardous waste, will investigate for potential presence of hazardous elements in the trash. Clearance of hazardous elements in the trash by RCDWR staff trained in recognizing hazardous waste, is required for proper re-burial of the trash on-site or disposal of the trash at the El Sobrante Landfill. (ALT 1/ALT 2)</p>	During Project Construction	RCDWR

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
HAZ	2	<p>If potential hazardous materials are identified but no acutely hazardous materials are present in the exposed trash, the location will be handled as an "uncontrolled hazardous waste site" and subject to the regulation and applicable requirements of CCR Title 8, Section 5192(q). Specifically, the Environmental Compliance Manager (ECM) and the hazardous waste inspection team of the RCDWR shall implement the department's Emergency Action Plan's hazardous waste emergency response procedures to clear all hazardous materials and then decontaminate the site, when warranted. The excavated hazardous materials will be temporarily stored on a protected surface in the Project Area, and either the Department's licensed hazardous material transport vehicles or a licensed hazardous waste hauler will be retained to evacuate the materials within 24 hours of excavation to a permitted facility for storage, processing or disposal. A final clearance from the ECM is required before the slope grading and subgrade construction work can resume. (ALT 1/ALT 2)</p>	<p>During Project Construction</p>	<p>RCDWR</p>
HAZ	3	<p>In the unlikely event that acutely hazardous materials are identified in the exposed trash, the Hazardous Materials Response Team of the County Environmental Health Department will be immediately notified. The slope grading and subgrade construction will not resume until a final clearance from the Environmental Health Department is issued. (ALT 1/ALT 2)</p>	<p>During Project Construction</p>	<p>RCDWR, LEA</p>
N	1	<p>Although not required as a public project, the project construction manager, in accordance with Ordinance No. 847, shall limit construction activities to between the hours of 6:00AM and 6:00PM, during the months of June through September; and between the hours of 7:00AM to 6:00PM during the months of October through May. (ALT 1/ALT 2)</p>	<p>During Project Construction</p>	<p>RCDWR</p>



Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
N	2	All equipment, fixed or mobile, used on site during project activities shall be equipped with properly operating and maintained mufflers to the satisfaction of the Riverside County Health Services Agency, Occupational Health and Safety Department and RCDWR. (ALT 1/ALT 2)	During Project Construction	RCDWR and Riverside County Health Services Agency, Occupational Health and Safety Department
N	3	The project shall mandate that the construction contractor prohibit the use of music or sound amplification on the project site during construction. (ALT 1/ALT 2)	During Project Construction	RCDWR
N	4	Equipment operators and other facility personnel subject to excessive noise levels will be provided with hearing protection (i.e., ear plugs, etc.). Equipment operators are required to wear ear protection in open cabs. (ALT 1/ALT 2)	During Project Construction	RCDWR
N	5	During project construction, the use of heavy equipment adjacent to parcels 107-201-021, 107-201-022 and 107-201-203 shall not occur on Saturday or Sunday. (ALT 1/ALT 2)	During Project Construction	RCDWR
N	6	Contractor shall comply with RCDWR's Idling Policy, which states that no diesel on-road vehicle, equipment, or engine that is used for any Department operation in an off-road capacity may idle for more than five (5) consecutive minutes. (ALT 1/ALT 2)	During Project Construction	RCDWR
N	7	Delivery of equipment and materials to the project site shall occur between the hours of 7:30AM to 4:30PM. (ALT 1/ALT 2)	During Project Construction	RCDWR

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
N	8	For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign shall be posted at the project site with the contact phone number. (ALT 1/ALT 2)	During Project Construction	RCDWR
N	9	Construction contractor shall delineate and maintain a 30 foot buffer between construction activities and the residences adjacent to SE channel alignment. (ALT 1/ALT 2)	During Project Construction	RCDWR
N	10	Construction contractor shall construct/install a temporary sound barrier along the southern property line where it meets parcels 107-201-007 and 107-201-011 and where feasible, along any other residential properties directly adjacent to the landfill property where there is currently no solid barrier. (ALT 1/ALT 2)	During Project Construction	RCDWR
T	1	Equipment and material transport traffic shall be limited to 15 mph on residential streets en route to and from the south side of the project channel. (ALT 1/ALT 2)	During Project Construction	RCDWR
T	2	Appropriate truck traffic signs shall be posted by the contractor along the truck route within the residential neighborhood to alert pedestrians and bicyclists of temporary heavy truck traffic thru their neighborhood. (ALT 1/ALT 2)	During Project Construction	RCDWR

Impact Code	No.	Mitigation Measure	Monitoring Timeframe	Enforcement Authorities
T	3	Where necessary, flagmen shall be provided by the contractor at critical locations to direct/separate residential and truck traffic to ensure safety. (ALT 1/ALT 2)	During Project Construction	RCDWR
T	4	At the end of the work day, the contractor shall inspect the residential haul route for debris or litters fall-out from the hauling trucks. All dropped debris and litters shall be picked up and removed from the neighborhood. (ALT 1/ALT 2)	During Project Construction	RCDWR
T	5	When warranted, the contractor shall clean up the dirt track-out created by the project's vehicles on Bel Air Street at the end of the work day. (ALT 1/ALT 2)	During Project Construction	RCDWR

***Comment Letters with Department Responses***

Hello Jose,

On behalf of the Riverside County Flood Control and Water Conservation District (District), please accept the following comments on the Draft Mitigated Negative Declaration (MND) for the Corona Landfill Southeast Drainage Channel Improvement Project: 1-1

1. The District may be providing a portion of the funding to build the project and as such is considered to be a responsible agency. However, the District was not listed as a responsible agency. Please be advised that in the past we have had issues with County Counsel with adopting environmental documents as a responsible agency when we have not been listed as such in the environmental document. In order to avoid the potential for those issues to occur with this project, please list the District as a responsible agency. 1-2
2. As mentioned in the comment above, the District may be providing a portion of the funding to build this project. The environmental document should include a discussion about the sources of funding in the project description section of the report. 1-3
3. As mentioned on page 14 of the report, an encroachment permit may be required for the project. To obtain further information on encroachment permits or existing facilities, contact Amy McNeill of the Encroachment Permit Section at 951.955.1266. 1-4
4. Upon completion of the final environmental document, please submit a copy of the approved document to the District for review. Please be sure to include all appendices that were used to support the conclusions found in the environmental document. 1-5

Thank you for the opportunity to review the MND. If you have any further questions concerning this letter, I may be reached at 951.955.1526. 1-6



Kevin Cunningham  
Associate Engineer – Air/Water Quality Control  
**Environmental Regulatory Services 2**  
Riverside County Flood Control  
& Water Conservation District

Office: 951.955.1526  
Fax: 951.788.9965

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Hi Jose,

As you may recall, yesterday by telephone we discussed the Wildlife Agencies' (CDFW and USFWS) concerns about the draft text of Mitigation Measures BIO-2 and BIO-3 in the CEQA Environmental Assessment #Corona 2015-02 for the Corona Landfill Southeast Channel Project, and you asked that the Wildlife Agencies send an e-mail message to RCDWR containing recommendations for revising the wording of the two measures. 2-1

Per RCDWR's request, here are the suggested revisions:

BIO-2:

Please change the wording of BIO-2 to read as follows:

"In order to avoid impacts to Least Bell's Vireos (LBVs), construction activities or any project activities that could potentially result in LBV nest abandonment, failure to nest, or abandonment of an occupied breeding territory (such as vegetation removal, etc.) will not be carried out during the LBV nesting season (March 15 - September 30)." 2-2

BIO-3

Please change the wording of BIO-3 to read as follows:

"If Least Bell's Vireos (LBVs) are detected within or in close proximity to the worksite, all work that could potentially impact the LBVs will be stopped until the biological monitor has determined that the LBV(s) have left the site." 2-3

The Wildlife Agencies would like to express our thanks to RCDWR for being willing to improve the two mitigation measures so as to avoid take of nesting vireos. 2-4

Jose, could you please send our two agencies copies of the revised EA and MND (what will actually be adopted) once they have been prepared ? Thanks in advance. 2-5

Thanks and Regards,

James

James Thiede  
Endangered Species Biologist  
U.S. Fish and Wildlife Service  
777 East Tahquitz Canyon Way, Suite 208  
Palm Springs, California 92262  
(760) 322-2070 x219



STATE OF CALIFORNIA  
**GOVERNOR'S OFFICE of PLANNING AND RESEARCH**  
 STATE CLEARINGHOUSE AND PLANNING UNIT



EDMUND G. BROWN JR.  
 GOVERNOR

KEN ALEX  
 DIRECTOR

May 10, 2016

Jose Merian  
 Riverside County Dept of Waste Resources  
 14310 Frederick St.  
 Riverside, CA 92553

Subject: Corona Landfill Southeast Drainage Channel Improvement Project  
 SCH#: 2016041027

Dear Jose Merian:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on May 9, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan  
 Director, State Clearinghouse

COUNTY OF RIVERSIDE  
 WASTE MANAGEMENT  
 16 MAY 17 PM 3:56

3-1

3-2

**Document Details Report**  
**State Clearinghouse Data Base**

**SCH#** 2016041027  
**Project Title** Corona Landfill Southeast Drainage Channel Improvement Project  
**Lead Agency** Riverside County

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**Type** MND Mitigated Negative Declaration  
**Description** 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.

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**Lead Agency Contact**

**Name** Jose Merian  
**Agency** Riverside County Dept of Waste Resources  
**Phone** 951-486-3200 **Fax**  
**email**  
**Address** 14310 Frederick St.  
**City** Riverside **State** CA **Zip** 92553

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**Project Location**

**County** Riverside  
**City** Corona  
**Region**  
**Lat / Long** 33° 51' 40" N / 117° 32' 02" W  
**Cross Streets** Magnolia Ave and Sherborn St  
**Parcel No.** 107-080-010, -034, -005, -006  
**Township** 3S **Range** 6W **Section** 32 **Base**

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**Proximity to:**

**Highways** I-15  
**Airports**  
**Railways** AT&SF  
**Waterways** Corona Landfill Southeast Drainage Channel  
**Schools** Centennial HS  
**Land Use** LU: Closed landfill  
Z: Light Manufacturing; Industrial Park  
GP Designation: Mixed Use Industrial  
Commercial

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**Project Issues** Agricultural Land; Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Landuse; Cumulative Effects

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**Reviewing Agencies** Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 6; Department of Water Resources; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 8; Native American Heritage Commission; Public Utilities Commission; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 8; State Water Resources Control Board, Division of Water Rights; Air Resources Board



**Document Details Report  
State Clearinghouse Data Base**

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**Date Received** 04/08/2016

**Start of Review** 04/08/2016

**End of Review** 05/09/2016

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Letter 1 Riverside County Flood Control and Water Conservation  
District (District), May 11, 2016

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Response 1-1 Comment noted.

Response 1-2 Page 14 of the EA/MND identifies the potential permits/approvals that may be required, and lists the applicable agencies. For clarity, the EA/MND will be revised to reflect the following:

“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.”

While the District is listed in this section, funding approval was not identified. The EA/MND will be revised as shown to reflect that “approvals” may be required from the District, thus capturing any and all approvals that may be needed for the Project from the District, as a responsible agency.

~~“Encroachment Permit Approvals~~ Approvals (Riverside County Flood Control and Water Conservation District)”

Response 1-3 Sources of funding are not required to be discussed in the project description or in the body of the environmental document as a whole, as it has no relevance to whether or not the project will have a physical effect on the environment nor does it serve as a framework for evaluating and/or analyzing environmental impacts. However, as stated in response 1-2, District approvals will be identified on page 14 of the EA/MND.

Response 1-4 Comment acknowledged.

Response 1-5 Comment acknowledged.

Response 1-6 Comment noted.

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Letter 2 U.S. Fish and Wildlife Service (USFWS), May 10, 2016

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Response 2-1 Comment acknowledged. Thank you for providing comments in writing.

Response 2-2 The EA/MND, using the expertise of qualified biologists, determined that the mitigation measures intended to protect the Least Bell's Vireo (BIO-1, BIO-2, BIO-3, and BIO-6) are more than adequate to mitigate the potential for harm, as well as avoid take, to LBV, that could result during implementation of the Project.

Due to hydrological issues related to Project construction within a drainage during the rainy season, it is not feasible, or required, to restrict construction from March through September; however, the Department has revised mitigation measure BIO-2 to expand the LBV nesting season and remove redundancies (BIO-3 already addresses the deleted section), as follows:

**"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, appropriate avoidance measures shall be adopted to avoid any potential impacts.~~ (ALT 1/ALT 2)"

Furthermore, mitigation measure BIO-6 requires pre-construction surveys for nesting birds, which includes LBV, if construction is to occur February 1 through August 31. In addition, a qualified biologist will be on-site during Project construction; therefore, compliance with mitigation measures will ensure that sensitive species such as the LBV will not be harmed or otherwise harassed by construction activities.

Response 2-3 The suggested revision to BIO-3 has been incorporated into the measure as follows:

**"BIO-3** If LBV are detected within or in close proximity to the worksite, all work that could potentially impact the LBV will be stopped until the biologist determines that the LBV has left the site. ~~If needed, relocation of LBV shall only occur after consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), following all USFWS and CDFW relocation protocols.~~ (ALT 1/ALT 2)"

Elimination of the potential for LBV relocation only strengthens the measure and protections offered to the LBV. Therefore, no new environmental effect has

been raised and the Project, with mitigation, will continue to reduce environmental impacts to less than significant.

Response 2-4 Comment acknowledged.

Response 2-5 Comment acknowledged.

### **Letter 3    State Clearinghouse, May 10, 2016**

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Response 3-1 This letter summarizes the Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (SCH) policy for disseminating the Mitigated Negative Declaration to State Agencies and that the County has complied with the State Clearinghouse review requirements. Furthermore, no state agencies submitted comments before the end of the review period for State agencies, which closed on May 9, 2016.

Response 3-2 Comment acknowledged.