SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

ITEM 11.2 (ID # 4999)

FROM : FLOOD CONTROL DISTRICT:

MEETING DATE: Tuesday, December 5, 2017

SUBJECT: FLOOD CONTROL DISTRICT: (Public Hearing) Adopt Resolution No. F2017-15 for the North Norco Channel Line NB, Stage 3 Project Pursuant to Section 18 of the District Act, Project No. 2-0-00145-03, 2nd District [$0]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Adopt Resolution No. F2017-15, which finds the North Norco Channel Line NB, Stage 3 Project (Project) will not have a significant adverse effect on the environment and is in compliance with Section 18 of the Riverside County Flood Control and Water Conservation District Act ("District Act"), the California Environmental Quality Act (CEQA), and the Western Riverside County Multiple Species Habitat Conservation Plan;
2. Adopt a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Project based on the findings incorporated in the Initial Study and the conclusion that the Project will not have a significant effect on the environment with the incorporation of feasible mitigation;
3. Approve and authorize the District to proceed with the Project; and
4. Direct the Clerk of the Board to deliver the Notice of Determination to the office of the County Clerk and the State Office of Planning and Research for filing within five (5) working days of this Board hearing.

Prev. Agn. Ref.: MT#4994 of 09/26/17

ACTION:

Bob Cullen, Assistant Chief Engineer 11/21/2017

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Ashley, seconded by Supervisor Tavaglione and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

Ayes:	Tavaglione, Washington, Perez and Ashley
Nays:	None
Absent:	Jeffries
Date:	December 5, 2017
xc:	Flood, Recorder

Kecia Harper-Ihem
Clerk of the Board
By: Deputy

SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	$0	$0	$0	$0
NET DISTRICT COST	$0	$0	$0	$0
SOURCE OF FUNDS: N/A			**Budget Adjustment:** N/A	
			For Fiscal Year: N/A	

C.E.O. RECOMMENDATION: [CEO use]

BACKGROUND:

Summary

The District proposes to replace the previously constructed earthen channel with a concrete-lined trapezoidal and rectangular channel in order to increase the capacity to convey the 100-year flow rate. The channel would continue to convey stormwater runoff from the existing upstream Line NB and outlet into the existing concrete lined North Norco Channel. A pervious concrete block system invert will be used for water quality purposes at the western end of the channel and just upstream of the North Norco Channel. In addition, existing concrete culverts will be reconstructed across Valley View Avenue and Sierra Avenue. Storm drain lines, inlets, and catch basins would also be constructed/reconstructed on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane. The cost of the proposed project is approximately $1,915,000.

All provisions of the California Environmental Quality Act ("CEQA") have been met. All CEQA documents for the Project were made available for a 30-day public review period from April 27, 2017 to May 29, 2017. The General Manager-Chief Engineer of the District has found that the Project will not have a significant effect on the environment and a Mitigated Negative Declaration (MND) has been prepared.

Impact on Residents and Businesses

Improved flood protection in the project vicinity.

ATTACHMENTS:

1. Resolution No. F2017-15
2. Authorization to Bill for Notice of Determination CDFW Filing Fees

Gregory P. Priamos, Director County Counsel 11/13/2017

Board of Supervisors

Riverside County Flood Control and Water Conservation District

RESOLUTION NO. F2017-15
COMPLYING WITH SECTION 18 OF THE DISTRICT ACT;
ADOPTING A MITIGATED NEGATIVE DECLARATION
AND A MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE NORTH NORCO CHANNEL LINE NB, STAGE 3 PROJECT,
PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; AND APPROVING
THE NORTH NORCO CHANNEL LINE NB, STAGE 3 PROJECT

WHEREAS, on September 26, 2017, the Board of Supervisors adopted Resolution No. F2017-14 pursuant to Section 18 of the Riverside County Flood Control and Water Conservation District Act ("District Act"), which requires the Riverside County Flood Control and Water Conservation District ("District") to give notice of its intention to construct a project in Zone 2, within the city of Norco, designated as North Norco Channel Line NB, Stage 3 Project ("Project") and giving further notice the Project would be considered at a public hearing on December 5, 2017; and

WHEREAS, the Project is generally bounded to the north by Fifth Street, on the south by Fourth Street, on the east by Valley View Avenue, and to the west by North Norco Channel; and

WHEREAS, the Project consists of replacing the previously constructed earthen channel with a concrete-lined trapezoidal and rectangular channel in order to increase the capacity to convey the 100-year flow rate. The channel would continue to convey stormwater runoff from the existing upstream Line NB and outlet into the existing concrete lined North Norco Channel. A pervious concrete block system invert will be used for water quality purposes at the western end of the channel and just upstream of the North Norco Channel. In addition, existing concrete culverts will be reconstructed across Valley View Avenue and Sierra Avenue. Storm drain lines, inlets, and catch basins would also be constructed/reconstructed on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane; and

WHEREAS, notice of the Section 18 public hearing was properly made, as required by law, and all persons desiring to be heard on the matter were given the opportunity to appear and present testimony, both oral and written, on December 5, 2017 ; and

WHEREAS, pursuant to the California Environmental Quality Act ("CEQA"), the District is the Lead Agency for the Project; and

FORM APPROVED COUNTY COUNSEL
BY MICHELLE CLACK DATE 11/8/17

WHEREAS, an Initial Study, State Clearinghouse No. 2017041077, was prepared that thoroughly addresses the potential environmental effects of implementing the Project, including the construction, operation, and maintenance of the various improvements identified therein; and

WHEREAS, the Initial Study determined that all impacts were either less-than-significant or could be mitigated to less-than-significant and a Mitigation Monitoring and Reporting Plan ("MMRP") was prepared for the Project; and

WHEREAS, the General Manager-Chief Engineer for the District has found the Project will not have a significant effect on the environment and a Mitigated Negative Declaration ("MND") has been prepared; and

WHEREAS, all CEQA documents for the Project, including the Notice of Intent to Adopt a MND and MMRP, were made available for a 30-day public review period from April 27, 2017 to May 29, 2017, and were posted on the District's website, and were made available for public review at the District's office and at the Norco Public Library; and

WHEREAS, the District received three (3) comment letters on the Draft Initial Study that were addressed in the Final Initial Study; and

WHEREAS, the comment letters were from the Southern California Edison Company, AT&T, and the Governor's Office of Planning and Research; and

WHEREAS, the comments did not change the analysis nor the mitigation measures as proposed in the Draft Initial Study, and the District has determined that an MND is the appropriate CEQA document for the project; and

WHEREAS, the Final Initial Study and MND have been independently reviewed and reflect the independent judgment of the Board of Supervisors for the District and are deemed adequate for purposes of making decisions on the merits of the Project; and

WHEREAS, all provisions of CEQA and the District Rules to Implement the California Environmental Quality Act have been satisfied; and

WHEREAS, the District is an active participant and Permittee in the Western Riverside County Multiple Species Habitat Conservation Plan ("MSHCP"); and

WHEREAS, the Project is in compliance with Sections 6.1.2, 6.1.3, 6.3.2, 6.1.4, 7.0, and Appendix C of the MSHCP as supported by the conclusions of the Initial Study prepared for the Project.

NOW, THEREFORE, BE IT RESOLVED, FOUND, DETERMINED AND ORDERED by the Board of Supervisors of the Riverside County Flood Control and Water Conservation District in regular session assembled on December 5, 2017, based upon the evidence and testimony presented on the matter, both written and oral, that:

1. The Project is in compliance with Section 18 of the District Act. The Section 18 map is attached hereto as Attachment A; an illustration of the Project's cross sections are attached hereto as Attachment B; the Engineer's Statement is attached hereto as Attachment C; and the Declaration of Postings for the Norco Public Library, the County Clerk, and the District are attached hereto as Attachment D.

2. There is no substantial evidence in light of the whole record that the Project, with mitigation, will have a significant effect on the environment, and the Initial Study, attached hereto as Attachment E, and the Mitigated Negative Declaration, attached hereto as Attachment F, represent the independent judgment of the District.

3. The Mitigated Negative Declaration, is adopted based on the findings incorporated in the Initial Study and the determination that the Project will not have a significant effect on the environment.

4. The Mitigation Monitoring and Reporting Program, attached hereto as Attachment G, is adopted pursuant to Public Resources Code section 21081.6.

5. All obligations set forth to the District pursuant to applicable sections of the MSHCP have been analyzed and shall be implemented by the District as prescribed in the MSHCP Implementation Agreement.

6. The Project is approved and the District is hereby authorized to proceed with the Project.

7. Pursuant to Public Resources Code section 21081.6, the custodians of the documents and materials that constitute the record of proceedings on which this decision is based are the Clerk of the Board of Supervisors and the District. These documents and materials are located at 4080 Lemon Street, Riverside, California and 1995 Market Street, Riverside, California.

8. The Board of Supervisors hereby directs staff to execute and file a Notice of Determination, attached hereto as Attachment H, with the Riverside County Clerk's Office and the Office of Planning and Research within five (5) working days of adoption of this Resolution.

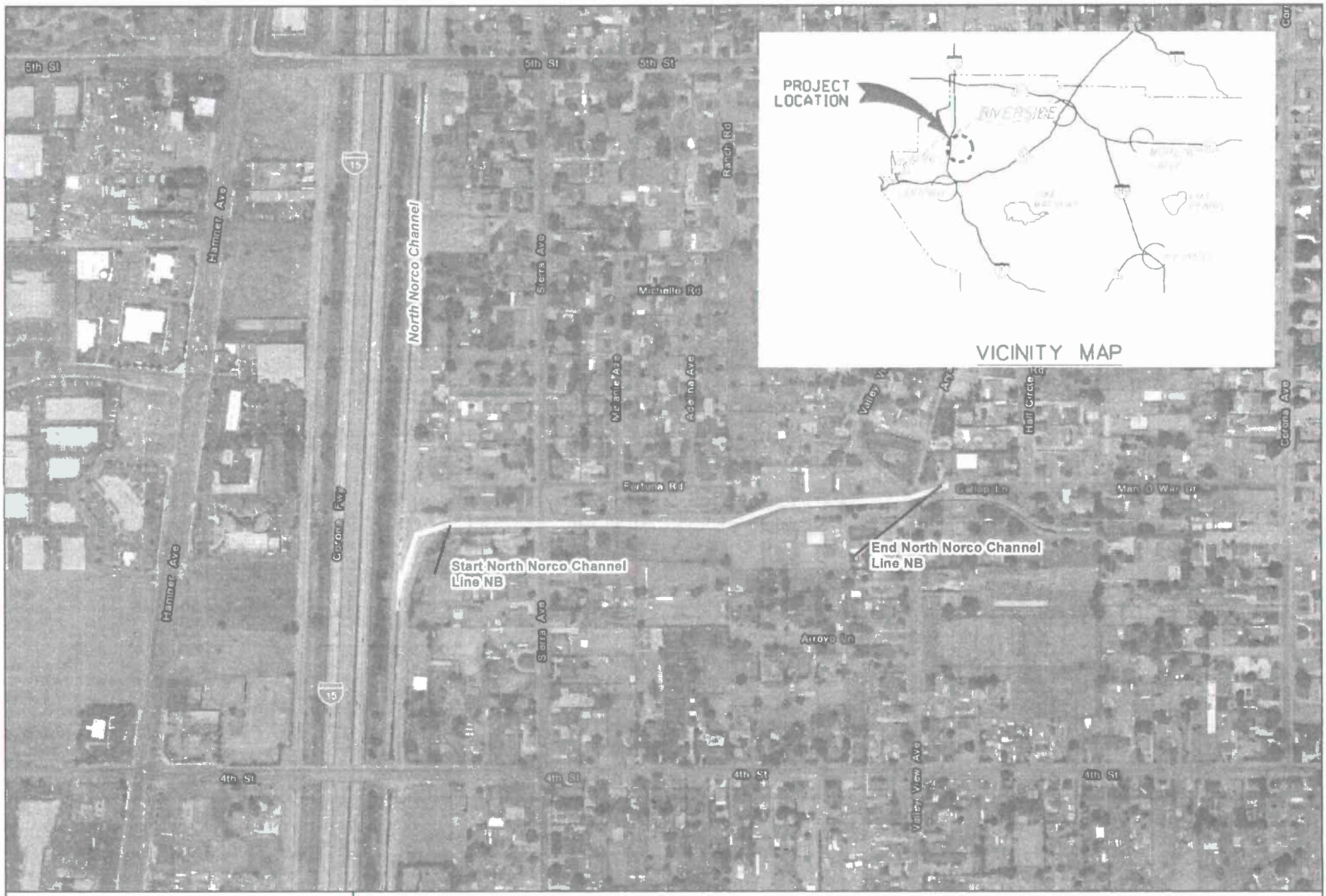
The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.

KECIA HARPER-IHEM, Clerk of said Board

By _____ Deputy

ROLL CALL:

Ayes: Tavaglione, Washington, Perez and Ashley
Nays: None
Absent: Jeffries



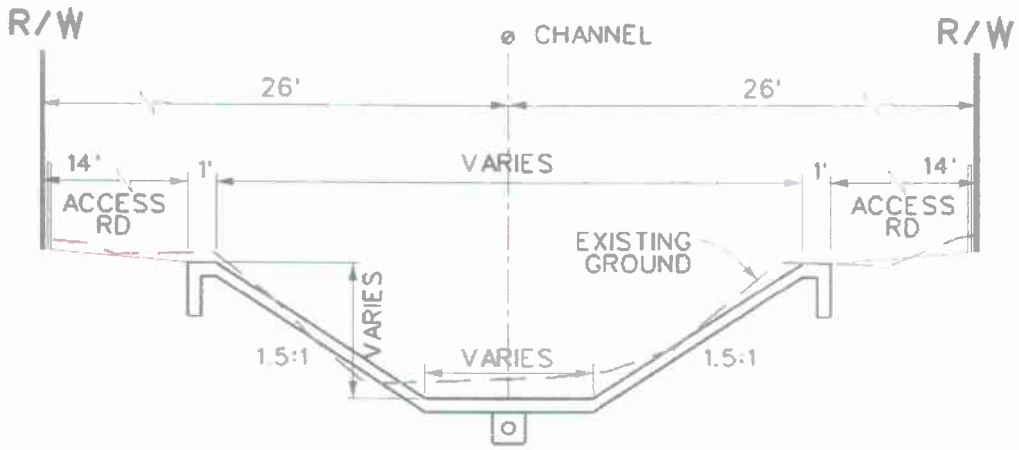
Attachment A - Section 18 Map

North Norco Line NB Channel, Stage 3

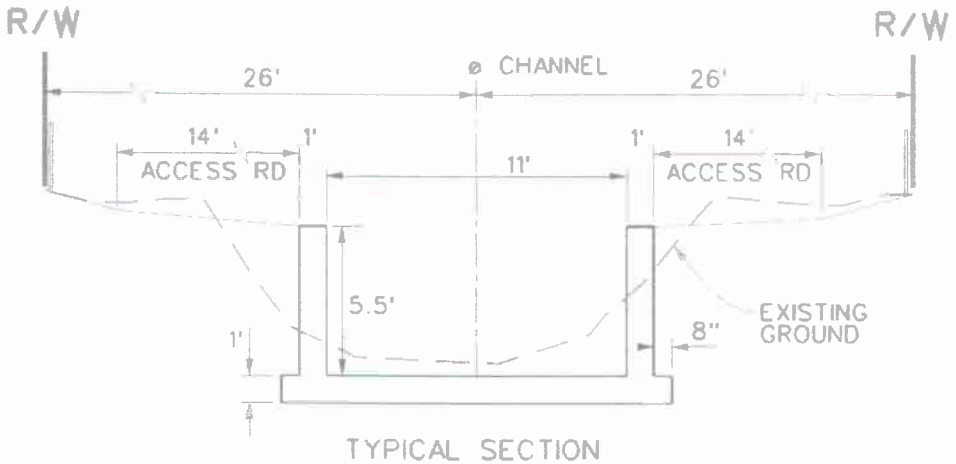
Riverside County Flood Control and Water Conservation District

Project Alignment

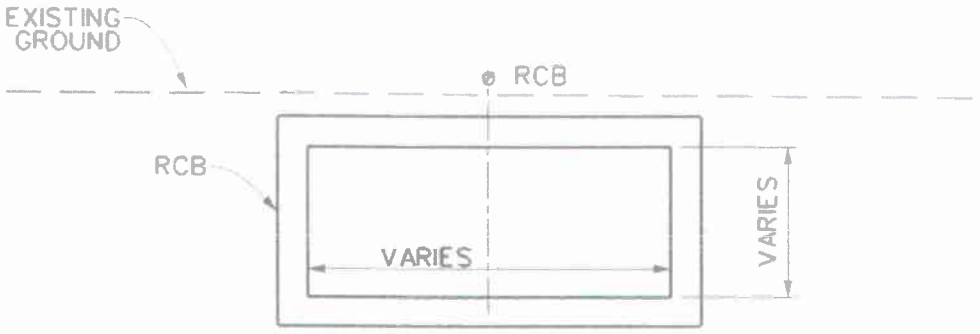
Map Not to Scale



TYPICAL SECTION
TRAP. CHANNEL



TYPICAL SECTION
RECT. CHANNEL



TYPICAL SECTION
RCB

PROJECT CROSS SECTIONS

North Norco Channel, Stage 3

PROJECT NUMBER: 2-0-00145-03

August 2017

ATTACHMENT "C"

North Norco Channel Line NB, Stage 3
Project No. 2-0-00145-03
Engineer's Statement

The proposed North Norco Channel Line NB, Stage 3 project is located within the city limits of Norco, Riverside County, California. The project is bounded to the north by Fifth Street, on the south by Fourth Street, on the east by Valley View Avenue, and to the west by North Norco Channel. The project length is approximately 1,750 feet, consisting of 200 lineal feet of reinforced concrete box (RCB), 370 feet of concrete lined rectangular channel, and 1,180 feet of concrete lined trapezoidal channel. In addition, 200 feet of the concrete lined trapezoidal channel will consist of an Armorflex lined invert serving as a water quality feature that will reduce the impervious area of the project.

The project footprint is approximately 2.91 acres; flow in the adjacent neighborhoods of the project will be introduced into the channel through a combination of catch basins, local grading and swales. The estimated cost of the proposed project is $1,915,000.

CERTIFICATE OF POSTING

I, Summer Henderson/Office Assistant II, do hereby certify that
(NAME AND TITLE)

I am not a party to the action or proceeding subject to this notice; and

on October 12, 2017, I posted a copy of the following document:
(DATE OF POSTING)

RESOLUTION NO. F2017-14 SETTING A PUBLIC HEARING DATE FOR NORTH NORCO CHANNEL LINE NB, STAGE 3 PROJECT IN ACCORDANCE WITH SECTION 18 OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ACT

The subject document was posted at the:

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 MARKET STREET
RIVERSIDE, CALIFORNIA 92501

Signature: _____ Date: 10-12-17

CERTIFICATE OF POSTING

I, Mary Meyer, do hereby certify that
(NAME AND TITLE)

I am not a party to the action or proceeding subject to this notice; and

on 10.12.17, I posted a copy of the following document:
(DATE OF POSTING)

RESOLUTION NO. F2017-14 SETTING A PUBLIC HEARING DATE FOR NORTH NORCO CHANNEL LINE NB, STAGE 3 PROJECT IN ACCORDANCE WITH SECTION 18 OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ACT

The subject document was posted at the:

RIVERSIDE COUNTY CLERK AND RECORDER'S OFFICE
2724 GATEWAY DRIVE
RIVERSIDE, CALIFORNIA 92507

Signature: _____ Date: 10.12.17

CERTIFICATE OF POSTING

I, Sara Hopkins, Library Assoc. 2, do hereby certify that
(NAME AND TITLE)

I am not a party to the action or proceeding subject to this notice; and

on 10/12/17, I posted a copy of the following document:
(DATE OF POSTING)

RESOLUTION NO. F2017-14 SETTING A PUBLIC HEARING DATE FOR NORTH NORCO CHANNEL LINE NB, STAGE 3 PROJECT IN ACCORDANCE WITH SECTION 18 OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ACT

The subject document was posted at the:

NORCO PUBLIC LIBRARY
3240 HAMNER AVENUE, SUITE 101B
NORCO, CALIFORNIA 92860

Signature: Sara Hopkins Date: 10/12/17

Riverside County Flood Control and Water Conservation District

Riverside, California

FINAL

CEQA INITIAL STUDY

for

North Norco Channel Line NB, Stage 3

June 2017

JASON UHLEY
General Manager-Chief Engineer

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APPENDICES

INTRODUCTION

Regulatory Framework

In accordance with the California Environmental Quality Act (CEQA) (*California Public Resources Code* Sections 21000 et seq.) and the State CEQA Guidelines (*California Code of Regulations*, Title 14, Sections 15000 et seq.), this Initial Study has been prepared as documentation for a Mitigated Negative Declaration (MND) for the proposed North Norco Channel Line NB Stage 3 project (project). This Initial Study includes a description of the project; the location of the project site; an evaluation of the potential environmental impacts that would result from project implementation; the findings of the environmental analysis; and the recommended mitigation measures to lessen or avoid the project's significant impacts on the environment.

Pursuant to Section 15367 of the State CEQA Guidelines, the Lead Agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment. The Riverside County Flood Control and Water Conservation District (District) is serving as the Lead Agency for the project. As the Lead Agency, the District has the authority for certification of the accompanying environmental documentation prior to project approval.

Organization of the Initial Study

The Initial Study is organized into the following sections:

Introduction: This section provides the regulatory context for the CEQA process and an overview of the conclusions in the Initial Study.

Mitigated Negative Declaration: The draft MND was provided for public review and comment. No comments or changes were made to the draft MND.

Mitigation Summary: This section compiles the proposed mitigation measures for this project.

Project Information: This section provides a brief description of the project location; the existing environmental setting of the project site and vicinity; and a description of the project.

Evaluation of Environmental Impacts: This section provides the parameters that the District uses to determine the level of impact.

Lead Agency Determination: This section identifies the Lead Agency's determination based on the initial evaluation.

CEQA Checklist: This section contains a summary checklist of environmental issues and accompanying analysis for responding to the CEQA checklist questions. This section also identifies the District's Standard Operating Procedures (SOP) that would minimize environmental impacts and Mitigation Measures (MMs) required to eliminate or reduce any potentially significant effects to a level considered less than significant.

References: This section identifies the references used in the preparation of the Initial Study.

Environmental Process

This Initial Study describes the expected environmental impacts of the project and indicates that the project would have no or less than significant adverse impacts on most environmental issue areas, except for biological resources and cultural resources. With the implementation of mitigation measures for impacts to biological resources and cultural resources, all project impacts would be less than significant.

This Initial Study was subject to a 30-day public review and comment period from April 27 to May 29, 2017. During this review period, public and agency comments on the document relative to environmental issues were sent to:

Mike Wong, Engineering Project Manager
Environmental Regulatory Services
Riverside County Flood Control and Water Conservation District
mwong@rivco.org
(951) 955-1233

Three comment letters were received during the public review period and have been included in the project's administrative record. If the environmental analysis is challenged in court, the challenge may be limited to only those issues raised during the public review period described above. Following receipt and evaluation of comments from agencies, organizations, and/or individuals, the District determined that no substantial or new environmental issues have been raised. Thus, further documentation, such as an Environmental Impact Report (EIR) or an expanded Initial Study, is not required. The comments and related responses are provided in Appendix C of the Initial Study document for consideration by the Board of Supervisors of the District. If the Board concurs with the findings presented herein, the enclosed MND will be adopted and the project will be approved.

MITIGATED NEGATIVE DECLARATION

State Clearinghouse Number: 2017041077	Contact Person: Randy Sheppeard	Telephone Number: (951) 955-1200 Email: rsheppea@rivco.org

Lead Agency and Project Sponsor:
Riverside County Flood Control and Water Conservation District

Address: 1995 Market Street	City: Riverside	Zip: 92501

Project Title and Description:
North Norco Channel Line NB, Stage 3

The Riverside County Flood Control and Water Conservation District (District) proposes to replace an existing interim dirt-lined trapezoidal flood control channel with a concrete-lined trapezoidal and rectangular channel, including concrete culverts, across Valley View Avenue and Sierra Avenue and an Armorflex, gabion, or rock-lined invert at the western end where the Line NB channel ties into the North Norco Channel. Storm drain lines, inlets, and catch basins would also be constructed/reconstructed on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane. The existing channel is currently inadequate for the conveyance of ultimate condition flow rates, and the project would eliminate this deficiency. The project expands upon previously constructed Stages 1 and 2 to replace the current remaining dirt-lined channel and construct a larger concrete-lined channel that would accommodate the 100-year runoff flow from multiple local drainages within the City of Norco to address the City's drainage issues. The project would continue to direct storm water runoff that emanates from the hills located in the eastern portion of the City and areas north and south of the channel for conveyance to the North Norco Channel that ties into the Prado Dam Reservoir.

Project Location: The North Norco Channel Line NB is located in the City of Norco, south of Fifth Street, north of Fourth Street, east of the Interstate (I) 15 Freeway and the North Norco Channel, and west of the intersection of Half Circle Road and Gallop Lane. It ties to Line NA to the east (upstream) and to the North Norco Channel to the west (downstream). Improvements are also proposed to storm drain lines, inlets, and catch basins on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane. In addition, four parcels adjacent to the channel are proposed for use as temporary construction staging areas. The project site is located within Section 7, Township 3 South, Range 6 West of the San Bernardino Meridian.

Lead Agency Finding: The General Manager-Chief Engineer of the Riverside County Flood Control and Water Conservation District has made a finding that the proposed North Norco Channel Line NB, Stage 3 project will not have a significant adverse effect on the environment. An Initial Study supporting this finding is attached. This finding will become final upon adoption of this Mitigated Negative Declaration by the Board of Supervisors of the Riverside County Flood Control and Water Conservation District. Mitigation measures are as follows:

Refer to attached Mitigation Monitoring and Reporting Program.

Signature: _____ Dated: 8-28-17

JASON UHLEY
General Manager-Chief Engineer

The Board of Supervisors of the Riverside County Flood Control and Water Conservation District, assembled in regular session on _____, 2017 has determined that the North Norco Channel Line NB, Stage 3 project will not have a significant adverse effect on the environment and has adopted this Mitigated Negative Declaration.

Signature:_____ Dated:_____

KECIA HARPER-IHEM
Clerk of the Board

Attachment

Copies to: 1) County Clerk
2) Flood Control

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
NORTH NORCO CHANNEL LINE NB,
STAGE 3

MITIGATION MONITORING AND REPORTING PROGRAM

Issue	Potential Impact	Environmental Commitment, Avoidance, Minimization, and/or Mitigation Measures	Action	Implementation Responsibility	Governing Agency	Implementation Timing
Biological Resources	A substantial adverse effect on biological resources involved within a jurisdictional water feature	MM 1: Prior to initiation of construction activities, the District shall obtain all necessary permits from the Santa Ana Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) for impacts to jurisdictional resources. Mitigation for the loss of jurisdictional resources shall be negotiated with the resource agencies during the regulatory permitting process and shall ensure mitigation to compensate for permanent impacts on jurisdictional resources is equivalent or superior to the biological functions and values impacted by the project. Potential mitigation options may include, but are not limited to, payment of an in-lieu mitigation fee to a mitigation bank or regional riparian enhancement program (e.g., invasive plant or wildlife species removal).	The District shall obtain the necessary permits from Santa Ana RWQCB and CDFW and comply with the conditions of the permits.	RCFC&WCD	Santa Ana RWQCB and CDFW	Prior to construction

Issue	Potential Impact	Environmental Commitment, Avoidance, Minimization, and/or Mitigation Measures	Action	Implementation Responsibility	Governing Agency	Implementation Timing
Cultural Resources	Destroy a unique paleontological resource or site or unique geologic feature	MM 2: To mitigate potential impacts to paleontological resources that may exist subsurface of the project area, the Project Paleontologist shall attend the pre-grade meeting to determine the level of monitoring required for the project in accordance with the following: 1. Monitoring shall be conducted during all grading and excavations deeper than one foot below current ground level in previously undisturbed ground by a qualified paleontological monitor. Paleontological monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontological personnel to have low	The District shall include this mitigation in the contractor specifications for the contractor to implement during construction.	Contractor	RCFC&WCD	During construction

Issue	Potential Impact	Environmental Commitment, Avoidance, Minimization, and/or Mitigation Measures	Action	Implementation Responsibility	Governing Agency	Implementation Timing
		potential to contain fossil resources. 2. Preparation of all recovered specimens shall be made to a point of identification and permanent preservation including washing of sediments to recover small invertebrates and vertebrates. 3. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontological storage [e.g., Western Science Center, Hemet] shall be completed at the recommendation of the Project Paleontologist. 4. A report of findings shall be prepared with an appended itemized inventory of specimens and submitted to the RCFC&WCD.				

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
NORTH NORCO CHANNEL LINE NB,
STAGE 3
MITIGATION MONITORING AND REPORTING PROGRAM

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RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) INITIAL STUDY

Project Information

1. **Project Title:**
North Norco Channel Line NB, Stage 3 Project

2. **Lead Agency Name and Address:**
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, California 92501

3. **Contact Person Email Address and Phone Number:**
Lead Agency Contact
Randy Sheppeard, Senior Flood Control Planner
Email: rsheppea@rivco.org
Phone: (951) 955-1200

Consultant
Kristin Starbird, Project Manager
Psomas
225 South Lake Avenue, Suite 1000
Pasadena, California 91101
Email: kristin.starbird@psomas.com
Phone: (626) 351-2000

4. **Project Location:**
The North Norco Channel Line NB is located in the City of Norco and is south of Fifth Street, north of Fourth Street, west of the intersection of Half Circle Road and Gallop Lane, and east of the North Norco Channel and I-15 freeway. The project site is within the Corona (USGS) 7.5-Minute Topographic Quadrangle and in Section 7, Township 3 South, Range 6 West of the San Bernardino Meridian. Regional and local project vicinities are shown on Exhibit 1. The project would occur on a 1,750-foot-long segment of the North Norco Channel Line NB (from 95 feet east of Valley View Avenue to 290 feet west of Sierra Avenue within the District's right-of-way) and on adjacent roads (i.e., Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane). Exhibit 2 provides an aerial photograph of the site. Project construction would affect a total of 2.91 acres.

5. **Project Sponsor's Name and Address:**
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, California 92501

6. **General Plan Designation:**
Residential Agricultural (RA)

7. **Description of Project:**
(Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

Project Purpose

The purpose of the project is to address the City of Norco's drainage issues by improving the existing channel, which has insufficient capacity to handle ultimate condition 100-year flow rates and in accordance with the Norco Master Drainage Plan that was developed in 1993. The project would involve the replacement of an interim dirt-lined flood control channel with a concrete-lined and reinforced concrete box channel designed to safely collect and convey water from the existing North Norco Channel Line NB on Valley View Avenue to the existing downstream North Norco Channel. The proposed project would allow the channel to carry the ultimate condition 100-year runoff from multiple local drainages within the City of Norco. The project would expand upon previously constructed Stages 1 and 2 and is the only remaining segment of the North Norco Channel Lines that needs to be upgraded.

Project Description

The Riverside County Flood Control and Water Conservation District (District) proposes to replace an existing interim dirt-lined trapezoidal flood control channel with a concrete-lined trapezoidal and rectangular channel. The proposed improvements would occur on an approximately 1,750-foot-long segment of the North Norco Channel Line NB and would consist of approximately 200 lineal-feet of reinforced concrete box, 370 feet of concrete-lined rectangular channel, and 1,180 feet of concrete-lined trapezoidal channel. In addition, an Armorflex (or approved equal), gabion, or rock-lined invert would be constructed at the channel bottom on a 200-foot-long segment at the downstream end (west of Sierra Avenue) to serve as a transition to the North Norco Channel and as a water quality feature. The project would also involve the reconstruction of storm drain lines, inlets, and catch basins for the safe introduction of flow from the surrounding neighborhood into the channel. These catch basins would be located along Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane, north of the channel.

The proposed drainage channel improvements would be mainly located in the District's existing right-of-way, with storm drain lines, inlets, and catch basins located on public roadway rights-of-way near the channel. The project may also involve the acquisition of an easement from the parcel (APN 127075001) at the southeastern corner of Sierra Avenue and Fortuna Road to avoid conflicts with other utilities in the area. The easement would be located on the northwest corner of this property. Exhibit 3 shows the general location of the proposed channel improvements.

Project Design

The existing dirt-lined channel would be replaced with a larger concrete-line trapezoidal and rectangular channel and the existing culverts on Sierra Avenue and Valley View Avenue would be upsized. The project would consist of approximately 200 lineal-feet of reinforced concrete box (RCB) under Sierra Avenue and Valley View Avenue, 370 feet of concrete-lined rectangular channel (where the channel curves west of Valley View Avenue), and 1,180 feet of concrete-lined trapezoidal channel on the remaining segments.

The western end of the channel that connects to the North Norco Channel would feature an Armorflex, gabion, or rock-lined invert to allow for the ground infiltration of storm water and the removal of pollutants from runoff. East of the invert and west of Sierra Avenue, the open channel would be widened to approximately 30 feet, with an 8-foot-wide bottom and 7-foot depth. The existing access roads to the

north and south would remain and are anticipated to be covered with an aggregate base and the chain-link fences will remain in place.

The proposed channel would narrow as it transitions to a 12-foot by 5-foot RCB that would replace the existing 8-foot by 6-foot RCB under Sierra Avenue. East of Sierra Avenue, the RCB would again become an open channel.

The channel from Sierra Avenue to approximately 270 feet east of Sierra Avenue would be a concrete-lined trapezoidal channel that is approximately 20 feet wide, with a 6-foot-wide bottom and a 5-foot depth. The access roads along the north and south sides of the channel would remain and are anticipated to be repaved with an aggregate base. The chain-link fence on both sides would also remain in place. This channel would narrow and become rectangular as it curves northeasterly and easterly, before widening to become a trapezoidal channel that is approximately 20 feet wide, with a 6-foot-wide bottom and a 5-foot depth. The access roads and chain-link fence on each side of the channel would remain in place.

The proposed channel would narrow as it transitions to a 6-foot by 10-foot RCB that would replace the existing 7-foot by 6-foot culvert under Valley View Avenue. East of Valley View Avenue, the transition structure would be reconstructed to connect to the existing trapezoidal channel (Line NA). Exhibit 4 shows the proposed cross sections for the channel.

Approximately 865 feet of existing storm drain lines on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane would be replaced with 24- and 36-inch lines. Catch basins and inlets on Sierra Avenue and Valley View Avenue are anticipated to be reconstructed and new catch basins are anticipated to be constructed on Fortuna Road and Gallop Lane. The existing gas line on Sierra Avenue may need to be relocated as part of the project.

Construction

Construction of the project is estimated to last approximately three months and would occur during the third quarter of 2017 (from July 2017 to September 2017). The District anticipates the use of the following equipment at the site (Table 1).

Table 1
Construction Equipment

Construction Equipment	Quantity	Duration (Days)
Concrete/Industrial Saws	1	2
Cranes	1	4
Crawler Tractors	2	6
Excavators	2	8
Graders	1	3
Other Equipment (i.e., Concrete Pump)	1	35
Pavers	1	2
Rollers	1	2
Rubber Tired Loaders	2	6
Dump Trucks	3	14
Signal Boards	2	45
Skid Steer Loaders	1	1

It is estimated that a total land area of 2.91 acres would be disturbed during construction. Grading would last approximately two weeks and result in the excavation of approximately 3,855 cubic yards (cy) of soil, 780 cy of backfill, and 3,075 cy for export or off-site disposal. With each dump truck carrying 8 cy of soils, the project would generate a total of 384 one-way trips (192 round trips) or an average of 38 one-way trips (19 round trips) per day for 10 days during excavation and grading activities. In addition, a number of concrete trucks would come to the site to bring in concrete for the construction of the open channel and other trucks would bring in various construction materials and culverts.

Exported soils would either be discarded at the El Sobrante Landfill (located at 10910 Dawson Road in Corona and approximately 11 miles southeast of the site) and/or other area landfills or soil materials may be sold for use on other construction projects.

There are four potential construction staging locations, as identified in Exhibit 4. Staging Area 1 is an undeveloped but disturbed portion of a residential parcel at 3091 Sierra Avenue, bound on the east and west by single-family residences, on the north by Fortuna Road, and on the south by the existing flood control channel. Staging Area 2 is located on an undeveloped and disturbed portion of a residential parcel at 3061 Sierra Avenue. This area is bound on the west by a single-family residence, on the north by the existing flood control channel, on the south by an agricultural facility (stable), and on the east by the undeveloped portion of a residential parcel (Staging Area 3). Staging Area 3 is an undeveloped and disturbed portion of a residential parcel at 3068 Valley View Avenue. This location is bound on the north by the existing flood control channel, on the south and east by single-family residences, and on the west by the undeveloped portion of a residential parcel (Staging Area 2). Staging Area 4 is an undeveloped but disturbed portion of a residential parcel at 1423 Fortuna Road. This location is bound on the south by the existing flood control channel and on the north, east, and west by single-family residences. The use of any and/or all potential construction staging areas would be temporary and all equipment, materials, and improvements on these staging areas would be removed after construction of the project. After the construction and reconstruction of culverts, storm drain lines, inlets, and catch basins, street repaving will also occur on 0.56 acre on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane to return these roads to their original conditions.

Operation and Maintenance Activities
The improved channel would convey storm water flows from a 100-year storm event from the surrounding area and the hills at the eastern section of the City to the North Norco Channel along the I-15 freeway and into the Prado Dam Reservoir and the Santa Ana River. Existing maintenance activities include annual inspections by District staff, including intermittent cleaning of debris and graffiti in the channel. This will not change with completion of the project.

Earlier Analyses Used: N/A
Impacts Adequately Addressed in Earlier Analyses: N/A
Mitigation Measures from Earlier Analysis: N/A

8. **Surrounding Land Uses and Setting:**
(Briefly describe the project's surroundings)

Surrounding land uses near the channel include single-family residences on large lots to the north and south, with some vacant lots. Farther north and south are the same residential uses, with a church (Cristo La Roca) to the northeast of the intersection of Valley View Avenue and Aryana Avenue. East and upstream of the site is the North Norco Channel Line NA. West and downstream of the site is the North Norco Channel and the I-15 freeway. Sierra Avenue and Valley View Avenue are two-lane north-south streets that cross that channel (with reinforced box culverts under the streets). Overhead power and telephone lines on wooden poles, equestrian trails, and underground utilities lines are present along these streets. Exhibit 5 includes photographs of the existing channel and Exhibit 6 shows the surrounding development.

The project site is located on District-owned right-of-way in the City of Norco and City-maintained public roads, and may involve the acquisition of an easement from private property at the southeastern corner of Sierra Avenue and Fortuna Road. The Norco General Plan Land Use Map designates the site as Residential Agricultural (RA), with the western portion of the project site designated as public right-of-way. The surrounding area is designated as RA and Residential Low (RL) in the General Plan Land Use Map.

In the Norco Zoning Map, the site is zoned as Agricultural–Low Density 20,000 square feet (A-1-20). This zone promotes the development of agriculturally oriented low-density living areas and encourages the maintenance of undeveloped open land on each residential parcel. Land uses near the site are zoned as Residential–Single Family 10,000 square feet (R-1-10). Permitted uses for this zone include single-family detached dwellings, public parks and playgrounds, accessory buildings and uses, small family day care homes, large family day care, residential care facilities, and other similar uses, with a minimum lot size of 10,000 square feet.

9. **Other Public Agencies Whose Approval May be Required:**
(e.g., permits, financing approval, or participation agreement.)

Federal Agencies *(not "public agencies" as defined by CEQA or required to take a CEQA action)*

N/A

State Agencies

California Department of Fish and Wildlife (CDFW) – CDFW Code Section 1602 Streambed Alteration Agreement

Santa Ana Regional Water Quality Control Board (RWQCB) – Waste Discharge Requirements under Porter Cologne Water Quality Control Act

City/County Agencies

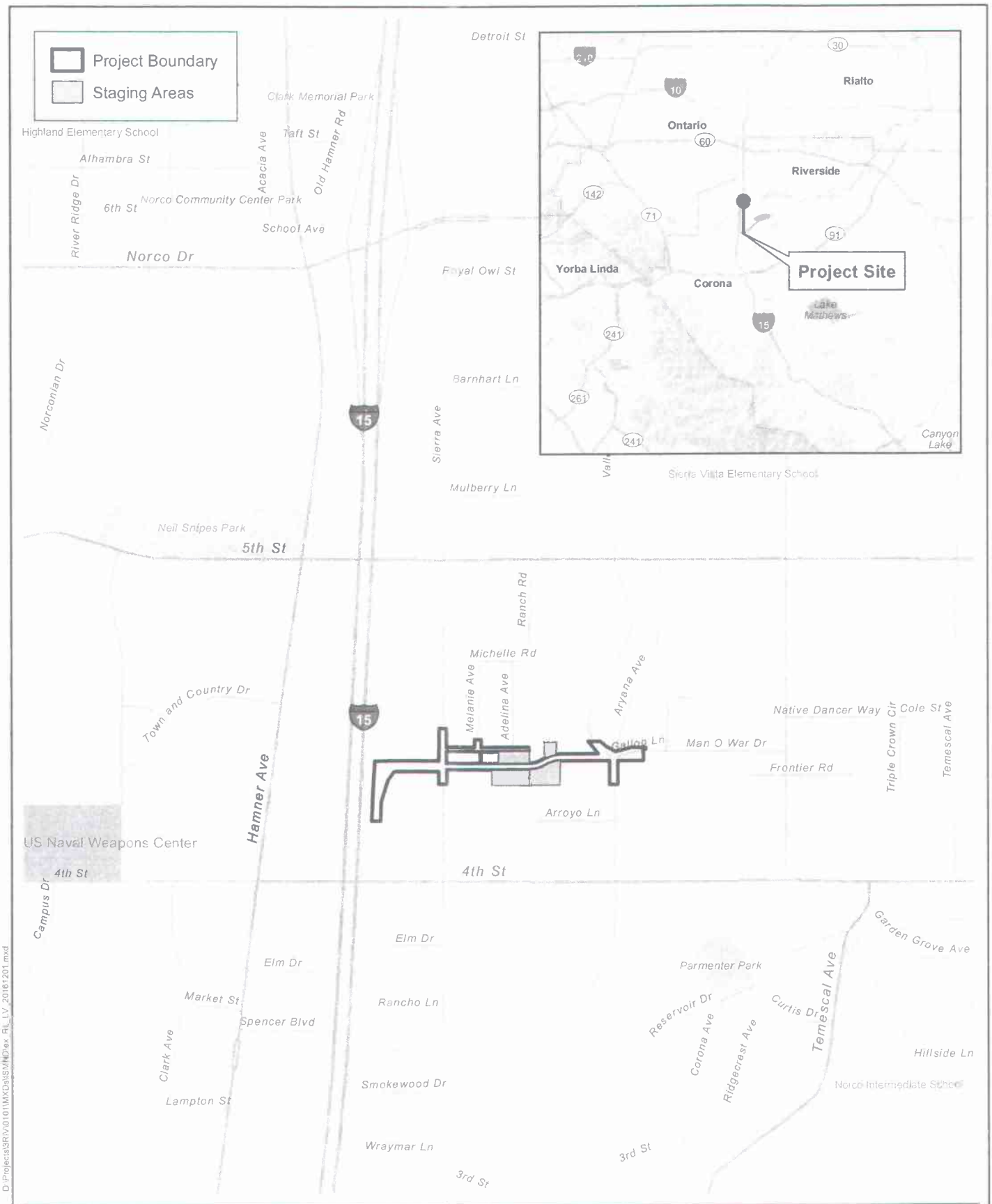
City of Norco – Encroachment Permit for work on public roadway rights-of-way

Financing Approval or Participation Agreements

N/A

10. Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code Section 21080.3.1? If so, has consultation begun?

The project site is within the Traditional Use Areas (TUA) of the Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians and Soboba Band of Luiseño Indians. Pursuant to Assembly Bill (AB) 52, the District initiated tribal consultation with each of the aforementioned tribes for this project. The Pechanga Band of Luiseño Indians did not respond to the initial invitation to consult or the follow up notice to consult on the project within the allotted 30-day time frame set by AB 52. The Rincon Band of Luiseño Indians deferred their right to consult to the Soboba Band of Luiseño Indians and the District began consultation with the Soboba Band of Luiseño Indians in December 2016. Consultation ended with the Soboba Tribe in April 2017.



Regional and Vicinity Map

Exhibit 1

North Norco Channel Line NB, Stage 3 Project

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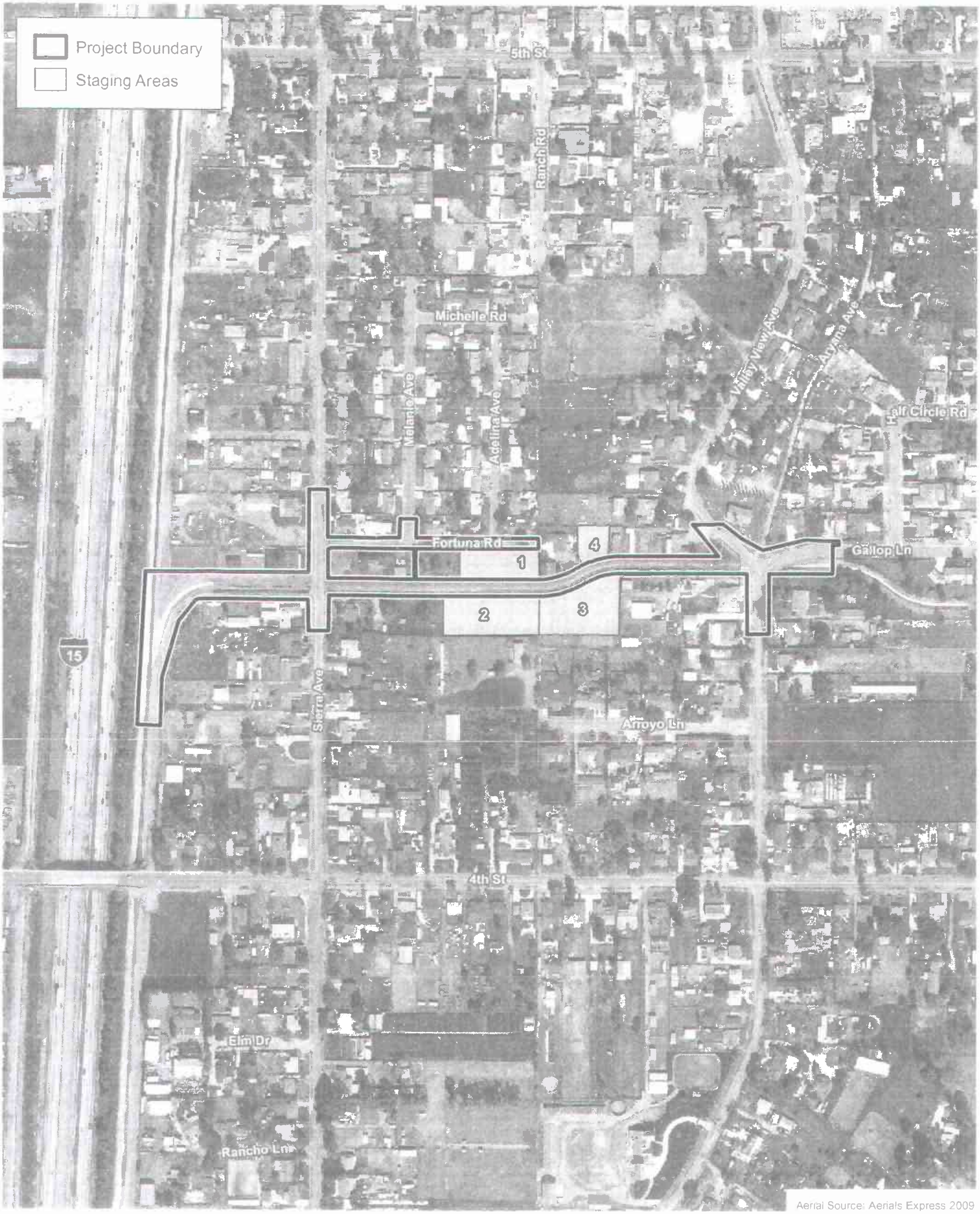
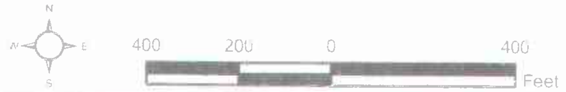


Aerial Photograph

Exhibit 2

North Norco Channel Line NB, Stage 3 Project



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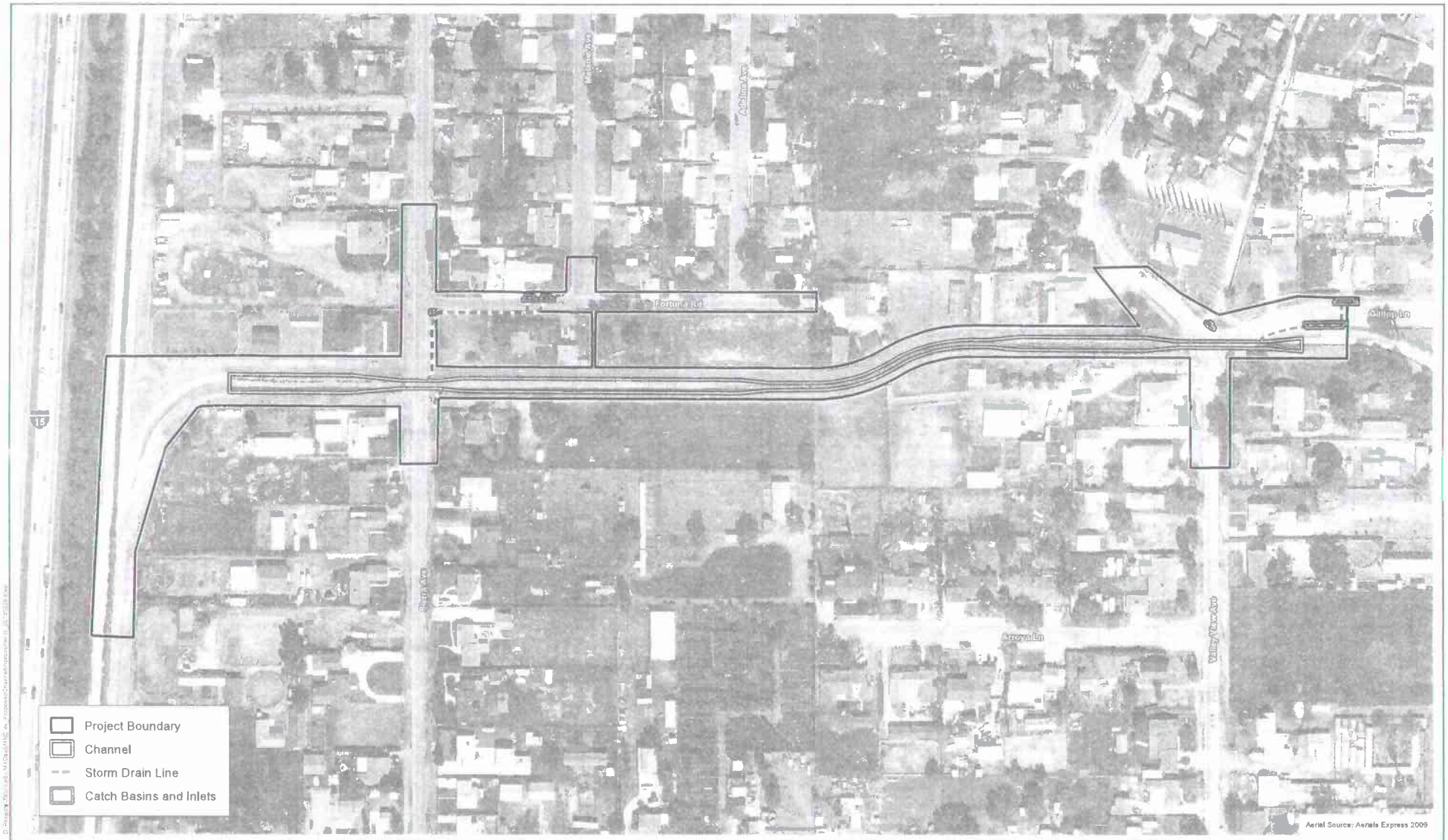


Proposed Channel Improvements

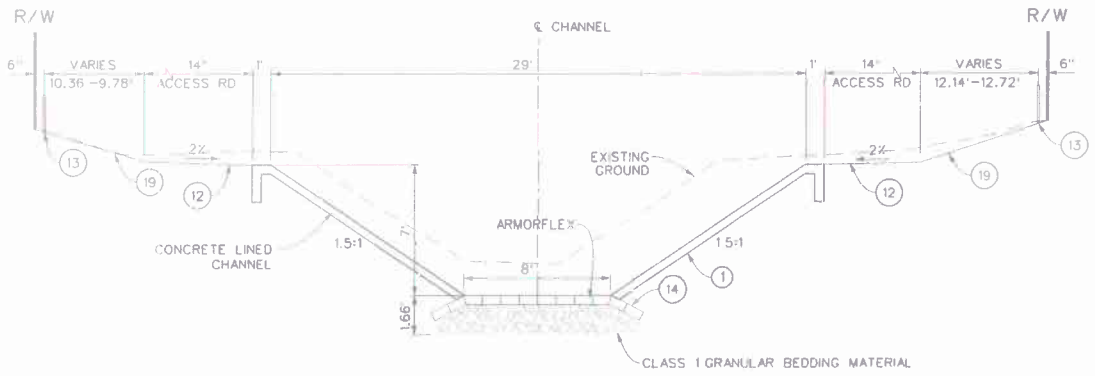
North Norco Channel Line NB, Stage 3 Project

Exhibit 3

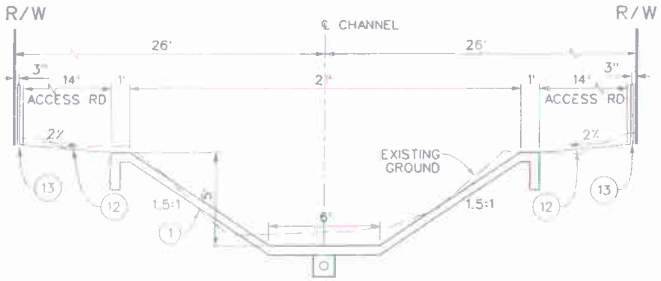
150 75 0 150

Feet

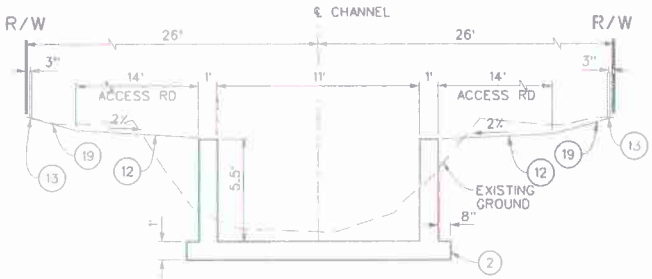
Channel cross section west of Sierra Avenue



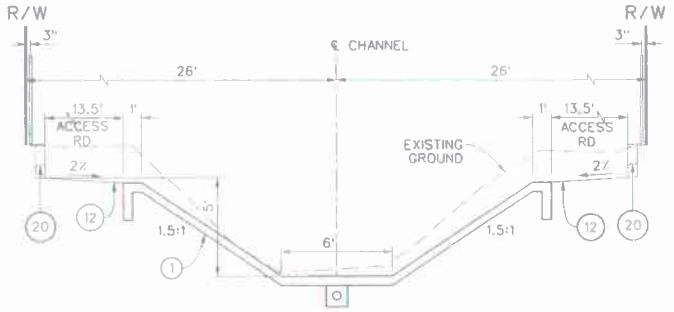
Channel cross section east of Sierra Avenue



Channel cross section at curve



Channel cross section west of Valley View Avenue



Source: 22%

Channel Cross Sections

Exhibit 4

North Norco Channel Line NB, Stage 3 Project

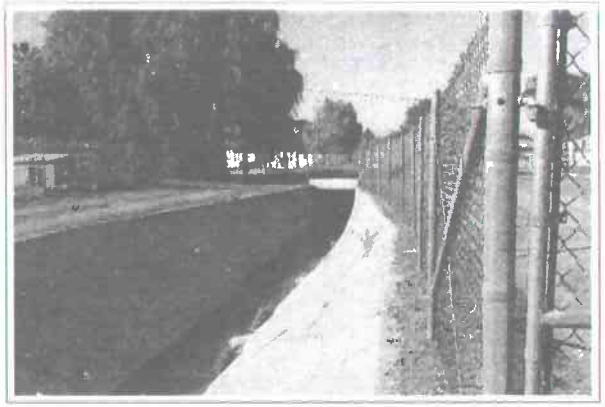
Looking west at western end of channel.

Looking northwest at culvert under Sierra Avenue.

Looking east at channel east of Sierra Avenue.

Looking west at channel west of Valley View Avenue.

Looking south at culvert under Valley View Avenue.



Looking west at channel east of Valley View Avenue.

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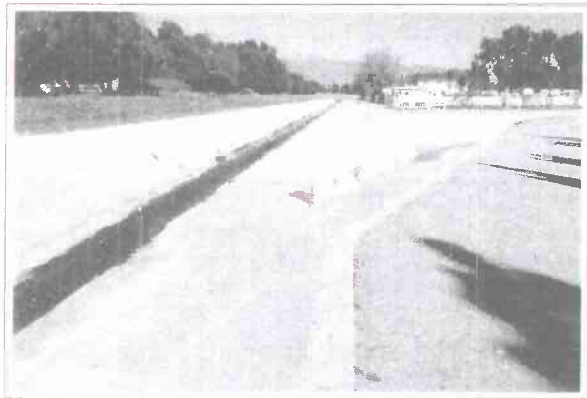
Site Photographs

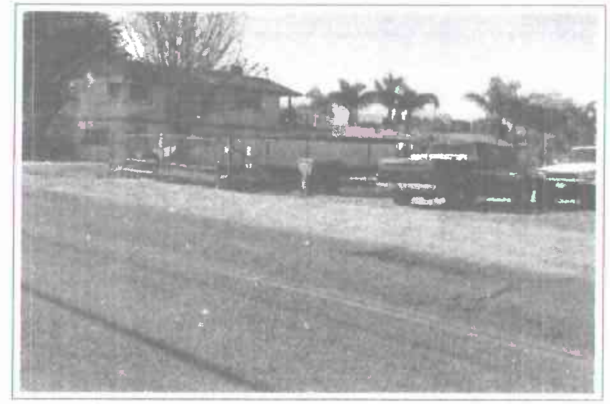
Exhibit 5

North Norco Channel Line NB, Stage 3 Project



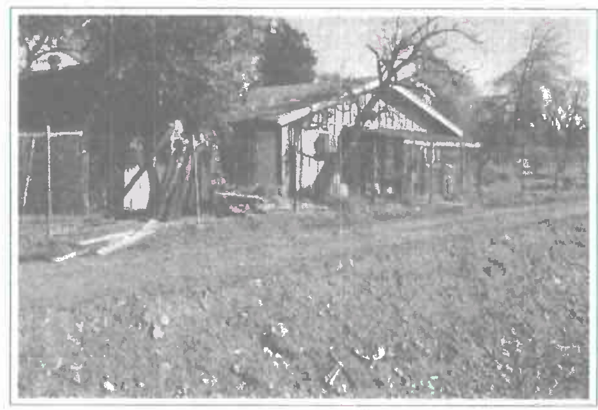
Looking north at confluence of North Norco Channel and Line NB.

Looking north on Sierra Avenue from channel culvert.



Looking southwest at residence south of channel and west of Sierra Avenue.

Looking northwest at stable north of channel and west of Sierra Avenue



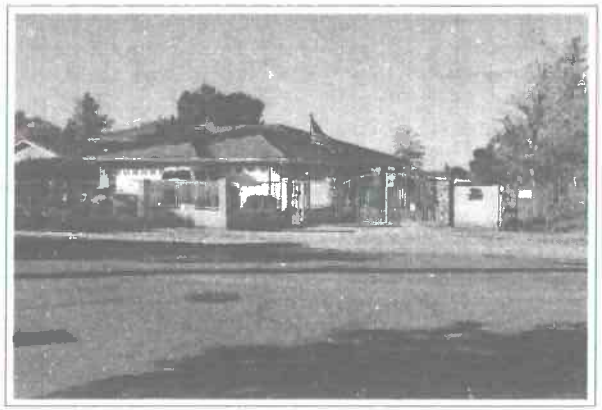
Looking northeast at residence north of channel and east of Sierra Avenue.

Adjacent Development

North Norco Channel Line NB, Stage 3 Project

Exhibit 6a

Looking west at Fortuna Road toward Sierra Avenue.



Looking west at residence south of channel and west of Valley View Avenue.

Looking northwest at residence north of channel and west of Valley View Avenue

Looking north at Valley View Avenue from channel culvert.

Looking east at Gallop Lane east of Valley View Avenue.

Adjacent Development

Exhibit 6b

North Norco Channel Line NB, Stage 3 Project

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors, as checked below, would potentially be affected by this project.

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

Evaluation of Environmental Impacts:

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

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

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

4. "Negative Declaration: No Impact or Less Than Significant" applies when the proposed project will not have a significant effect on the environment, does not require the incorporation of mitigation measures, and does not require the preparation of an Environmental Impact Report. The lead agency must briefly describe the reasons that a proposed project will not have significant effect on the environment and does not require the preparation of an environmental impact report.

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

6. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (CEQA Guidelines Section 15063(c)(3)(D)). The use of an earlier analysis as a reference should include a brief discussion that identifies the following:

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

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

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

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

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

9. The explanation of each issue should identify:

a. The significance criteria or threshold, if any, used to evaluate each question; and

b. The mitigation measure identified, if any, to reduce the impact to less than significance.

CEQA CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS. Would the Project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

No Impact.

The project site is located in an agricultural residential neighborhood in the City of Norco, where large lot residences with accessory agricultural activities (e.g., farming and animal raising and boarding) are present. The project site contains a dirt-lined trapezoidal channel, with reinforced box culverts under Sierra Avenue and Valley View Avenue. Dirt access roads run along the north and south sides of the channel, and chain-link fence with gates surround the channel right-of-way. See Exhibit 3 for photographs of the site and surrounding area. Since the channel is below grade, it is only readily visible at short distances from the site, mainly from abutting residential properties and crossing streets (i.e., Sierra Avenue and Valley View Avenue). The project area is not part of a scenic vista and the proposed improvements to the channel would create a concrete-lined channel with a short rock-lined segment, but the visual quality of the channel will remain relatively unchanged. Thus, the project would not adversely affect the aesthetic quality of the project vicinity. Views of the mountains to the north and the hills to the east would not be blocked by the project. No impact on scenic vistas would occur.

(Sources: Project Description, Norco General Plan)

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒

No Impact.

Review of the California Scenic Highway Mapping System shows that there are no officially designated Scenic Highways near the project site. The nearest officially designated State Scenic Highway is State Route (SR) 243, located approximately 42 miles east of the project site in Banning, California. I-15 runs through the City of Norco along the western edge of the site, and the segment of I-15 south of SR-91 to the San Luis Rey River near the San Diego County line is considered an eligible Scenic Highway. The project site is not visible from this segment of I-15.

The North Norco Channel Line NB is not a scenic resource, and there are no scenic resources in the vicinity. Also, the proposed improvements would be at-grade, below grade, or underground and would not be visible from I-15. Thus, no impact on scenic resources would occur with the project.

(Sources: Project Description, California Scenic Highway Mapping System)

c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐

Less than Significant Impact.

The project will involve the improvement of the existing flood control channel, requiring grading, excavation and trenching activities, and concrete work. During the construction period, these activities will result in views of a highly disturbed ground with construction equipment, soil stockpiles, building materials, trucks, and construction crews, as seen by individuals adjacent to the site. Upon completion of construction, views of the site will revert back to a drainage channel, with roads repaved and staging areas cleared.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

While a larger and concrete-lined channel would be constructed in place of the existing earthen channel, the overall character of the area will remain largely unchanged. Thus, the project would have less than significant impacts on the visual character of the site and its surroundings. No mitigation is required.

(Source: Project Description)

d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

No Impact.

There are no existing light fixtures or sources of glare along the channel. Construction activities are anticipated to occur during daytime hours from 7 AM to 5 PM, eliminating the need for temporary nighttime lighting. The proposed improvements include concrete and rock lining of the channel (which would not be reflective) and improvements to storm drain lines, inlets, and catch basins that would be underground and not readily visible. Additionally, the project does not propose the installation of permanent light fixtures. Therefore, there would be no impact related to new sources of light and glare.

(Source: Project Description)

II.	**AGRICULTURAL & FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

No Impact.

The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP) pursuant to Section 65570 of the *California Government Code*. Under the FMMP, the site and the surrounding area are designated as Urban and Built-Up Land, which refers to land occupied by structures that have a building density of at least 1 unit to 1.5 acres or approximately 6 structures to a 10.0-acre parcel. This includes residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, and sewage treatment and water-control structures. There are no Prime Farmlands, Unique Farmlands, or Farmlands of State or Local Importance on or near the site. Thus, the project would not convert farmland to other uses and no impact would occur.

(Source: Riverside County Important Farmland 2014)

b)	Conflict with existing agricultural zoning, agricultural use or land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?	☐	☐	☐	☒

No Impact.

According to the Norco Zoning Map, the project site and surrounding areas are zoned as A-1-20, with the area north of Fortuna Road zoned as R-1-10. According to the Norco Municipal Code, the A-1-20 zone allows farms devoted to the hatching, raising, butchering, or marketing on a commercial scale of chickens, turkeys, or other fowl or poultry and

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

rabbits, fish, frogs, mink, chinchilla, or other small animal farms of a similar nature. Nurseries, greenhouses, orchards, aviaries, and apiaries; the raising of field crops and tree crops, berry and bush crops, as well as vegetable, flower, and herb gardening on a commercial scale; and the keeping and maintaining of horses, cattle, swine, sheep, and goats are also allowed.

Although there are animal-raising activities at the residences near the site, the site is a storm drainage channel and is not in agricultural use. Storm drain lines, inlets, and catch basins will be constructed/reconstructed on existing public roadway rights-of-way. In addition, there are no Williamson Act contracts applicable to the project site, according to the Riverside County Williamson Act Map. The site is also not within a Riverside County Agricultural Preserve. The project would improve the channel and adjacent storm drain lines, inlets, and catch basins but would not change the use of the site or the surrounding area. Thus, there would be no impact related to a potential conflict with an agricultural zoning or Williamson Act contract or Agricultural Preserve.

(Sources: City of Norco Zoning Map, Norco Municipal Code, Riverside County Williamson Act Map)

c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

No Impact.

The project site is a storm drain channel and has no agricultural use. The areas surrounding the channel include low density residential uses and land used for the keeping and maintenance of horses, cattle, swine, sheep, or goats; greenhouses; and the raising of various crops. However, these areas are not designated as Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land) by the FMMP. The project would also not lead to any change in land use on the site or in the surrounding area. Thus, no impact related to the conversion of farmland to other uses would occur.

(Sources: Project Description, Riverside County Important Farmland 2014)

d)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

No Impact.

The nearest national forest to the site is the Cleveland National Forest, located in the Santa Ana Mountains and approximately 3.2 miles southwest of the project site. The site and the surrounding area do not contain trees that are part of a forest or that may be considered timberland. No impact on timberland or forestry resources would occur with the project.

(Source: National Forest Locator Map)

e)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact.

There is no forest land in the project vicinity. Also, the project would not lead to any change in land use on the site or in the surrounding area. There would be no impact regarding the conversion of forest land to non-forest land.

(Source: National Forest Locator Map)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

Less than Significant Impact.

The project site is located in the Riverside County portion of the South Coast Air Basin (SoCAB) and, for air quality regulation and permitting, is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The regional plan that applies to the proposed project is the SCAQMD Air Quality Management Plan (AQMP). The SCAQMD's current air quality planning document is the 2012 AQMP, which is a regional and multi-agency effort among the SCAQMD, California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the U.S. Environmental Protection Agency (USEPA). The purpose of the AQMP is to set forth a comprehensive program that would lead the region into compliance with federal air quality standards for eight-hour ozone (O_3) and for fine particulate matter less than 2.5 micrometers in diameter (PM2.5). The AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); updated emissions inventory methods for various source categories; and SCAG's latest growth forecasts. A 2016 AQMP is currently under development; adoption by the SCAQMD Governing Board is scheduled for February 2017. The 2016 AQMP will develop integrated strategies and measures to meet the following National Ambient Air Quality Standards (NAAQS):

- 8-hour O_3 (75 parts per billion [ppb]) by 2031
- Annual PM2.5 (12 micrograms per cubic meter [$\mu g/m^3$]) by 2025
- 8-hour O_3 (80 ppb) by 2023
- 1-hour O_3 (120 ppb) by 2022
- 24-hour PM2.5 (35 $\mu g/m^3$) by 2019

This section discusses any potential inconsistencies of the project with the AQMP.

The SCAQMD CEQA Handbook states, "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP". Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency, which are described below.

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

Based on the air quality modeling analysis in the Air Quality and Greenhouse Gas Emissions Technical Memorandum, which can be found in Appendix A of this Initial Study, short-term construction air quality emissions created from the proposed project would not result in significant impacts based on SCAQMD regional thresholds of significance or local thresholds of significance (discussed under Threshold b] of this section). The ongoing use of the storm drain channel would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance as shown in Table 3 below. The analysis for long-term operational air quality impacts showed that local pollutant concentrations would not exceed the air quality thresholds. Therefore, based on the information provided above, the proposed project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations and would be consistent with the first criterion.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis on this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. For this project, the City of Norco Land Use Plan defines the assumptions that are represented in the AQMP.

The project site is currently designated as RA in the Norco General Plan Land Use Map and is zoned A-1-20. The proposed project is consistent with the current land use designation and zoning and would not require a General Plan Amendment or zone change. The project would also not change the existing land uses on the site or the surrounding area, nor lead to a permanent increase in population, household, or employment. Therefore, the project is not anticipated to exceed the AQMP assumptions for the project site and is consistent with the AQMP for the second criterion. Based on the above, the proposed project is consistent with the SCAQMD AQMP.

However, construction of the project would generate short-term pollutant emissions that would add to existing air quality violations during the three-month period that construction activities will occur. Short-term employment would also occur during construction. Therefore, a less than significant impact will occur in relation to implementation of the AQMP. No mitigation is required.

(Sources: Project Description, Air Quality and Greenhouse Gas Emissions Technical Memorandum, 2012 Air Quality Management Plan, 2016 Air Quality Management Plan)

b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐

Less than Significant Impact.

Regional Air Quality

The SCAQMD establishes significance thresholds to assess the regional impact of project-related air pollutant emissions in the SoCAB. Table 2 summarizes the SCAQMD's mass emissions thresholds, which are presented for both long-term operational and short-term construction emissions. A project with emissions below these thresholds is considered to have a less than significant effect on air quality.

Table 2
SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance

	Pollutant Emissions (pounds/day)					
	VOC	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Construction	75	100	550	150	150	55
Operation	55	55	550	150	150	55

VOC: volatile organic compound(s); NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter less than 10 micrometers in diameter; PM2.5: fine particulate matter less than 2.5 micrometers in diameter.
Source: Vista Environmental 2016a

Construction Emissions

Project-generated emissions were calculated using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 emissions inventory model. CalEEMod is a computer program accepted by the SCAQMD that can be used to estimate anticipated emissions associated with land development projects in California. CalEEMod has separate databases for specific counties and air districts, and the Riverside County database was used for the project.

The proposed project would consist of channel improvements to an existing 1,750-foot-long channel. Improvements would include the development of approximately 200 lineal feet of RCB, 370 feet of concrete-lined rectangular channel, and 1,180 feet of concrete-lined trapezoidal channel. The project will also construct/reconstruct storm drain lines, inlets, and catch basins on Fortuna Road, Sierra Avenue, Gallop Lane, and Valley View Avenue in close proximity to the channel.

The CalEEMod model has been utilized to calculate the construction-related regional emissions from the proposed project. The worst-case summer or winter daily construction-related criteria pollutant emissions from the proposed project for each phase of construction activities are shown below in Table 3. The CalEEMod model outputs can be found in Appendix A of this Initial Study.

Table 3
Construction-Related Regional Criteria Pollutant Emissions

	Pollutant Emissions (pounds/day)					
Activity	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Excavation and Grading of Channel[a]						
On-site[2]	3.02	38.22	15.92	0.04	1.93	1.43
Off-site[3]	0.66	8.33	9.02	0.02	0.83	0.31
Total	**3.68**	**46.55**	**24.94**	**0.06**	**2.76**	**1.74**
Channel Construction						
On-site[2]	1.61	16.24	10.01	0.02	0.86	0.81
Off-site[3]	0.38	1.98	5.30	0.01	0.77	0.23
Total	**1.99**	**18.22**	**15.31**	**0.03**	**1.63**	**1.04**
Catch Basin Construction						
On-site[2]	2.45	24.79	13.59	0.03	1.21	1.14
Off-site[3]	0.38	1.98	5.30	0.01	0.77	0.23
Total	**2.83**	**26.77**	**18.89**	**0.04**	**1.98**	**1.37**
Final Grading and Road Construction[a]						
On-site[2]	1.93	20.85	10.91	0.02	1.19	0.92
Off-site[3]	0.08	0.53	1.11	0.00	0.14	0.04
Total	**2.01**	**21.38**	**12.02**	**0.02**	**1.33**	**0.96**
Paving						
On-site[2]	1.40	6.93	4.83	0.01	0.41	0.38
Off-site[3]	0.02	0.03	0.29	0.00	0.06	0.02
Total	**1.42**	**6.96**	**5.12**	**0.01**	**0.47**	**0.40**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

VOC: volatile organic compound(s); NOx: nitrogen oxides; CO: carbon monoxide; SO_2: sulfur dioxide; PM10: respirable particulate matter less than 10 micrometers in diameter; PM2.5: fine particulate matter less than 2.5 micrometers in diameter; SCAQMD: South Coast Air Quality Management District.
Notes:
[a] Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[b] On-site emissions from equipment not operated on public roads.
[c] Off-site emissions from vehicles operating on public roads.
Sources: Vista Environmental 2016a.

As shown, project emissions during construction would not exceed SCAQMD thresholds.

Operational Emissions

No change in the routine annual maintenance trips to the channel would occur after the project is constructed. Thus, no long-term emissions would be generated by the project.

Local Air Quality

Project-related construction and operational air emissions may have the potential to exceed the State and federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB. In order to assess local air quality impacts, the SCAQMD has developed Localized Significance Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. LSTs are applicable to the following criteria pollutants: nitrogen dioxide (NO_2), carbon monoxide (CO), respirable particulate matter less than 10 micrometers in diameter (PM10), and PM2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest receptor. For LST CO and NO_2 exposure analysis, receptors who could be exposed for one hour or more are considered. For LST PM10 and PM2.5 exposure analysis, receptors who could be exposed for 24 hours are considered. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The SCAQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres, which is the appropriate method for the project. When quantifying mass emissions for localized analysis, only emissions that occur on site are considered. Consistent with the SCAQMD's LST method guidelines, emissions related to off-site delivery/haul truck activity and worker trips are not considered in the evaluation of localized impacts.

Construction Emissions

The LST Methodology provides look-up tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. The project site is approximately 2.9 acres, which is closest to the 2.0- acre project site shown in the look-up tables and was used for this analysis.

The project site is located in Air Monitoring Area 22, which includes the Corona/Norco area. The nearest sensitive receptors are single-family homes located as near as ten feet (three meters) from the project site. According to LST Methodology, any receptor located closer than 25 meters shall be based on the 25-meter thresholds. Table 4 below shows the nitrogen oxides (NOx), CO, PM10, and PM2.5 construction activities.

Table 4
Construction-Related Local Criteria Pollutant Emissions

Phase	Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Excavation and Grading of Channel[a]	38.22	15.92	1.93	1.43
Channel Construction	16.24	10.01	0.86	0.81
Catch Basin Construction	24.79	13.59	1.21	1.14
Final Grading and Road Construction[1]	20.85	10.91	1.19	0.92
Paving	6.93	4.83	0.41	0.38
SCAQMD Thresholds for 25 meters (82 feet)[b]	**170**	**1,007**	**6**	**5**
Exceeds Threshold?	No	No	No	No

NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter less than 10 micrometers in diameter; PM2.5: fine respirable matter less than 2.5 micrometers in diameter; SCAQMD: South Coast Air Quality Management District.
Notes:
[a] Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[b] The nearest sensitive receptors are single-family homes located as near as 10 feet (3 meters) from the project site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds.
Sources: Calculated from CalEEMod and SCAQMD's Mass Rate Look-Up Tables for two acres in Air Monitoring Area 22, Corona/Norco Area, Vista Environmental 2016a

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

As shown in Tables 3 and 4, none of the analyzed criteria pollutants would exceed the SCAQMD regional construction and local emission thresholds. In addition, construction emissions would be short-term and limited only to the three-month period when construction activity is taking place. Additionally, construction activities would be required to follow SCAQMD regulations that limit fugitive dust emissions, including SCAQMD Rules 401 and 403. The District complies with pertinent SCAQMD regulations as a Standard Operating Procedure (SOP).

Operational Emissions

The ongoing use of the North Norco Channel Line NB would not result in a long-term increase in air quality emissions. The only emissions associated with long-term operation of the channel are from routine annual maintenance trips to the project site by District personnel in a small truck. No change in the routine maintenance schedule would occur from implementation of the proposed project.

Therefore, no long-term operational emissions are anticipated and the impact would be short-term and less than significant with compliance with SCAQMD regulations, as a standard operating procedure. No mitigation measures are required.

Standard Operating Procedure

SOP 1: The project shall comply with South Coast Air Quality Management District (SCAQMD) Rules 401 and 403, which require the contractor to implement measures to reduce fugitive dust emissions that include the following:

- Limit speed of vehicles on dirt areas of the project site to 15 miles per hour (mph) or less.
- Apply water and/or other dust suppressants as necessary to prevent or alleviate erosion by the forces of wind.
- Limit all stockpiles that can be blown by wind to 8 feet in height or apply a soil stabilizer.
- Cover all trucks hauling soil or other loose material.
- Sweep daily all paved access roads and any track out onto public road with water sweepers.
- Cease all grading operations other than dust suppression activities when winds exceed 25 mph.

(Sources: Project Description, Air Quality and Greenhouse Gas Emissions Technical Memorandum)

c)	Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard *(including releasing emissions which exceed quantitative thresholds for ozone precursors)?*	☐	☐	☒	☐

Less than Significant Impact.

Cumulative projects include local development projects proposed near the site, as well as general growth within the project area. However, as with most development projects, the greatest source of emissions is from mobile sources, which include vehicle travel throughout the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. The project site is an area that is nonattainment for ozone, PM10, and PM2.5.

In accordance with State CEQA Guidelines Section 15130(b), this analysis of cumulative impacts incorporates a three-tiered approach to assess cumulative air quality impacts.

- Consistency with the SCAQMD project-specific thresholds for construction and operations; and
- Project consistency with existing air quality plans.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

Consistency with South Coast Air Quality Management District Project-Specific Thresholds

The project site is located in the SoCAB. The USEPA has designated the SoCAB as a nonattainment area for ozone and PM2.5 by federal standards. CARB has designated the SoCAB as a nonattainment area for ozone, PM10, and PM2.5 by State standards. The regional ozone, PM10, and PM2.5 emissions associated with construction of the project have been calculated above in Table 3. The above analysis found that the project would result in less than significant regional emissions of VOC and NOx (ozone precursors), PM10, and PM2.5 during construction of the proposed project. Therefore, a less than significant cumulative impact would occur from construction of the project.

In general, the greatest cumulative operational impact on the air quality to the SoCAB would be the incremental addition of pollutants from increased traffic from residential, commercial, and industrial development. In accordance with SCAQMD methodology, projects that do not exceed SCAQMD criteria pollutant thresholds or that can be mitigated to less than significant criteria pollutant threshold levels are not significant and do not add to the overall cumulative impact. The analysis under Threshold b) above indicates that continued use of the North Norco Channel Line NB would result in no new VOC and NOx (ozone precursors), PM10, or PM2.5 emissions. With respect to long-term operational emissions, this project would create no cumulative impact.

Consistency with Air Quality Plans

As discussed above under Threshold a) above, the project is currently designated as RA in the Norco General Plan Land Use Map and is zoned A-1-20. The project would not conflict with the current land use designation and zoning and would not require a General Plan Amendment or zone change. The project would not lead to an increase in population or employment that would exceed the AQMP assumptions for the project site. Based on the above, the proposed project is consistent with the SCAQMD AQMP. Therefore, the proposed project would not result in an inconsistency with the current land use designations with respect to the regional forecasts utilized by the AQMP.

As such, the proposed project would result in a less than significant cumulative impact. No mitigation is required.

(Source: Air Quality and Greenhouse Gas Emissions Technical Memorandum)

d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Less than Significant Impact.

Sensitive use areas or receptors are classified as areas that contain children, elderly, or those with medical conditions that are exacerbated due to air pollutants. The agricultural residential area in which the North Norco Channel Line NB is located is considered to be a sensitive use area due to the presence of residences along the channel. The nearest off-site sensitive receptors are single-family homes located as near as ten feet (three meters) from the project site.

Construction-Related Sensitive Receptor Impacts

Local Criteria Pollutant Impacts from Construction

As shown in Table 4, local air quality impacts from construction of the project would not exceed the LST NOx, CO, PM10, and PM2.5 thresholds of significance. Therefore, construction of the project would have a less than significant construction impact related to local air quality and sensitive receptors, and no mitigation would be required.

Toxic Air Contaminants Impacts from Construction

In general, the greatest potential for toxic air contaminant (TAC) emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual cancer risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the relatively limited number of

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

heavy-duty construction equipment and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 70 years) substantial source of TAC emissions and corresponding individual cancer risk.

Construction activities would be required to follow SCAQMD regulations that limit DPM emissions, including SCAQMD Rule 402 that does not allow the discharge of any source of air contaminants that may create a nuisance at the nearby homes. In addition, the District requires all contractors to adhere to the District's best management practices (BMPs) that limit construction activities and associates emissions from occurring in close proximity to the nearby homes. Therefore, through compliance with SCAQMD regulations and the District's BMPs, no significant short-term TAC impacts would occur during construction of the proposed project. As such, construction of the project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operational-Related Sensitive Receptor Impacts

The ongoing use of the storm drain channel would not expose sensitive receptors to substantial pollutant concentrations. The only operational emissions associated with the project are vehicle emissions from routine annual maintenance trips to the channel by District personnel in a small truck. No change in the routine maintenance schedule would occur from implementation of the proposed project. Therefore, no long-term operational emissions are anticipated and there would be no impact.

Impacts would be temporary and less than significant. No mitigation is required.

(Source: Air Quality and Greenhouse Gas Emissions Technical Memorandum)

e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Less than Significant Impact.

The existing North Norco Channel Line NB does not generate objectionable odors, which are generally associated with agricultural activities, landfills and transfer stations, the generation or treatment of sewage, the use or generation of chemicals, and food processing.

Potential sources that may emit odors during construction activities for the project include the application of materials such as asphalt pavement, paints, and solvents and potential odors from diesel equipment emissions. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site boundary. Due to the transitory nature of construction odors, a less than significant odor impact would occur, and no mitigation would be required.

The project would consist of channel improvements to the current interim dirt-lined trapezoidal channel, including the construction of a concrete-lined channel, storm drain lines, inlets, and catch basins to improve capacity for increased flow rates. The proposed project would have the potential to reduce odors that may currently be created in the interim dirt-lined channel from organic processes and insufficient capacity of the conveyance of the ultimate condition flow rates. However, current odor levels are minimal and do not rise to a significant enough level to be unpleasant to a majority of the population in the area. Therefore, a less than significant odor impact would occur from operation of the project. No mitigation is required.

(Source: Air Quality and Greenhouse Gas Emissions Technical Memorandum)

f)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Less than Significant Impact.

Climate change refers to any significant change in climate, such as the average temperature, precipitation, or wind patterns, over a period of time that result from natural factors, natural processes, and human activities that change the

composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn increases the Earth's surface temperature. Some GHGs occur naturally and are emitted into the atmosphere through natural processes, while others are created and emitted solely through human activities.

In order to identify GHG significance criteria under CEQA for development projects, the SCAQMD initiated a Working Group, which provided detailed methodology for evaluating GHG significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommended a tiered approach that provides a quantitative annual threshold of 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year for all land use type projects. According to the SCAQMD draft threshold of significance, a cumulative global climate change impact would occur if the GHG emissions would exceed 3,000 $MTCO_2e$ per year.

The current use of the site is the storm drain channel, and the proposed project would not increase operational GHG emissions because the nature of the project is the same as its existing uses. The proposed project would consist of improvements to the existing interim dirt-lined channel through the construction of a concrete channel and the improvement of storm drain lines, inlets, and catch basins. The proposed project is anticipated to generate GHG emissions from construction equipment as calculated using CalEEMod. Table 5 shows the GHG emissions from construction for the project.

Table 5
Construction-Related Greenhouse Gas Emissions

	Greenhouse Gas Emissions (Metric Tons per Year)			
Category	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Excavation and Grading of Channel	28.70	0.01	0.00	28.81
Channel Construction	31.51	0.00	0.00	31.62
Catch Basin Construction	42.34	0.01	0.00	42.51
Final Grading and Road Construction	5.46	0.00	0.00	5.49
Paving	0.71	0.00	0.00	0.72
Total Construction Emissions	108.72	0.02	0.00	109.14
Amortized Total Construction Emissions (30 years)*	**3.62**	**0.00**	**0.00**	**3.64**
SCAQMD Draft Threshold of Significance				**3,000**

CO_2: carbon dioxide; CH_4: methane; N_2O: nitrous oxide; CO_2e: carbon dioxide equivalent; SCAQMD: South Coast Air Quality Management District.
Notes:
*Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.
Sources: CalEEMod Version 2013.2.2, Vista Environmental 2016a.

The data provided in Table 5 above shows that the proposed project would create a total of 109.14 $MTCO_2e$ or 3.64 $MTCO_2e$ per year, when amortized over a 30-year period. Because the proposed project's GHG emissions would be less than 3,000 $MTCO_2e$/yr, the emissions would not be cumulatively considerable. Therefore, the project would result in less than significant GHG emissions. No mitigation is required.

(Sources: Preliminary Environmental Assessment Report, Air Quality and Greenhouse Gas Emissions Technical Memorandum)

g)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

Less than Significant Impact.

The applicable plans reducing GHG emissions are the County of Riverside Draft Climate Action Plan (February 2015) and the SCAQMD Working Group's draft GHG emissions thresholds. The County's Climate Action Plan provides a GHG emission reduction target of a 15 percent decrease from 2008 levels by 2020. The Climate Action Plan provides measures to reduce transportation, energy, area source, water, solid waste, agricultural, and industrial sources of GHG emissions. None of these measures are applicable to the continued use and operation of the storm drain channel. Therefore, the proposed project would not conflict with the County's Climate Action Plan.

Also, as noted in Threshold f) above, implementation of the proposed project would result in the generation of 3.64 $MTCO_2e$ per year. The proposed project would be below the SCAQMD's proposed threshold of 3,000 $MTCO_2e$ per year. The proposed project is therefore consistent with the SCAQMD Working Group's draft GHG emissions thresholds. Federal and State regulations related to GHG reduction apply to transportation/vehicles, energy and waste production, and industry and do not directly address storm drainage channels. Thus, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. There would be a less than significant impact from construction-generated GHG emissions, and no mitigation is required.

(Source: Air Quality and Greenhouse Gas Emissions Technical Memorandum)

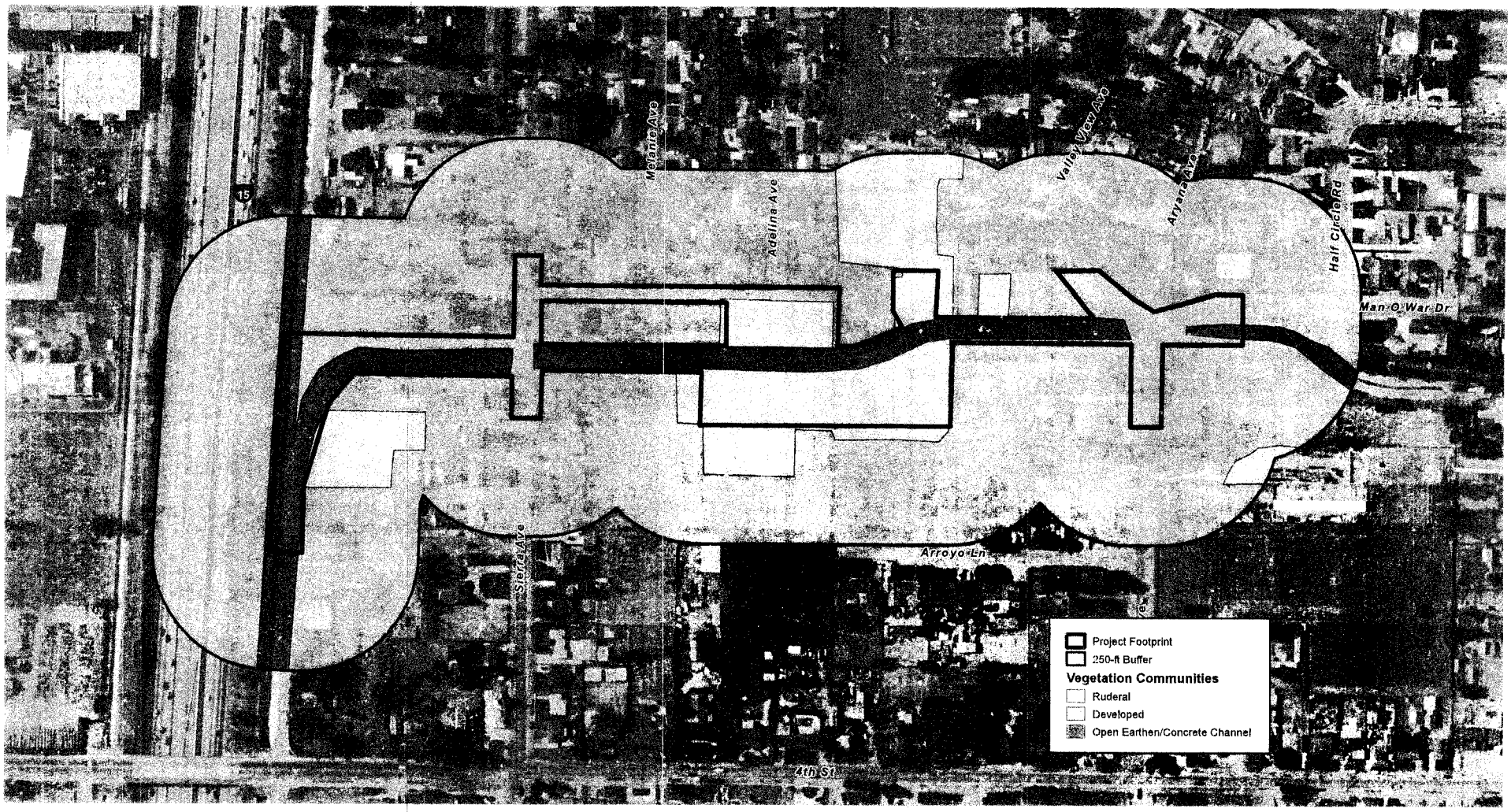
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

No Impact.

The North Norco Channel Line NB is mainly unvegetated but includes small, insignificant patches of upland non-native vegetation. A General Biological Assessment was completed to determine the potential for plant and animal habitat disturbance in an area defined as the project site and a 500-foot buffer around the site. Three vegetation communities and land cover types were observed within the area: ruderal (5.56 acres), open earthen/concrete channel (3.68 acres), and developed (37.23 acres). Ruderal vegetation is found on undeveloped land along the channel. These areas are regularly disked and dominated by non-native, weedy plant species, with some ornamental species. The open channel and access roads along the channel support limited vegetation consisting of non- native, weedy plant species. Developed areas include residential properties and roadways that have no or limited vegetation consisting of ornamental and weedy species. All three communities are heavily disturbed and lack native habitat. See Exhibit 7 for the location of these vegetation communities.

The General Biological Assessment identified the plant and animal species observed on the site but indicated that there were no special status species within the project site during the time of the field visit. Also, the project site does not contain the appropriate habitat to support any special status wildlife species or species identified by the State or federal Endangered Species Act.

Five special status plant species were reported to occur in the U.S. Geological Survey's (USGS') Corona North 7.5-minute topographic quadrangle, which includes the project area. The Santa Ana River woollystar (*Eriastrum densifolium ssp. sanctorum*) is one of the species reported in the quadrangle, and it is designated as a federal and State Endangered species. All five special status plant species were determined to have no potential for occurrence in the project area due to the disturbed nature of the area and lack of suitable habitat that could support any special status plant species. No further surveys are necessary to determine presence or absence of these species.



Source: URS 2016

Vegetation Communities

North Norco Channel Line NB, Stage 3 Project

Exhibit 7

200 100 0 200 Feet

PSOMAS

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		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
	Thirty-two special status wildlife species are reported to occur in the USGS' Corona North 7.5-minute topographic quadrangle. Ten of these species are listed as federally and/or State Threatened and/or Endangered. However, all 32 special status wildlife species were determined to have no potential for occurrence in the project area, due to the lack of suitable habitat to support these wildlife species. Therefore, there would be no impact on sensitive plant or animal species, and no mitigation is required. (Source: General Biological Assessment)				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

No Impact.

The project site does not support habitat appropriate for vernal pools or species associated with these habitat types, nor does it contain riparian/riverine areas as defined by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). According to the General Biological Assessment completed for this project, vernal pools, vernal swales, alkali scalds or flats, or other seasonal wet habitats were not identified in the project area during field surveys. The project area lacks suitable habitat for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Branchinecta lynchi*), or other vernal pool species (including plants).

The North Norco Channel Line NB is a constructed earthen trapezoidal drainage channel that contains an Ordinary High Water Mark (OHWM) and is tributary to a Traditional Navigable Water (TNW): the Santa Ana River. The project site is identified by the National Wetlands Inventory (NWI) as: riverine, intermittent, streambed, seasonally flooded, artificial substrate (R4SBCr). As indicated above, the North Norco Channel Line NB is mainly unvegetated, with small, insignificant patches of upland non-native vegetation. No United States Army Corps of Engineers (USACE)-defined wetlands are present within the channel or adjacent areas, as identified during the delineation, and no wetlands are identified in the area by the NWI.

The Western Riverside County MSHCP Section 6.1.2 defines riparian/riverine areas as "lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, 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". The project area contains drainage features that include the project site, which is a constructed trapezoidal earthen and partially rock rip-rap flood-control channel. This feature does not contain riparian or riverine habitat as defined by the MSHCP; thus any alterations to the drainage would not affect any Covered Species or Conservation Areas either directly or indirectly through downstream effects. Additionally, the feature does not contain any natural or created wetlands or created open waters.

The Western Riverside County MSHCP Permittee Implementation Guidance Manual states that artificially constructed areas and areas that do not contain biological functions and values that contribute to downstream habitat values for covered species are not considered riparian/riverine resources. There would be no permanent impacts to riparian and riverine areas as defined by the MSHCP within the project site.

Additionally, the project site does not support habitat appropriate for vernal pools or species associated with these habitat types, nor does it contain riparian/riverine areas as defined by the MSHCP. Therefore, there would be no impacts and no mitigation is required.

(Sources: General Biological Assessment, Western Riverside County MSHCP, Western Riverside County MSHCP Permittee Implementation Guidance Manual; USFWS Critical Habitat Portal)

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Have a substantial adverse effect on biological resources involved within a jurisdictional water feature as defined by federal, State or local regulations (e.g., Section 404 of the Clean Water Act, Section 401 of the Clean Water Act, Section 1602 of California Fish and Game Code, Porter-Cologne Water Quality Control Act, etc.) through direct removal, filing, hydrological interruption, or other means?	☐	☒	☐	☐

Potentially Significant Impact Unless Mitigation Is Incorporated.

A Jurisdictional Delineation was prepared for the project in accordance with requirements determined by the Clean Water Act (CWA), as implemented by the USACE, the RWQCB, and the CDFW, in order to determine the presence of any wetlands or other Waters of the United States (WoUS). Exhibit 8 shows the jurisdictional resources on and near the site.

The North Norco Channel Line NB is classified as a constructed earthen drainage channel, and there are no natural water features in the channel. Seasonal storm water runoff from areas to the north, south, and east of the channel enter the channel and flow westerly into the North Norco Channel along I-15 that is tributary to the Santa Ana River. The North Norco Channel Line NB has an OHWM, which is a line on the shore established by the fluctuation of water and defined by a clear natural line impressed on the back, shelving, changes in the character of the soil, destruction of terrestrial vegetation, presence of litter and debris, and other characteristics. The channel is assumed to support non-relatively permanent (i.e., ephemeral) flow and is tributary to the Santa Ana River.

The District has consulted with the USACE to determine whether there are wetland or non-wetland areas in the channel that are subject to USACE jurisdiction. The USACE has indicated that the North Norco Channel Line NB is a non-tidal drainage ditch excavated on dry land and thus, is not considered WoUS. As such, it is not subject to permitting under Sections 401 and 404 of the CWA.

The Santa Ana RWQCB will have to determine if the project is within their jurisdiction through the Porter-Cologne Water Quality Control Act. Construction of the project may affect 0.79 acre of non-wetland areas that may be subject to RWQCB jurisdiction. The District will need to consult with the Santa Ana RWQCB and obtain Waste Discharge Requirements for the project in accordance with the Porter Cologne Water Quality Control Act, if necessary.

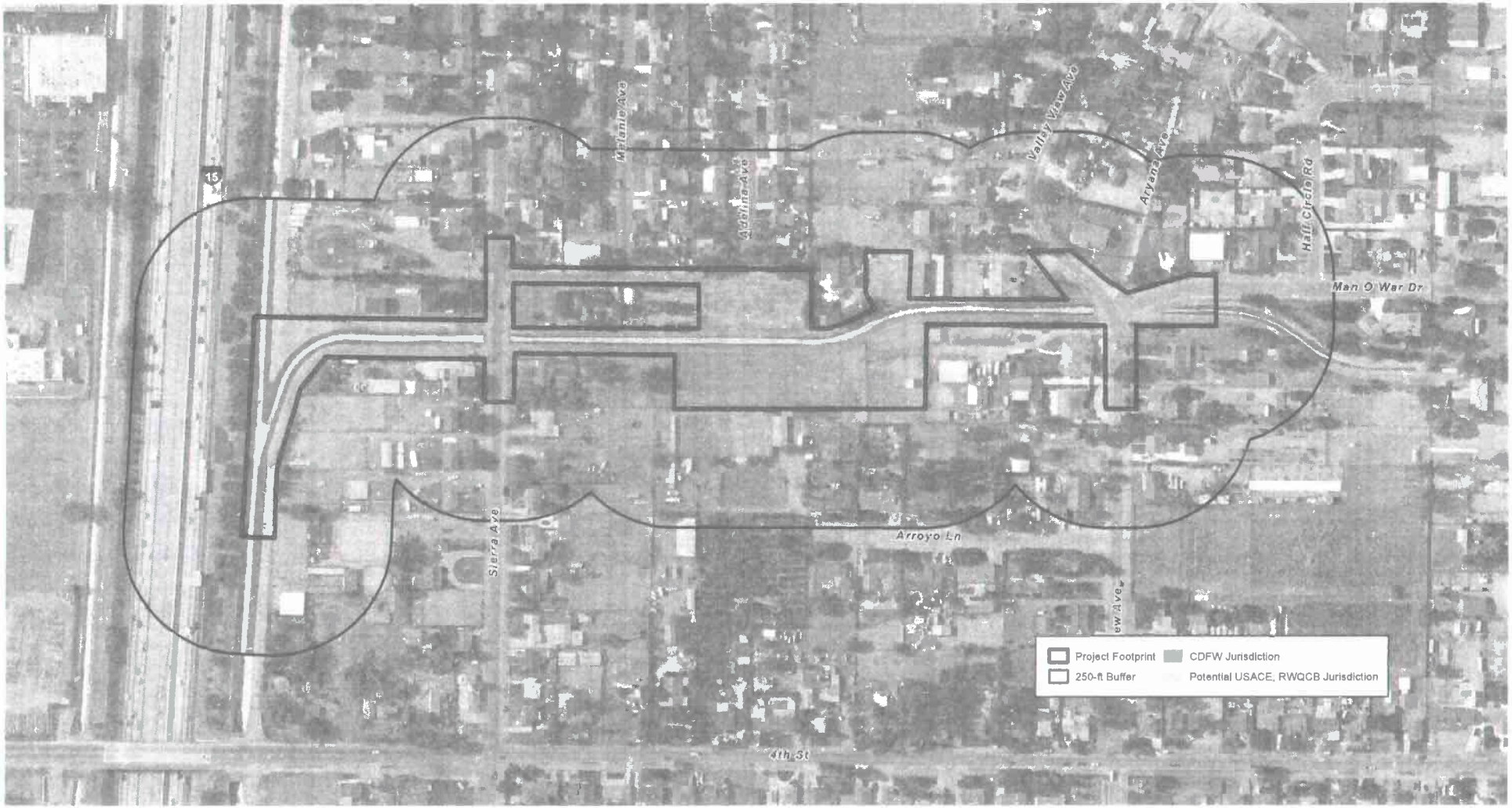
The project would alter the earthen bed, banks, and channel containing at least minimal habitat for wildlife resources. Construction of the project may affect 2.01 acres of non-riparian areas that may be subject to CDFW jurisdiction. The District will need to consult with the CDFW and obtain a Section 1602 Streambed Alteration Agreement for the project, if necessary.

Procurement of the necessary permits and compliance with the conditions of the permits would be needed to prevent any significant impacts to biological resources within a jurisdictional water feature (MM 1). Implementation of this mitigation would reduce impacts to less than significant levels.

Mitigation Measure

MM 1: Prior to initiation of construction activities, the District shall obtain all necessary permits from the Santa Ana Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) for impacts to jurisdictional resources. Mitigation for the loss of jurisdictional resources shall be negotiated with the resource agencies during the regulatory permitting process and shall ensure mitigation to compensate for permanent impacts on jurisdictional resources is equivalent or superior to the biological functions and values impacted by the project. Potential mitigation options may include, but are not limited to, payment of an in-lieu mitigation fee to a mitigation bank or regional riparian enhancement program (e.g., invasive plant or wildlife species removal).

(Source: Jurisdictional Delineation, USACE Correspondence)



Source: URS 2016

Jurisdictional Resources

Exhibit 8

North Norco Channel Line NB, Stage 3 Project

200 100 0 200 Feet

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		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

Less than Significant Impact.

Based on the General Biological Assessment, no fish species were observed during site surveys, and two special status fish species may occur in the project area but have no potential to occur on the project site. Impacts to biological resources in the channel would be mitigated through MM 1, as discussed above.

The project site is located in an area with a chain-link fence lining both sides of the length of the channel. However, wildlife species and small mammals may use the channel as a migratory wildlife corridor or as a native wildlife nursery site. Construction activities would prevent this movement on a short-term basis, but after construction completion, wildlife would be able to use the channel as a migratory wildlife corridor and as a native wildlife nursery site. Impacts would be temporary and less than significant. No mitigation is required.

(Sources: General Biological Assessment, Jurisdictional Delineation)

e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

No Impact.

The County has adopted the Riverside County Oak Tree Management Guidelines, which intends to promote the preservation of oak trees (*Quercus, ssp.*) in the County. However, there are no oak woodlands or oak trees on the project site, and no trees would be removed as part of the project construction. Therefore, the Riverside County Oak Tree Management Guidelines are not applicable to the project. No impact would occur with the project.

(Source: General Biological Assessment)

f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

No Impact.

The project site is located within the boundaries of the Western Riverside County MSHCP but is outside of any designated Criteria Cells or Cell Groups. The project area does not include any MSHCP Conserved Lands or Public/Quasi-Public (PQP) lands and, therefore is in compliance with MSHCP Sections 6.1.4 (Urban/Wildlands Interface) and 7.5.3 (Construction Guidelines). Additionally, the project site is not located in areas with any Narrow Endemic Plant Species, as identified by the MSHCP Section 6.1.3 or with Amphibian, Burrowing Owl, Mammalian, Criteria Area Species, or Special Linkage Areas, as identified by MSHCP Section 6.3.2 Survey Needs and Procedures. Core habitat areas and important habitat linkage areas in the City are limited to the Santa Ana River, which supports fish species and riparian habitats. The project site does not contain MSHCP Section 6.1.2 riparian/riverine areas (as discussed under Threshold b] above). Also, the MSHCP states that flood control facilities (improvements and new construction) that are undertaken by a Permittee are considered Covered Activities as described in MSHCP Section 7.3.7 (Flood Control Facilities). The District is a Permittee under the Western Riverside MSHCP. Based on the information above, the project is in compliance with the Western Riverside County MSHCP.

(Sources: General Biological Assessment, Western Riverside County MSHCP, Norco General Plan)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒

No Impact.

The project site involves the reconstruction of the North Norco Channel Line NB, which was initially constructed in 1979–1980. Demolition would be limited to areas within the existing channel right-of-way and adjacent roads. There are no historical resources, sites, or landmarks that have been identified within or immediately adjacent to the project site, based on review of the California Historic Resources Inventory (HRI), California Department of Parks and Recreation (DPR), National Register of Historic Places (NRHP), and the 1942 and 1954 and USGS topographic maps. Based on the cultural resource literature and records search, it has been determined that the area has a low sensitivity for historic resources. Also, no historically significant buildings, structures, objects, or sites were observed on the project site. Therefore, no impacts to historical resources would occur with the project.

(Sources: Project Description, Preliminary Environmental Assessment Report, Phase I Cultural Resources Assessment)

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐

Less than Significant Impact.

The area that is now the City of Norco was occupied during the Late Prehistoric Period by the Native American societies commonly known to anthropologists as the Gabrielino. The term "Gabrielino" identifies those Native Americans who were under the control of the Spanish Mission San Gabriel. The overwhelming number of people here were of the same ethnic nationality and language group who generally referred to themselves as Tongva. Their territory included the entire Los Angeles Basin and extended from northern Orange County north to the San Fernando Valley in Los Angeles County and eastward to the Riverside and San Bernardino area. It also included the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers.

A records search at the Eastern Information Center indicated that three historical resource studies have been conducted within a ¼ mile of the site. One of these studies includes the project area but no cultural resources were identified. The Sacred Lands file search with the Native American Heritage Commission (NAHC) did not indicate the presence of Native American traditional cultural places in the area.

A survey of the project site and proposed staging areas for cultural resources was conducted on November 30, 2016. Since no access was provided to the two staging areas south of the channel and surveys were conducted from the channel right-of-way and public roadways. No archaeological structures, objects, or sites were observed on the surface of the project site. However, ground disturbance associated with the project may uncover buried archaeological resources. The District implements a standard practice in the event that archaeological resources are discovered during grading, excavation, and ground disturbance. Implementation of SOP 2 would prevent potentially significant adverse impacts on undiscovered archaeological resources that may be disturbed during project construction. Impacts would be less than significant.

Standard Operating Procedure

SOP 2: In accordance with the District's Standard Operating Procedures, if an accidental discovery of potentially significant cultural resources occurs during construction, the following procedures shall be implemented if

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

avoidance is not possible:

1) If avoidance is not possible, there shall be no ground disturbance within the area of the discovery until or unless a qualified archaeologist has determined that construction will not impact potentially significant cultural resources.

2) The Contractor shall immediately cease all construction or ground disturbance activity in the vicinity of the find and notify the Engineer. The District will provide a qualified archaeologist to assess the significance of the discovery and, if necessary, develop appropriate management and treatment measures. The Contractor shall not resume construction in the affected area without the Engineer's approval.

3) If the discovery is determined to be of Native American origin and is potentially substantial in nature pursuant to Public Resources Code Sections 21074, the District shall make a reasonable attempt to identify the most applicable Tribe of origin. The District may contact a qualified archaeologist, the nearest Tribes, local land use agency (e.g. City or County), the County Archaeologist and/or the Native American Heritage Commission (NAHC) to help identify the appropriate Tribe(s) for the discovered cultural resources.

4) Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with applicable Native American Tribal Representative(s) and if necessary, or with assistance from the Riverside County Archaeologist or other qualified archaeologist.

5) In the case that multiple Tribes have been identified as potentially being the Tribe of origin, and if those Tribes cannot come to an agreement as to the method for preserving the cultural resource(s), the resources shall be reburied nearby, if feasible.

6) If reburial is not feasible, and the cultural resources cannot be adequately associated with any one Tribe, the District shall cause to have the resources curated and stored pursuant to applicable State and federal laws; the District preference would be to cause the cultural resources to be curated and stored at the Western Science Center or at an appropriate institution recommended by the Project Archaeologist that is in compliance with the federal Secretary of Interior standards, and that is made available to other archaeologists/researchers and Tribal members for further study.

(Sources: Preliminary Environmental Assessment Report, Phase I Cultural Resources Assessment)

c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Potentially Significant Impact Unless Mitigation is Incorporated.

A Paleontological Resources Records Search was completed by the Division of Geological Sciences of the San Bernardino County Museum (SBCM). The records search indicated that there is no previously known paleontological resource locality within one mile of the site. However, the project site is underlain by the following sediment types: Pleistocene very old alluvial channel deposits (Qvoaa) and older alluvial fan deposits of middle to late Pleistocene age (Qofa). The Pleistocene alluvium in Riverside County has a high potential to yield significant fossil resources, which have included mammoths, mastodons, ground sloths, dire wolves, saber-toothed cats, large and small horses, large and small camels, and bison, as well as plant macro- and microfossils.

A qualified Paleontologist conducted a visual inspection of the areas that may be disturbed by the project, including the channel, access roads, road sides, and staging areas, to determine whether any paleontological resources are visible on the ground surface. Although no paleontological resources were observed, light brown silty sands to gravelly sands of the older alluvial fan deposits (Qofa), which has a high potential to yield significant fossil resources, were observed in several areas along the channel west of Sierra Avenue. These sediments were present in areas not covered by the boulder, cobble, and gravel placed on the sides of the channel to prevent erosion. Thus, fossil-bearing soils may be

present in other areas of the drainage channel and in adjacent areas. MM 2 requires that when the covering material is removed prior to the cementing of the side walls of the channel and during other excavation activities, a qualified paleontologist monitor these activities for potential paleontological resources. Impacts would be less than significant after mitigation.

Mitigation Measure

MM 2: To mitigate potential impacts to paleontological resources that may exist subsurface of the project area, the Project Paleontologist shall attend the pre-grade meeting to determine the level of monitoring required for the project in accordance with the following:

1. Monitoring shall be conducted during all grading and excavations deeper than one foot below current ground level in previously undisturbed ground by a qualified paleontological monitor. Paleontological monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.
2. Preparation of all recovered specimens shall be made to a point of identification and permanent preservation including washing of sediments to recover small invertebrates and vertebrates.
3. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontological storage [e.g., Western Science Center, Hemet] shall be completed at the recommendation of the Project Paleontologist.
4. A report of findings shall be prepared with an appended itemized inventory of specimens and submitted to the RCFC&WCD.

(Sources: Preliminary Environmental Assessment Report, Phase I Cultural Resources Assessment)

d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Less than Significant Impact.

Previous ground-disturbance activities for the construction of the existing storm drain channel and public rights-of-way (e.g., roads) where new storm drain lines, inlets, and catch basins are proposed would have uncovered human remains if they are present. Thus, the site and adjacent roads are not expected to contain human remains. However, should grading and excavation activities unearth unknown human remains or unknown burial grounds, compliance with existing regulatory requirements under the *California Health and Safety Code* and the *California Public Resources Code* would require the County Coroner to make a determination of disposition and the NAHC would identify the most likely descendant, who would have the opportunity to address proper disposition of the remains (SOP 3). This would reduce any potential impacts to human remains to less than significant levels. No mitigation is required.

Standard Operating Procedure

SOP 3: In the event that human remains are unearthed during excavation and grading activities, all activity shall cease immediately. Pursuant to *California Health and Safety Code* Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to *California Public Resources Code* Section 5097.98. If the remains are determined to be of Native American descent, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

then contact the most likely descendant of the deceased Native American, who shall serve as consultant on how to proceed with the remains.

(Sources: Preliminary Environmental Assessment Report, Phase I Cultural Resources Assessment)

VI. GEOLOGY AND SOILS. 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

No Impact.

California is a seismically active State but there are no active or potentially active earthquake faults in the City of Norco. The project site is not located within an Alquist-Priolo Earthquake Fault Zone and the North Norco Channel Line NB is not expected to be impacted directly by ground rupture since the nearest designated Earthquake Fault Zone is located approximately five miles southwest of the project site. The nearest earthquake fault to the site is the Central Avenue Fault, located 3.2 miles southwest of the site. This fault does not have a designated Earthquake Fault Zone; is not considered an active fault; but an inferred location based on groundwater data. Other nearby earthquake faults include the Chino and Glen Ivy Faults of the Elsinore Fault Zone, which are located 5.3 and 6.4 miles southwest of the site, respectively. Thus, the project would not be exposed to ground rupture hazards. There would no impact related to ground rupture.

(Sources: Norco General Plan, Preliminary Environmental Assessment Report, CGS Fault Evaluation Report FER-247, CGS Earthquake Fault Zones, Geotechnical Investigation)

ii) Strong seismic ground shaking?	☐	☐	☒	☐

Less than Significant Impact.

As stated in response to Threshold a) i) above, the nearest earthquake fault is the Central Avenue Fault. Other earthquake faults near the site include the Chino and Glen Ivy Faults of the Elsinore Fault Zone, located approximately 5.3 and 6.4 miles southwest of the project site. The Chino Fault is a northern splay of the Elsinore Fault Zone and extends approximately 20 kilometers roughly parallel to the Central Avenue Fault until it merges into the Elsinore Fault Zone.

The North Norco Channel Line NB will be subject to moderate to severe groundshaking in response to a large magnitude earthquake that may pose a potential seismic hazard. The project does not propose the construction of habitable structures. Also, the project would be constructed in compliance with the seismic design criteria in the California Building Code (CBC) and in accordance with the design seismic hazard parameters in the Geotechnical Investigation for the project to account for groundshaking hazards on site, as required by the CBC. Impacts related to groundshaking would be less than significant and no mitigation is required.

Standard Operating Procedure

SOP 4: At a minimum, the District will design and construct the project in compliance with the recommendations of the Geotechnical Investigation for the project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

(Sources: Project Description, CGS Fault Evaluation Report FER-247, CGS Earthquake Fault Zones, Geotechnical Investigation)

iii) Seismic-related ground failure. including liquefaction?	☐	☐	☐	☒

No Impact.

Liquefaction refers to the transformation of soils into a liquid state due to vibration in the presence of water. It tends to occur in areas with shallow groundwater (within 50 feet of the surface) and where the soils are composed of loosely compacted granular materials. Liquefaction can lead to the loss of soil-bearing strength, ground settlement, or subsidence of the soil; can result in damage to foundations and settlement of aboveground structures; and, in some cases, can uplift buried structures (e.g., pipelines).

Groundwater first encountered at 601 feet above mean sea level is interpreted by the Geotechnical Investigation to be perched on clay horizons, with groundwater generally present at approximately 585 to 587 feet above mean sea level. The liquefaction triggering analysis conducted as part of the Geotechnical Investigation indicates that seismically induced soil liquefaction potential at the site is low and seismically induced settlement will be small if it does occur. Thus, no liquefaction hazards are present and no impact related to liquefaction would occur with the project. Compliance with the pertinent provisions of the CBC and the recommendations of the Geotechnical Investigation (SOP 4) would reduce hazards associated with local soil settlement. No impact would occur.

(Sources: Norco General Plan, Preliminary Environmental Assessment Report, Preliminary Site Assessment, Geotechnical Investigation)

iv) Landslides or mudflows?	☐	☐	☐	☒

No Impact.

The project site is located within the USGS' Corona North 7.5-minute topographic quadrangle in Section 7, Township 3 South, Range 6 West, at an approximate elevation of 620 to 640 feet above sea level. The site is relatively flat and no major slopes would be created by the project. The Safety Element of the Norco General Plan states that the potential for landslides in Norco is relatively minor because of the hard bedrock that underlies most of the City and the absence of clay-coated bedding that is typical in most California landslides. The Geotechnical Investigation also states that there are no mapped landslides in the project vicinity. Also, with the construction of a concrete- and rock- lined channel, the potential for mudflows along the sides of the existing earthen channel would be eliminated. No impacts from landslides or mudflows would occur.

(Sources: Project Description, Preliminary Environmental Assessment Report, Norco General Plan, Geotechnical Investigation)

b) Result in substantial changes in topography, unstable soil conditions from excavation, grading or fill, or soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less than Significant Impact.

Many areas throughout Riverside County are considered to be vulnerable for blowsand. The U.S. Department of Agriculture (USDA) Soil Report indicated the majority of the site (52.6 percent) is considered to be Greenfield sandy loam, which has a wind erodibility index rating of 3, meaning that disturbed soils are moderately susceptible to erosion. Of the 5 soil types identified on site by USDA soil maps, the most prevalent are Greenfield sandy loam with 0 to 2 percent slopes and the Porterville clay, moderately deep, slightly saline-alkali with 0 to 5 percent slopes. These soil types are relatively susceptible to erosion, as they rate a 3 or 4 on the 8-point Wind Erodibility Group rating scale. However, the project would comply with SCAQMD Rule 403 (SOP 1), which requires measures for the control of dust

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

during construction, and Riverside County Ordinance 484 (SOP 5), which regulates the control of blowing sand. Erosion and sediment control measures would also be implemented during construction as part of the Storm Water Pollution Prevention Plan (SWPPP) for the project (SOP 8). With a concrete and rock-lined channel that would replace the existing earthen channel, erosion would be reduced by the project in the long-term. Thus, erosion impacts would be less than significant with compliance with existing regulations as a standard operating procedure by the District. No mitigation is required.

Standard Operating Procedure

SOP 5: The project shall comply with Riverside County Ordinance 484, which may include, but is not limited to, wind-breaks, walls, fences, planting and maintaining vegetation, covering the land, applying water or other material, or other effective method or combination of methods of holding the soil in place.

(Sources: Preliminary Environmental Assessment Report, Riverside County Ordinance 484, USDA Web Soil Survey)

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	☐	☐	☒	☐

Less than Significant Impact.

Surface soils on the site include shallow soils with significant silt and clay (i.e., old alluvial fan deposits and very old alluvial channel deposits) and deeper soils with predominantly sandy materials at depths greater than 10 feet. Diorite bedrock was encountered 45 feet below the ground surface.

As indicated above, the site does not have liquefaction or landslide hazards. The site is also located outside areas with known subsidence. The potential for other geologic hazards (such as lateral spreading, subsidence, or collapse) would be specific to soil characteristics at the site. As required by the California Building Code, a Geotechnical Investigation would need to be prepared for the project and the recommendations of the Geotechnical Investigation incorporated into the structural design of the project (SOP 4). Since the project would be built to current engineering standards, it would ensure the structural integrity of proposed improvements. Impacts would be less than significant, and no mitigation is required.

(Sources: Project Description, Preliminary Environmental Assessment Report, Chino Basin Hydrogeology, Geotechnical Investigation)

d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994 or most current edition), creating substantial risks to life or property?	☐	☐	☒	☐

Less than Significant Impact.

Expansive soils are materials that, when subject to a constant load, are prone to expand when exposed to water. Expansive soils can overstress and cause foundational damage to buildings. Greenfield soils are not generally expansive, while Porterville soils are considered expansive. Expansion index tests conducted as part of the Geotechnical Investigation indicate on-site soils have low expansion potential. The project would be constructed in compliance with pertinent provisions of the CBC and the recommendations of the Geotechnical Investigation for the project (SOP 4). Compliance with the recommendations of the Geotechnical Investigation would ensure that the engineering design and construction of the project account for site-specific soil conditions, including soil expansion potential. Thus, impacts would be less than significant. No mitigation is required.

(Sources: Preliminary Environmental Assessment Report, USDA Web Soil Survey, Geotechnical Investigation)

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Have soils incapable of adequately supporting any structures, fill or other improvements associated with the project?	☐	☐	☒	☐

Less than Significant Impact.

As indicated above, the primary soils underlying the site are Greenfield sandy loam with 0 to 2 percent slopes and the Porterville clay, moderately deep, slightly saline-alkali with 0 to 5 percent slopes. The corrosion evaluation of the subgrade soils indicate that the on-site soils are unlikely to be corrosive to foundation elements. The geologic characteristics of the on- site soils, including their capacity to support structures, fill, and improvements, would be subject to the recommendations of the Geotechnical Investigation for the project. Compliance with the recommendations of the Geotechnical Investigation (SOP 4) would ensure the structural stability of the project and impacts would be less than significant. No mitigation is required.

(Sources: Preliminary Environmental Assessment Report, USDA Web Soil Survey, Geotechnical Investigation)

VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Less than Significant Impact.

Construction of the project would utilize heavy equipment (i.e., excavators, trucks, tractors) on the project site. This equipment would likely be fueled by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous materials. Construction may also involve the use of hazardous materials, such as paints, thinners, solvents, acids, curing compounds, grease, oils, and other chemicals, which could pose risks to construction workers or lead to soil and groundwater contamination if not properly stored, used, or disposed of. Construction activities would be conducted in compliance with existing federal, State, and local hazardous material regulations (SOP 6). This would avoid the creation of a significant hazard to the public or the environment.

Continued use of the storm drain channel would not involve the use or transport of hazardous materials. The project site is within a residential neighborhood and therefore, the roadways surrounding the site have a low likelihood of being used to transport hazardous materials. Rodenticide is used in rodent control devices that are located at several locations the chain-link fence along the channel, which will continue to be used after construction of the project. However, the continued use of the rodenticide by the District would be made in accordance with applicable regulations (SOP 6) and would not involve chemical storage or transport in quantities that may pose a significant hazard to the public. As such, impacts would be less than significant impact related to the transport, use, or disposal of hazardous materials. No mitigation is required.

Standard Operating Procedure

SOP 6: Hazardous materials shall be used, stored, handled, transported, and disposed of in accordance with existing and applicable laws and regulations. These regulations include, but are not limited to, the Hazardous Materials Transportation Act and Hazardous Materials Transportation Uniform Safety Act, Resource Conservation and Recovery Act (RCRA), Occupational Safety and Health Act (OSHA), and California Accidental Release Prevention Program (CalARP), among others.

(Sources: Preliminary Environmental Assessment Report, Preliminary Site Assessment)

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
b)	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?	☐	☐	☒	☐

Less than Significant Impact.

A PSA was prepared to evaluate the presence of hazardous wastes and soil and groundwater contamination on site and in the project area. The PSA indicates the site and the surrounding area were undeveloped or used for agriculture from 1901 to 1931, with some buildings and roads constructed starting in 1931. The drainage channel is seen in the 1977 aerial photograph, and residential development in the area intensifies until 1989. Review of hazardous material databases found 35 sites within 1 mile of the channel but all have low potential for posing a Recognized Environmental Condition (REC) to the site. Due to the age of development in the area, there is a potential for asbestos and lead-based paint to be present in roads, utility lines, and other structures that would be demolished as part of the project. Compliance with existing regulations related to the handling and disposal of asbestos and lead-based paint (SOP 7) would be necessary to prevent significant adverse impacts. No mitigation is required.

As stated above, construction of the storm drain channel and continued use of rodenticide would be made in compliance with existing federal, State, and local regulations (SOP 6). As such, a less than significant impact related to the release of hazardous materials into the environment would occur. No mitigation is required.

Standard Operating Procedure

SOP 7: Demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing materials (ACMs) or lead-based paint (LBP) shall include ACM and/or LBP surveys and appropriate handling and disposal of identified ACM and LBP in accordance with applicable regulations, including, but not limited to, the following:

- *California Health and Safety Code* (Section 39650 et seq.)
- California Occupational Safety and Health Administration (CalOSHA) regulations
- *California Code of Regulations*, Title 8, Section 1529 (Asbestos) and Section 1532.1 (Lead)

(Sources: Preliminary Environmental Assessment Report, Preliminary Site Assessment)

c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

Less than Significant Impact.

There are no schools within 0.25 mile of the site. The nearest schools are the American Career College (0.32 mile) to the northwest and the Sierra Vista Elementary School (0.40 mile) to the northeast. The proposed project would not pose a significant hazard to the students and faculty of these schools due to the distance of the site to the schools and the limited use of hazardous materials associated with short-term construction activities for the project. These hazardous materials and wastes would also be used, stored, transported, and disposed of in compliance with existing regulations (SOP 6). Therefore, the potential for hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste during construction would be less than significant, and no mitigation is required.

(Sources: Preliminary Environmental Assessment Report, Preliminary Site Assessment)

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Be located on a site, which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐

Less than Significant Impact.

The site is not listed in databases that have been compiled pursuant to *California Government Code* Section 65962.5. The PSA for the project stated that there was no indication of hazardous materials or wastes; aboveground storage tanks; underground storage tanks; drums and containers; drains, sumps, or clarifiers; wells; discolored/stained pavement or soil/stressed vegetation; or pits, ponds, or lagoons. Review of historical records did not indicate past land uses or activities that may pose an environmental concern.

The project site contains several dispensers of Diphacinone, which is a rodenticide and hazardous material. Continued use of the rodenticide by the District would be made in accordance with applicable regulations (SOP 6).

Within the public right-of-way, lead-based paint and asbestos do not appear to be present. However, underground utility lines containing asbestos may be encountered. Also, based on the age of many of the structures in the project area, lead-based paint and asbestos might be found within privately held parcels. As discussed in response to Threshold a), compliance with existing regulations related to the handling and disposal of asbestos and lead-based paint (SOP 7) would be necessary to prevent significant adverse impacts.

In addition, one of the adjacent properties contained a metal drum with contents that are unknown and could potentially be hazardous. However, this was on an adjacent property and not on the project site. Also, the project does not include the disturbance or removal of this drum. Thus, impacts would be less than significant, and no mitigation is required.

(Sources: Project Description, Preliminary Environmental Assessment Report, Preliminary Site Assessment)

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?	☐	☐	☐	☒

No Impact.

The project site and the City of Norco are not located within designated Airport Influence Areas of the Ontario, Riverside, Chino, or Corona airports. The site is located near the takeoff patterns for the Ontario International Airport and the approach patterns for the Los Angeles International Airport but would not affect operations at these airports due to distance from the site. The nearest airport to the project site is the Corona Municipal Airport, located approximately 3.1 miles southwest of the site. The project site is located outside of the Corona Municipal Airport's Airport Influence Area. Since the storm drain channel is below grade and there are no employees stationed at the channel, the project would not expose people to aircraft hazards and would not adversely affect aircraft or airport operations. There would be no impact related to airports.

(Sources: Preliminary Environmental Assessment Report, Norco General Plan)

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact.

The project site is not located within the vicinity of a private airstrip. Therefore, the project would not expose people to aircraft hazards, would not adversely affect aircraft or airport operations, and would not result in a safety hazard for people residing or working in the project area. There would be no impact related to airstrips.

(Source: Preliminary Environmental Assessment Report)

g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Less than Significant Impact.

The project site is currently developed with a storm drain channel and does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During the three-month construction period, the temporary obstruction of roadways (Sierra Avenue and Valley View Avenue) would prevent emergency evacuation through those roads where they cross the North Norco Channel Line NB. However, when feasible only one of these north-south roads would be blocked at any one time. Also, there are other roadways in the area that would be available for emergency evacuation by nearby residents. Thus, impacts would be short-term and less than significant.

(Sources: Project Description and Preliminary Environmental Assessment Report)

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?	☐	☐	☐	☒

No Impact.

The California Department of Forestry and Fire (CALFIRE) designates areas in Western Riverside County as Very High Fire Hazard Severity Zones (VHFHSZ). The project area is classified as Non-VHFHSZ. The project site is located in a residential area, and there are no large, vacant areas with steep slopes that may be susceptible to wildfire. The nearest VHFHSZ is located 1 mile southeast of the project site. The project would not be exposed to nor create wildfire hazards. Therefore, no impacts related to wildfire would occur.

(Sources: CALFIRE Western Riverside County Very High Fire Hazard Severity Zones, Preliminary Environmental Assessment Report)

VIII. HYDROLOGY AND WATER QUALITY. Would the project:					
a)	Violate or conflict with any adopted water quality standards or waste discharge requirements?	☐	☐	☒	☐

Less than Significant Impact.

The project site is located within the Santa Ana River watershed, which drains a 1,083,424-acre watershed in San Bernardino, Riverside, and Orange Counties. The North Norco Channel Line NB drains a 91-acre area to the north, south, and east of the channel and connects to the North Norco Channel, which discharges into the Prado Dam Reservoir and the Santa Ana River.

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

Construction of the project would have the potential to contribute sediment, trash, debris, and pollutants into storm drain channels serving the site. Demolition, grading, and excavation activities would generate loose soils that may enter the storm drain channel. In addition, construction equipment and activities could result in potential leaks of oil and grease, vehicle fluids, paint, and other solvents into the ground, which may then be washed down into these drainage channels.
Without the use of appropriate Best Management Practices (BMPs), this could add to temporary impairments of water quality in the Santa Ana River Watershed.

The National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No 2012-006-DWQ or the latest approved general permit) requires construction activities that involve the disturbance of one acre or more of total land area to prepare and implement an SWPPP that contains BMPs to reduce or eliminate construction-related pollutants in the runoff. Construction of the project would involve the disturbance of 2.91 acres and, thus, would be subject to the NPDES Construction General Permit and would be required to implement erosion control and sediment control BMPs, as well as tracking control, hazardous material and waste management, and other BMPs during construction (SOP 8). These BMPs would reduce the potential for construction debris and other pollutants to enter the North Norco Channel, Prado Dam Reservoir, and the Santa Ana River.

Long-term changes in storm water runoff quality would not likely occur with the project, because the project proposes a concrete-lined channel that would reduce sediment in the storm water and an Armorflex, gabion, or rock-lined invert at the western end of Line NB to allow sediments and debris to settle and improve water quality of the runoff prior to discharge into the North Norco Channel and downstream water bodies. Impacts would be less than significant with compliance with existing regulations as a standard operating procedure by the District. No mitigation is required.

Standard Operating Procedure

SOP 8: Project construction will comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-006-DWQ or the latest approved general permit). This Construction General Permit requires construction activities that involve the disturbance of one acre or more of total land area to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that contains Best Management Practices (BMPs) to reduce or eliminate construction-related pollutants in the runoff.

(Sources: Preliminary Environmental Assessment Report, NPDES Construction General Permit)

b)	Result in substantial discharges of typical stormwater pollutants *(e.g. sediment from construction activities, hydrocarbons, and metals from motor vehicles, nutrients and pesticides from landscape maintenance activities, metals of other pollutants from industrial operation,)* or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity?	☐	☐	☒	☐

Less than Significant Impact.

As stated above in Threshold a) of this section, mandatory compliance with the SWPPP (SOP 8) would ensure that the project does not violate any water quality standards or waste discharge requirements during construction activities.

The North Norco Channel Line NB connects to the North Norco Channel that discharges into Reach 3 of the Santa Ana River. Reach 3 is designated as an impaired water body under Section 303(d) of the CWA. Impairments include copper, lead, and pathogens. The proposed project would change the dirt-lined channel to a concrete-lined channel and a downstream segment that would be lined with Armorflex, gabion, and/or rocks. This project feature would continue to

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

allow ground infiltration of storm water in the channel, including the settlement of storm water pollutants. No storm water pollutants would be generated in the long-term, and no direct impact on water quality would occur with the project.

Additionally, the project is a public infrastructure improvement that involves the replacement of the existing interim flood control channel with a storm drain channel that would lead to more efficient flow patterns for the runoff generated in the surrounding community. As proposed, catch basins and inlets would be stenciled/signed with "Only Rain in the Drain" to discourage the disposal of wastes into the storm drainage system and the channel. Therefore, there would be a less than significant impact related to storm water pollution, and no mitigation measures are required.

(Sources: Project Description, Preliminary Environmental Assessment Report, Preliminary Site Assessment)

c)	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)?*	☐	☐	☒	☐

Less than Significant Impact.

The project site lies within the Temescal Groundwater Sub-Basin in the Upper Santa Ana Watershed of the Santa Ana Groundwater Basin. The drainage in this basin generally flows toward the Santa Ana River, which is located approximately 1.0 mile north of the project site. The aquifers within the Santa Ana Groundwater Basin are typically unconfined. Groundwater at the project site is inferred to flow to the southwest and is anticipated to be greater than 180 feet below ground surface.

Excavation activities are not expected to extend deep enough to affect underlying groundwater resources. In addition, the project would not involve the direct or indirect withdrawals of groundwater. Water use would be limited to temporary construction dust control and cleaning and no long-term water use would occur with the project. An Armorflex, gabion, or rock-lined invert is proposed at the western end of the channel to continue to allow ground percolation of runoff. Thus, the project would not deplete groundwater supplies or interfere substantially with groundwater recharge. Therefore, the impact would be less than significant, and no mitigation is required.

(Sources: Preliminary Environmental Assessment Report, Project Description, Preliminary Site Assessment)

d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of a watercourse or wetland, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

Less than Significant Impact.

The nearest surface water bodies to the project site are Lake Norconian and the Santa Ana River, which are located approximately ¼ mile to the west and 1 mile to the northwest of the project area, respectively. The North Norco Channel Line NB connects to the North Norco Channel that eventually discharges into the Santa Ana River southwest of the City of Norco.

The project involves the improvement of the existing interim flood control channel with a concrete-lined channel that would safely collect and convey storm water flows in the area. The channel would be concrete-lined to reduce erosion, except for a short downstream segment that would be lined with Armorflex, gabion, or rocks to allow ground infiltration. During construction, there may be a need for the temporary diversion of flows within the channel, but, once

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

completed, flows in the improved channel would have the same direction and drainage pattern as the existing storm drain channel. Project construction would lead to a temporary diversion but would not result in an increase in the erosion or sedimentation from the site, with the implementation of erosion control BMPs outlined in the SWPPP (SOP 8), and no mitigation is required.

(Sources: Preliminary Environmental Assessment Report, Project Description)

e)	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?	☐	☐	☒	☐

Less than Significant Impact.

The flood insurance rate map of the Federal Emergency Management Agency (FEMA) shows that the North Norco Channel Line NB and adjacent areas are located within Zone X—areas of 0.2 percent annual chance flood; areas of 1.0 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 1.0 percent annual chance flood. The project would not change drainage patterns or the flood hazard designation of the site and surrounding areas.

Currently, the North Norco Channel Line NB does not have the capacity to accommodate storm water from a 100-year flood event and flooding could occur in the area of Sierra Avenue in such an event. The project would provide added capacity to the channel and prevent flood hazards in the area. Thus, a beneficial impact in terms of flood control would occur with the project.

As stated in response to Threshold d) above, the project would not substantially alter the existing drainage pattern of the site. During construction, there may be diversion of flows, but flow within the channel would run in the same direction and course of the existing channel. The purpose of the project is to better collect and convey the flow rates than the existing channel, which would prevent flooding on or off site. Therefore, there would be a less than significant impact, and no mitigation measures are required.

(Sources: Project Description, Preliminary Environmental Assessment Report, FEMA Flood Insurance Rate Map)

f)	Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems?	☐	☐	☒	☐

Less than Significant Impact.

No new aboveground structures or housing structures would be developed with implementation of the project. The purpose of the project is to better collect and convey the flow rates than the existing channel. The project would increase the capacity of the storm water drainage systems. The earthen channel would be replaced with a concrete-lined channel, which would reduce ground infiltration of runoff within the channel length but the western end of the channel would feature an Armorflex, gabion, or rock-lined invert that would allow continued ground infiltration. Therefore, there would be a less than significant impact, and no mitigation measures are required.

(Sources: Project Description, Preliminary Environmental Assessment Report)

g)	Place housing within a 100-year flood hazard area as mapped on Federal Flood Hazard boundary of Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

No Impact.

Review of FEMA's flood insurance rate map shows that the North Norco Channel Line NB and adjacent areas are

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

located within Zone X—areas of 0.2 percent annual chance flood; areas of 1.0 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 1.0 percent annual chance flood. Thus, the proposed channel improvements would not be located in a 100-year flood hazard area. Also, the project does not involve the construction of housing but instead, would accommodate 100-year flood flows to prevent flooding in the adjacent residential areas. Therefore, there would be no impact.

(Sources: Norco General Plan, FEMA Flood Insurance Rate Map, Project Description)

h)	Place structures or fill within a 100-year flood hazard area, which would impede or redirect flood flows?	☐	☐	☐	☒

No Impact.

As stated above, the project site is located outside of the areas subject to inundation by the 1 percent annual chance flood (100-year flood hazard area). Also, the purpose of the project is to increase conveyance of storm water in the channel to accommodate flows from a 100-year flood event. Therefore, the project would have no impact on the 100-year flood hazard area.

(Sources: Norco General Plan, FEMA Flood Insurance Rate Map)

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?	☐	☐	☐	☒

No Impact.

The City is not in a pathway of any major dams or reservoirs, therefore, no flood hazards related to dam inundation or levee failure occur within the project site. Also, the project proposes to improve flood control and reduce flooding in the area. There would be no impact related to dam or levee failure.

(Sources: Norco General Plan, Project Description)

j)	Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

No Impact.

The nearest body of surface water to the project site is Lake Norconian, which is an artificial lake located approximately 0.72 mile west of the project site. Due to the distance of the lake to the project site, there is a very low possibility of inundation by seiche at the site. The Pacific Ocean is located approximately 31 miles southwest of the project site, and inundation by tsunami is highly unlikely and would not impact the project. The project site is surrounded by relatively level land, and there are no nearby steep hillsides. Therefore, inundation by mudflow is also unlikely to impact the site. There would be no impact related to seiche, tsunami, or mudflow.

(Source: Norco General Plan)

IX. LAND USE PLANNING. Would the project:					
a)	Physically divide an established community?	☐	☐	☐	☒

No Impact.

The North Norco Channel Line NB is an existing storm drain located in a residential neighborhood in the City of Norco. Adjacent land uses include large lot residences and a few vacant lots along both sides of the channel, with a church (Cristo La Roca) on the northeast corner of Valley View Avenue and Aryana Avenue. The project would involve

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

improvements to the existing channel and the storm drain lines, inlets, and catch basins in adjacent roads. All work would be at-grade, below grade, or below the ground surface. Also, work proposed within residential properties is not expected to involve displacement or the creation of barriers in the community. Once completed, the North Norco Channel Line NB would better serve the storm drainage needs of the surrounding community. No impacts related to the division of an established community would occur.

(Sources: Project Description, Norco General Plan)

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 mitigating an environmental effect?	☐	☐	☐	☒

No Impact.

The Norco General Plan Land Use Map designates the site as RA, with the western end designated as public right-of-way. The surrounding area is designated as RA and RL. The RA designation allows low-density agricultural residential uses. The area north of Fortuna Road and east of Sierra Avenue is designated as RL, which allows single-family residential uses.

The project would not change the existing land use designation or use of the site or the surrounding area and would not conflict with the Norco Land Use Plan. The project would not conflict with the goals and policies in the Norco General Plan and would not adversely affect the agricultural and equestrian lifestyle that is promoted in the General Plan. In addition, the project would be consistent with a goal in the Safety Element of the Norco General Plan to reduce potential flood hazards in the City.

In the Norco Zoning Map, the site is zoned as A-1-20. This zone promotes the development of agriculturally oriented low-density living areas and encourages the maintenance of undeveloped open land on each residential parcel. According to Title 18, Zoning, of the Norco Municipal Code, permitted uses for this zone include single-family detached dwellings, public parks and playgrounds, accessory structures and uses, specific agricultural uses, child home care, trailers, and other similar uses with a minimum lot area of 20,000 square feet.

Near the site is land zoned as R-1-10. Permitted uses for this zone include single-family detached dwellings, public parks and playgrounds, accessory buildings and uses, small family day care homes, large family day care, residential care facilities, and other similar uses, with a minimum lot size of 10,000 square feet. As a utility infrastructure, the North Norco Channel Line NB serves the flood control needs of surrounding developments and is an allowable facility in the underlying zones. Also, the proposed improvements to the North Norco Channel Line NB and connecting storm drain lines, inlets, and catch basins would not change the existing land use of the site and would not conflict with the Norco Zoning Ordinance.

(Sources: Norco Zoning Map, Norco General Plan Land Use Map, Norco Municipal Code)

X. MINERAL RESOURCES. 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?	☐	☐	☐	☒

No Impact.

Based on the Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Finder, there are no oilfields or oil, gas, or geothermal wells on or near the site. The Norco General Plan shows the designated

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

Mineral Resource Zones (MRZ) in the City, which are primarily located at the Norco Hills, Beacon Hill, and the hills and slopes around Lake Norconian. The project site is not located on or near these hills, and the site has no mineral zoning classification.

The project site is also not included in areas known to contain regionally significant Portland cement concrete-grade aggregate resources, based on the California Geological Survey's (CGS') Update of Mineral Land Classification for the Temescal Valley production area. Thus, no impact on regionally significant mineral resources would occur with the project.

(Sources: DOGGR Well Finder, Norco General Plan, CGS' Update of Mineral Land Classification)

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?	☐	☐	☐	☒

No Impact.

The project site is not subject to mineral resource extraction activities and is not located within the MRZ in the City's General Plan. Thus, the project would not lead to the loss of a locally important mineral resource. No impact on locally important mineral resources would occur.

(Source: Norco General Plan)

XI. NOISE. 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?	☐	☐	☒	☐

Less than Significant Impact.

The primary sources of noise in the area is vehicle traffic on I-15, Sierra Avenue, and Valley View Avenue. Traffic noise from the freeway and nearby roads do not affect the North Norco Channel Line NB since no residents or employees are stationed at the channel. In order to determine the existing noise levels, three short-term ambient noise measurements were taken in the vicinity of the proposed project between 10:46 AM and 11:40 AM on Wednesday, November 2, 2016. The results of these measurements indicate average noise levels of 53.4 to 57.6 A-weighted decibels (dBA) Ldn (which is the day-night average sound level or the average noise level over a 24-hour period), as provided in the Noise Technical Memorandum in Appendix B.

Construction-Related Noise

Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The construction activities for the proposed project are anticipated to include excavation and grading of the existing dirt-lined channel, construction of a concrete channel, storm drain lines, inlets, and catch basins, grading of existing access roads, and paving of adjacent roads. The nearest sensitive receptors to the project site consist of single-family homes located ten feet from the project site. Construction and haul trucks using local streets in the project area would also generate noise that may affect adjacent residents on Sierra Avenue, Valley View Avenue, and Sixth Street.

Section 9.07.020(B) of the City of Norco Municipal Code (Municipal Code) exempts capital improvement project construction noise carried out by a governmental agency. The District's Standard Operating Procedures limits construction between the hours of 7:00 AM and 5:00 PM on weekdays unless otherwise approved by the District's

General Manager–Chief Engineer (SOP 9). This time frame falls within the City of Norco's established hours of construction of 6:30 AM to 7:00 PM.

District noticing procedures also include notification that construction will be occurring and will involve the operation of heavy construction equipment in close proximity to each residence adjacent to construction sites. This notice includes the expected work schedule and the District's contact information. In the event that the District receives noise complaints, the District notifies the contractor for the incorporation of any feasible and practical techniques to minimize the noise impacts on adjacent residences (SOP 10).

Therefore, project construction would not conflict with the Norco Municipal Code and would minimize nuisance noise with the implementation of SOP 9 and SOP 10. Impacts would be less than significant, and no mitigation is required.

Standard Operating Procedures

SOP 9: As a standard operating procedure, the District limits the construction to 7:00 AM to 5:00 PM, Monday through Friday, except under special circumstances approved by the District's General Manager–Chief Engineer.

SOP 10: The District will provide notice to residences near the construction site that construction will be occurring and will involve the operation of heavy construction equipment. The notice will include the expected work schedule and the District's contact information. In the event that a noise complaint is received by the District, the District will notify the contractor of the need to incorporate any feasible and practical techniques to minimize the noise impacts on adjacent residences.

Operational-Related Noise

The existing use of the project is a storm drain channel. Therefore, the ongoing operation of the proposed project would not result in a long-term increase in noise levels. The only noise sources associated with the long-term operations of the project are routine annual maintenance trips to the project site by District personnel in a small truck. No change in the routine maintenance schedule would occur from implementation of the proposed project. Therefore, no long-term increase in operational noise levels is anticipated, and there would be no impact.

(Source: Noise Technical Memorandum)

b)	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Less than Significant Impact.

Neither the City of Norco Municipal Code nor the City of Norco General Plan have quantifiable vibration thresholds. Therefore, the thresholds provided in the *Transportation and Construction Vibration Guidance Manual*, prepared by the California Department of Transportation (Caltrans), has been utilized, which defines the threshold of perception from transient sources at 0.25 inch per second peak particle velocity (PPV).

The construction activities for the proposed project are anticipated to include excavation and grading of the existing dirt- lined channel, (re)construction of a concrete channel, storm drain lines, inlets, and catch basins, grading of existing access roads, and paving of adjacent roads. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment. The construction equipment that would be used for the project would include concrete/industrial saws, cranes, crawler tractors, excavators, graders, a concrete pump, pavers, rollers, rubber-tired loaders, dump trucks, signal boards, and skid steer loaders.

According to the *Transit Noise and Vibration Impact Assessment*, prepared by the Federal Transit Administration, the construction equipment that would produce the largest level of vibration from the above-mentioned list would be dump trucks loaded with material. A loaded truck would create a vibration level of 0.076 inch per second PPV at 25 feet.

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

Based on typical propagation rates, the vibration level at the nearest off-site receptor (residential uses located 10 feet away) would be 0.21 inch per second PPV. The vibration level at the nearest off-site receptor is within the 0.25 inch per second PPV threshold for transient sources. Therefore, construction-related vibration impacts would be less than significant.

The proposed project would consist of improvements to the existing storm drain channel. The operation of the project would not include the use of any known vibration sources. Therefore, no operational vibration impacts are anticipated from the proposed project.

(Source: Noise Technical Memorandum)

c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒

No Impact.

The ongoing operation of the proposed project would not result in a potential substantial permanent increase in ambient noise levels in the project vicinity above existing levels without the proposed project improvements. The only noise sources associated with the long-term operations of the project are routine annual maintenance trips to the project site by District personnel in a small truck. No change in the routine maintenance schedule would occur from the proposed project. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels, and there would be no impact.

(Source: Noise Technical Memorandum)

d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Less than Significant Impact.

As discussed in Thresholds a) and c) above, the project would not create a permanent increase in ambient noise levels in the project vicinity above levels existing without the project. However, project construction may result in a temporary noise increase at the nearby sensitive receptors.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the Occupational Safety and Health Administration (OSHA) limits for noise exposure have been utilized. The use of a significance threshold using an OSHA standard is considered conservative. The OSHA standard limits noise exposure of workers to 90 decibels (dB) or less over 8 continuous hours or 105 dB or less over 1 continuous hour. This standard has been used to analyze the construction noise impacts to the sensitive receptors located at the nearby off-site residences as a result of the project.

The excavation and grading activities that would occur near the off-site residences would require the use of excavators and loaders that would make several passes over each portion of the project site, which would limit channel excavation and grading activities near any particular off-site residence to less than one hour intervals. However, channel and catch basin construction and paving activities would have the potential to occur in the proximity of the same off-site residence for eight continuous hours. Therefore, the 1-hour standard of 105 dB has been used as the threshold for channel excavation, grading, final grading, and road construction, and the 8-hour standard of 90 dB has been used as the threshold for channel construction, catch basin construction, and paving activities.

Construction noise impacts from the project to nearby sensitive receptors were calculated with the Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM). Table 6 shows the results; additional details can be found in the Noise Technical Memorandum in Appendix B of this Initial Study.

As shown in Table 6, the greatest noise impacts would occur during the final grading and road construction phase of the project, with a noise level as high as 92 dBA L_{eq} at the nearest off-site residential use. None of the construction phases would exceed the OSHA noise standards for each particular phase, which is based on the anticipated duration of each impact. Therefore, the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, and impacts would be less than significant.

Table 6
Worst-Case Construction Noise Levels at Nearest Off-site Residences

Construction Phase	Distance to Nearest Off-Site Residence[a] (feet)	Construction Noise Level (dBA L_{eq})	Threshold[b] (dBA L_{eq})
Excavation and Grading of Channel	25	84	105
Channel Construction	25	80	90
Catch Basin Construction	30	80	90
Final Grading and Road Construction	15	92	105
Paving	30	79	90

dBA: A-weighted decibels; L_{eq}: average noise level. Notes:

[a] The nearest off-site residences are single-family homes as near as 10 feet from the project site.

[b] Threshold for excavation and grading activities is based on the OSHA 1-hour standard of 105 dB and the threshold for building channel and catch basin construction and paving activities are based on the OSHA 8-hour standard of 90 dB.

Sources: Vista Environmental 2016b.

(Source: Noise Technical Memorandum)

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?	☐	☐	☒	☐

Less than Significant Impact.

The proposed project is not located within an airport land use plan and is not within two miles of an airport. The nearest airport to the project site is the Corona Municipal Airport, located 3.1 miles southwest of the project site. The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The project site is located outside of the 65 dBA community noise level equivalent (CNEL) noise contours of the Corona Municipal Airport. While aircraft overflights may be audible on the project site, the construction crews at the site would not be exposed to excessive aircraft noise levels. Also, no residents or employees would be stationed at the North Norco Channel Line NB in the long-term. Impacts would be less than significant, and no mitigation is required.

(Source: Noise Technical Memorandum)

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?	☐	☐	☐	☒

No Impact.

There are no private airstrips near the site that generate noise that may affect the construction crew for the project. Also, no residents or employees would be stationed at the North Norco Channel Line NB in the long-term. No impacts related to airstrips would occur with the project.

(Sources: Project Description, Norco General Plan, Noise Technical Memorandum)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. POPULATION AND HOUSING. 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)* resulting in substantial adverse physical impacts or conflicts with the adopted general plan, specific plan, or other applicable land use or regional plan?	☐	☐	☐	☒

No Impact.

The California Department of Finance (DOF) reports that the City of Norco had a January 2016 population of 26,896 persons and a housing stock consisting of 7,321 dwelling units. The housing stock is made up of 6,968 single-family detached units, 98 single-family attached units, 39 two- to four-family units, 194 five-plus family units, and 22 mobile homes. Of those, 7,180 units are occupied, accounting for a 1.9 percent vacancy rate, with an average of 3.34 persons per household.

The project site is located in a residential neighborhood in the City of Norco but does not propose the construction of new dwelling units that may increase the City's resident population. Also, no commercial or industrial use or business is planned with the project. The project would improve the existing drainage channel but does not propose to extend the channel to areas that are not currently served nor would it support or allow for more intensive development to occur in the surrounding area. Thus, the project would not induce growth in the area. In addition, the project would not change the existing use of the drainage channel and would not conflict with the City's General Plan (as discussed under Section IX, Land Use Planning, above). No impacts would occur.

(Sources: Project Description, DOF E-5 Population Estimates for Cities, Counties, and the State)

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact.

While the site is located in a residential neighborhood, the proposed improvements to the North Norco Channel Line NB would be located within public rights-of-way for the existing flood control channel and adjacent roads. One residential property may be affected for acquisition of an easement; however, no housing units will be demolished. Staging areas would be confined to existing vacant lots or the undeveloped portions of residential lots. Thus, no housing displacement would occur, and no replacement housing is needed.

(Source: Project Description)

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact.

The project would be confined to public rights-of-way and would not occur in areas where housing units or businesses are located. No resident or employee displacement would occur, and no relocation or replacement housing is needed.

(Source: Project Description)

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII.	**PUBLIC SERVICES.**				
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 service ratios, response times or other performance objectives for any of the following public services:				
	Fire protection?	☐	☐	☒	☐

Less than Significant Impact.

Fire protection services in the City of Norco is provided by the Riverside County Fire Department/California Department of Fire and Forestry. The County fire station serving the site is Station 57, located 1.35 miles northwest of the project site at 3902 Hillside Avenue. The proposed project would bring in construction equipment, construction trucks, and building materials to the site that may be flammable or may contain flammable liquids. Thus, the potential for fire on the site and in the surrounding area may increase, resulting in a short-term demand for fire protection services. However, this would be temporary during the construction phase because once completed, the North Norco Channel Line NB Stage 3 improvements would consist of a concrete-lined channel that would not be flammable. Thus, impacts would be temporary and less than significant.

(Sources: Project Description, Norco CALFIRE/Fire Department)

	Police protection?	☐	☐	☒	☐

Less than Significant Impact.

Police protection services in the City are provided by the Riverside County Sheriff's Department. The Norco Sheriff's station is located 0.34 mile southwest of the site, at 2870 Clark Avenue. The channel is located within the District right-of-way that has chain-link fencing on both sides, with locked gates at street crossings. The proposed project would bring in construction equipment and building materials to the site that may be subject to theft and vandalism. However, these equipment and materials would be placed in a fenced area and locked from public access.

The presence of the construction crew may also lead to personal crimes. In addition, street closures would be necessary during construction. Thus, the potential for crime on the site and in the surrounding area may increase, resulting in a short-term demand for police protection services. However, this would be temporary during the construction phase because once completed, the channel would remain fenced and no persons would be stationed at the site, as existing. Thus, impacts on police protection services would be temporary and less than significant. No mitigation is required.

(Sources: Project Description, Norco Sheriff's Department)

	Schools?	☐	☐	☐	☒

No Impact.

The project site is within the service boundaries of the Corona-Norco Unified School District (CNUSD). The nearest elementary school to the site is Sierra Vista Elementary School, located approximately 0.40 mile northeast of the site at 3560 Corona Avenue. The nearest middle school is Norco Intermediate School, located approximately 0.44 mile southeast of the site at 2711 Temescal Avenue. The nearest high school is Norco High School, located approximately 0.94 mile southeast of the site, at 2065 Temescal Avenue. The proposed channel improvements would not be located near these schools. Also, the project does not propose residential uses that may create a demand for schools. Thus, no impact on schools would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
(Sources: Project Description, CNUSD District Map)				
Parks?	☐	☐	☐	☒

No Impact.

The nearest park to the project site is Parmenter Park, located approximately 0.28 mile southeast of the site. Neal Snipes Park is also in the project vicinity, located approximately 0.34 mile northwest of the site. The proposed channel improvements would not be located near these parks. Also, the project does not propose residential uses that may create a demand for parks and recreational facilities. Thus, no impact on parks would occur.

(Sources: Project Description, Norco Park and Facility Map)

Other public facilities?	☐	☐	☒	☐

Less than Significant Impact.

The Norco Public Library is located approximately 0.80 mile northwest of the project site at 3954 Old Hamner Avenue. The project would not create a demand for library services. The channel would continue to be under the maintenance responsibility of the District and annual inspection and intermittent maintenance activities would be provided at the channel. The project would allow the channel to accommodate the 100-year storm event, reducing the need for maintenance activities in the event of large storms. Thus, demand for public facilities would be limited and considered less than significant. The impacts of the construction of the improved channel on various environmental issues have also been addressed in this Initial Study.

(Sources: Project Description, Norco General Plan)

XIV. RECREATION.				
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?	☐	☐	☐	☒

No Impact.

As indicated in XIII, Public Services, above, the nearest parks to the project site are Parmenter Park to the southeast and Neal Snipes Park to the northwest. The project does not propose a land use (e.g., residential use) that may create a demand for parks and recreational facilities. The proposed storm drain improvements would not bring in a permanent resident or daytime population that may use nearby parks. Thus, no impact on existing parks would occur.

(Sources: Project Description, Norco Park and Facility Map)

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?	☐	☐	☒	☐

Less than Significant Impact.

The project proposes improvements to the existing storm drainage channel and associated storm drain lines, inlets, and catch basins. The channel is fenced and not available for use for recreational purposes. However, there are equestrian trails along the west sides of Sierra Avenue and Valley View Avenue and the north side of Gallop Lane. Construction of the project would lead to the temporary obstruction of these trails during the times when construction activities are occurring on these roads. However, upon completion of the project, these trails would be restored to their original conditions and trail use would continue to be available for public use. Thus, impacts related to recreation facilities,

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

specifically trails in the City, would be temporary and less than significant. The Open Space Element of the Norco General Plan proposes a linear park along the North Norco Channel Line NB. The project would not preclude future development of the linear park along the channel. No impacts related to future parks would occur with the project.

(Sources: Project Description, Norco General Plan)

XV. TRANSPORTATION AND TRAFFIC. Would the Project:				
a) Conflict with an adopted 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?	☐	☐	☒	☐

Less than Significant Impact.

Regional access is provided by I-15, which runs north-south just west of the western end of the North Norco Channel Line NB. The nearest freeway interchange to the site is at Sixth Street, which is a four-lane street designated as a Major Arterial and truck route in the Circulation Element of the Norco General Plan. It was estimated to have carried 57,800 vehicles per day in 2010. Roadways in the project area include Sierra Avenue and Valley View Avenue, and both streets are designated as Local Streets in the Circulation Element of the Norco General Plan. These north-south roadways are striped and provide one travel lane in each direction. Fortuna Road and Gallop Lane are also designated as Local Streets in the Circulation Element. These east-west roads are unstriped and provide one travel lane in each direction. There are no signalized intersections in the project area.

The project would generate short-term vehicle trips when the proposed improvements are under construction. These trips would include worker commutes; construction equipment and materials transport; import of fill soils; and/or export of excavated soils. These vehicle trips would add to existing traffic volumes on local and regional roadways, depending on the origin and destination of each trip. Due to the size of the project, construction-generated trips would be limited. Equipment would be brought to the site at the start of construction and removed at the end of construction. Construction crews would come to the site on weekdays but are not expected to have a measurable effect on regional and local traffic volumes. The project proposes to export 3,075 cy of material during excavation and grading activities. This would translate to a total of 384 one-way trips (192 round trips) or an average of 38 one-way trips (19 round trips) per day for 10 days during excavation and grading activities. After grading and excavation, dump trucks would come to bring in concrete and other trucks would bring in equipment, building materials, and culverts. Repaving of the streets and removal of equipment, building materials, and wastes would occur toward the end of the construction phase. Thus, relatively minor construction-related traffic would occur because of the small scale of the proposed improvements (for a limited duration of approximately three months). In addition, there is a relatively low volume of traffic on the local streets. Impacts on the freeway, collector streets, and local streets would be less than significant, and no mitigation measures are required.

During construction, it is anticipated that Sierra Avenue would be closed at the channel when the culvert under this road is replaced. Similarly, Valley View Avenue would be closed at the channel when the culvert under this road is replaced. When Sierra Avenue is closed, vehicles would be routed to use Fifth Street and Valley View Avenue to go south and would use Fourth Street and Valley View Avenue to go north. When Valley View Avenue is closed, vehicles would be routed to use Fifth Street and Sierra Avenue to go south and would use Fourth Street and Sierra Avenue to go north. During these road closures, access to individual parcels would still be maintained and detours would be signed for vehicles to use alternative streets. The two road closures will occur alternately, therefore impacts would be temporary and less than significant; no mitigation is required.

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

During operation of the project, there would be minimal annual vehicle trips by District staff to the channel for routine maintenance, which would not change from existing vehicle trips to the storm drain channel. This would include one small truck to and from the site. Operational activities would not affect roadway circulation and service levels and would not conflict with an existing plan, ordinance, or policy. Impacts would be less than significant, and no mitigation is required.

(Sources: Project Description, Preliminary Environmental Assessment Report, Air Quality and Greenhouse Gas Memorandum)

b)	Conflict with an adopted congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the appropriate congestion management agency for designated roads or highways?	☐	☐	☒	☐

Less than Significant Impact.

The Riverside County Congestion Management Program (CMP) was developed by the Riverside County Transportation Commission (RCTC) to align land use, transportation, and air quality management efforts in the County and to ensure that new development pays its fair share of needed transportation improvements. It sets a target of Level of Service (LOS) E for the Congestion Management System (CMS) and requires the local agency to prepare a deficiency plan when a CMS facility operates at LOS F. The deficiency plan must include measures that would be implemented to eliminate the deficiency, along with transportation demand management strategies and transit alternatives.

The nearest CMS facility to the site is I-15 and the freeway segment north and south of the Sixth Street interchange is not considered deficient by the CMP. The project site is located approximately 80 feet west of I-15 and access to and from the site would be through the Sixth Street interchange. Due to the limited number of trips that would be generated by the project during construction, there would not be any measurable impact to the LOS at I-15 ramps or freeway segments. This impact would also be temporary during the three-month construction period. Thus, no conflict with the Riverside County CMP would occur. Impacts on the CMP would be less than significant, and no mitigation is required.

(Source: Project Description, Riverside County Congestion Management Program)

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

Less than Significant Impact.

The proposed storm drain channel improvements would be located within the District right-of-way and public roads and a small portion of private property on the southeast corner of Sierra Avenue and Fortuna Road. No changes to driveways, access points, or abutting roads are anticipated to occur by the project. Culverts and storm drain lines would be placed underground on the roadways, and catch basins and inlets would be located on the roadway shoulders.

There are no designated truck routes near the site (Sixth Street is the nearest truck route), but the City allows trucks to use the most direct route between a delivery/pickup location and the closest arterial road or freeway, as well as vehicles owned by a public utility or a licensed contractor while necessarily in use in the construction, installation, or repair of any public utility. For the project, this route would be Sierra Avenue or Valley View Avenue north to Sixth Street and west to I-15. When oversized trucks are used, transportation permits from Caltrans and moving permits from the City may be necessary and shadow vehicles may have to accompany these trucks. Repaving of the local streets to restore pavement conditions may also be required by the City. Compliance with the conditions of these permits (SOP 11) would prevent the creation of traffic hazards. In addition, partial obstruction of travel lanes and short-term closures of Sierra

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

Avenue and Valley View Avenue may occur. Detours would be provided to direct vehicles to other streets but access to individual parcels would be maintained in accordance with the *Manual on Uniform Traffic Control Devices* (MUTCD), which contain standards for maintenance of access, mobile operations on a two-lane road, and temporary traffic control signs and markings (SOP 12). Compliance with applicable guidelines in the MUTCD avoid the creation of traffic hazards in and near the construction site.

After construction, the roadways would be repaved and no long-term hazards would be created by the project. Impacts related to hazards due to a project design feature would be temporary and less than significant with compliance with existing regulations as a standard operating procedure by the District. No mitigation is required.

Standard Operating Procedures

SOP 11: Oversized loads shall obtain any necessary transportation permits from the California Department of Transportation (Caltrans) and moving permits from the City of Norco, including compliance with the permit conditions.

SOP 12: Temporary traffic control measures shall be implemented in accordance with the *Manual on Uniform Traffic Control Devices* (MUTCD) related to maintenance of access, mobile operations on a two-lane road, and temporary traffic control signs and markings.

(Source: Project Description, Norco Municipal Code, MUTCD)

d) Would the project result in inadequate emergency access?	☐	☐	☒	☐

Less than Significant Impact.

As stated above, impacts on local roads used for emergency access would be short-term during construction. During construction activities, temporary closure of portions of Sierra Avenue and Valley View Avenue would occur, but the closures of these streets would alternate to ensure that one street is available as a detour when the other street is closed. Temporary traffic control measures would be implemented in accordance with the MUTCD (SOP 12). Compliance with the MUTCD would require notification of emergency personnel about short-term lane closures and the provision of traffic controls to maintain access to adjacent developments and limit the obstruction of traffic flows. Impacts would be less than significant, and no mitigation is required.

(Sources: Project Description, MUTCD)

e) Would the project result in inadequate parking capacity?	☐	☐	☒	☐

Less than Significant Impact.

The continued use of the site as a storm drain channel within the District right-of-way would not result in inadequate parking. No structures would be constructed that would require parking access or increase the demand for local street parking.

Parking during construction activities would occur within the channel right-of-way and at designated staging areas. On-street parking may also occur during the daytime and would last for three months. Upon completion of project construction, there would be no residents or employees stationed at the channel that may require parking. Annual routine inspections would include driving along both sides of the channel or parking at areas along the District right-of-way. Adequate parking capacity would be available and any on-street parking would only be temporary during construction. Impacts would be less than significant and no mitigation is required.

(Source: Project Description)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, pedestrian facilities, or other alternate transportation or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Less than Significant Impact.

The Riverside Transit Agency (RTA) provides bus transit services in the City of Norco and the rest of Riverside County. RTA Bus Route 3 runs through the City, west of I-15, but there is no bus service to the area east of the freeway, where the site is located. There are no sidewalks along the streets in the project area, but there is an equestrian trail on the west sides of Sierra Avenue and Valley View Avenue and the north side of Gallop Lane.

The proposed project would not affect planned alternative transportation routes or modes, nor would it conflict with adopted policies, plans, and programs supporting alternative transportation. The storm drain channel improvements would not affect public transit services, proposed bike lanes/routes, or pedestrian facilities. However, a temporary closure of equestrian trails on Sierra Avenue, Valley View Avenue, and Gallop Lane would occur during construction. As with roadway closures, detours would be provided on other streets in the City. Impacts on alternative transportation systems would be temporary and less than significant. No mitigation is required.

(Sources: RTA Route 3, Norco General Plan, Preliminary Environmental Assessment Report)

XVI. TRIBAL CULTURAL RESOURCES.				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	☐	☐	☐	☒

No Impact.

The proposed project site has no known tribal cultural resource features and would not be eligible for listing in the California Register of Historical Resources, or in a local register. No properties related to the project are eligible, designated or registered for listing in the California Register of Historical Resources, or in a local register pursuant to a local ordinance or resolution.

See Section V (b). Cultural Resources for more details.

(Source: Tribal Consultation, Phase I Cultural Resource Assessment)

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact

Less than Significant Impact.

Pursuant to AB 52 and Public Resources Code Section 21080.3.1, the District initiated tribal consultation with the following tribes for this project:

- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- Soboba Band of Luiseño Indians

The Pechanga Band of Luiseño Indians did not respond to the initial invitation to consult or the follow up notice to consult on the project within the 30-day time frame that is set by AB 52. The Rincon Band of Luiseño Indians deferred their right to consult to the Soboba Band of Luiseño Indians. The District met with Mr. Joseph Ontiveros of the Soboba Band of Luiseño Indians on February 23, 2017. Mr. Ontiveros provided information regarding the locations of known tribal cultural resources within the project vicinity. There are no known tribal cultural resources existing on site.

The proposed project does not meet the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. No properties related to the project meet any of the National Register of Historic Places criteria; such as: associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage, associated with the lives of persons important in our past, or embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values, or has yielded, or may be likely to yield, information important in prehistory or history.

The District will implement its Standard Operating Procedure (SOP 2) in the case of an accidental discovery during construction. See Section V (b). Cultural Resources above.

(Source: Tribal Consultation, Phase I Cultural Resource Assessment)

XVII. UTILITIES AND SERVICE SYSTEMS. Would the Project:				
a) Impact the following facilities requiring or resulting in the construction of new facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
Electricity	☐	☐	☐	☒

No Impact.

There are overhead and underground power lines along Sierra Avenue, Fortuna Road, and Valley View Avenue. The aboveground lines and poles will be avoided during construction; however, the project may require electrical use during construction (if a job site trailer is required); this electrical power use would be temporary and minor. There would be no impact on electrical facilities.

(Sources: Project Description, Preliminary Environmental Assessment Report)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
Natural Gas	☐	☐	☒	☐

Less than Significant Impact.

There are several gas lines in Sierra Avenue and Valley View Avenue, with the 6-inch gas line on Sierra Avenue and the 2-inch gas line on Valley View Avenue protected in place and the 2-inch gas line on Sierra Avenue to be relocated. Title 8, Section 1541, of the *California Code of Regulations* (CCR) requires persons planning new construction and/or excavations or new utility lines near or crossing existing subsurface installations and lines, high-pressure pipelines, natural gas/petroleum pipelines, electrical lines greater than 60,000 volts, and other high-priority lines to notify the Owner/Operator of the line and to determine the locations of subsurface lines prior to any ground disturbance for excavation. In compliance with this regulation, prior to construction, Underground Service Alert (USA) would be contacted to identify subterranean utility lines in the vicinity of the project site that would have the potential to be affected by excavation and the implementation of necessary measures to protect these utility lines from disturbance or damage. This would also minimize disruption of gas services in the area. Impacts would be less than significant, and no mitigation is required.

The proposed project would not require natural gas during construction or use. There would be no demand for gas service or any long-term impacts.

Standard Operating Procedure

SOP 13: In accordance with Title 8, Section 1541, of the *California Code of Regulations* (CCR), persons planning new construction and/or excavations or new utility lines near or crossing existing subsurface installations and lines, high-pressure pipelines, natural gas/petroleum pipelines, electrical lines greater than 60,000 volts, and other high-priority lines are required to notify the Owner/Operator of the line and to determine the locations of subsurface lines prior to any ground disturbance for excavation. Coordination, approval, and monitoring by the Owner/Operator of the line would avoid damage to high-priority lines and the creation of hazards to the surrounding area.

(Sources: Project Description, Preliminary Environmental Assessment Report, California Code of Regulations)

Communication System	☐	☐	☐	☒

No Impact.

There are overhead telephone lines on wooden poles along Sierra Avenue, Fortuna Road, and Valley View. These lines and poles would be protected in place. The nature of the project as a storm drain channel improvement project does not require the use of communication systems during construction or use. There would be no impact on communication systems.

(Sources: Project Description, Preliminary Environmental Assessment Report)

Street lighting	☐	☐	☐	☒

No Impact.

There are no streetlights along on adjacent roads where improvements are proposed but there is a streetlight at the eastern end of Gallop Lane, which would not be affected by the project. The project does not propose lighting along the channel, and construction and operation would have no impact on street lighting.

(Sources: Project Description, Preliminary Environmental Assessment Report)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
Public facilities, including roads and bridges	☐	☐	☒	☐

Less than Significant Impact.

The project does not propose the construction of new roads or bridges. However, the reconstruction of the culverts under Sierra Avenue and Valley View Avenue and the construction of storm drain lines, inlets, and catch basins would affect public roadways. These roads would be repaved after construction and would revert to existing conditions. Impacts on roads would be temporary and less than significant.

(Sources: Project Description, Preliminary Environmental Assessment Report)

b)	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Less than Significant Impact.

The purpose of the project is to replace the interim earthen storm drain channel with a larger concrete-lined channel that will convey ultimate condition flow rates. The project would help to address the City of Norco's drainage issues and convey storm water runoff from areas north and south of the channel and the hills located in the eastern portion of the City to the North Norco Channel, which discharges into the Prado Dam Reservoir. The construction of the storm water drainage facility would not cause significant environmental effects, with compliance with the District's Standard Operating Procedures and the mitigation measures outlined in the Initial Study. Therefore, there would be less than significant impacts, and no additional mitigation measures are required.

(Sources: Project Description, Norco General Plan)

c)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

Less than Significant Impact.

There are several water lines on Sierra Avenue and Valley View Avenue that cross the North Norco Channel Line NB. The project would protect these lines in place. Also, the project would not require water supplies for long-term use. Rather, the purpose of the project is to better convey the full 100-year flow rate than the existing storm drain channel in place at the site. The project would not create a long-term demand for water, and operational activities would not affect water supply. As stated above, prior to construction, USA would be contacted to identify subterranean utility lines in the vicinity of the project site that would have the potential to be affected by excavation and the necessary measures implemented to protect these utility lines from disturbance or damage (SOP 13). This would also minimize disruption of water services in the area. Impacts would be less than significant, and no mitigation is required.

Water use during construction would be limited to dust control and equipment cleaning and would be provided by water trucks or fire hydrants. This water may come from local groundwater wells or treated groundwater from the Arlington Desalter. Due to the temporary nature and limited demand for water, impacts on water supplies would be less than significant. Also, no long-term water use would occur with the project.

Therefore, there would be a less than significant impact, and no mitigation is required.

(Sources: Project Description, Norco General Plan)

☐ ☐ ☒ [

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d)	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?	☐	☐	☒	☐

Less than Significant Impact.

There are sewer lines on Sierra Avenue and Valley View Avenue that cross the channel culvert at these locations. In addition, there is an 8-inch sewer line on the south side of the channel from Sierra Avenue to approximately 200 feet east of Valley View Avenue. These sewer lines will be protected in place. As stated above, prior to construction, USA would be contacted to identify subterranean utility lines in the vicinity of the project site that would have the potential to be affected by excavation and the implementation of necessary measures to protect these utility lines from disturbance or damage (SOP 13). This would also minimize disruption of sewer services in the area.

The project would not generate wastewater nor require wastewater treatment during construction or use. Wastewater generation during construction would be collected in portable toilets that would be regularly emptied at off-site locations. Impacts would be less than significant and no mitigation is required.

(Sources: Project Description, Norco General Plan)

e)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Less than Significant Impact.

Construction wastes that would be generated by the project include excess soils, asphalt and concrete wastes, excess building materials, and other debris. Any solid waste generated during construction would be properly disposed of at the El Sobrante Landfill and/or other area landfills. The El Sobrante Landfill is located approximately 11 miles from the project site, on 10910 Dawson Canyon Road in the City of Corona. The maximum permitted throughput at the El Sobrante Landfill is 16,054 tons per day, and the remaining capacity at the landfill is over 145 million tons. The landfill is a Class III landfill and accepts mixed municipal wastes and construction/demolition wastes. Other area landfills also have available capacities. Thus, temporary waste generation during construction would not deplete available capacities at existing landfills.

There would be minimal solid waste requiring disposal from long-term routine maintenance activities. Also, no increase in long-term solid waste generation is expected with the improved storm drain channel. Therefore, there would be a less than significant impact, and no mitigation measures are required.

(Sources: Environmental Information Package, CalRecycle Facility/Site Summary Details)

f)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Less than Significant Impact.

Construction wastes are anticipated to be disposed of at the El Sobrante Landfill and/or other area landfills, although soil materials may be transported for use at construction sites in the area. There are available capacities at the El Sobrante Landfill and other area landfills to dispose of the construction wastes from the project. Hazardous wastes would be disposed of in accordance with existing regulations (SOP 6 and SOP 7). Impacts would be less than significant, and no mitigation is required.

(Sources: Project Description, CalRecycle Facility/Site Summary Details, CalGreen Code)

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Potentially Significant Unless 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?	☐	☒	☐	☐

Potentially Significant Impact Unless Mitigation Incorporated.

As discussed in Section IV, Biological Resources, the project would have less than significant impacts on sensitive biological resources after the implementation of MM 1. The project would not have the potential to degrade the quality of the environment; would not substantially reduce the habitat of a fish or wildlife species; would not cause a fish or wildlife population to drop below self-sustaining levels; would not threaten to eliminate a plant or animal community; and would not reduce the number or restrict the range of rare or endangered plants or animals with the procurement of the necessary resources agency permits and compliance with the conditions of the permits.

As discussed in Section V, Cultural Resources, impacts on archaeological and tribal resources would be minimized or avoided through implementation of the standard operating procedure for accidental discovery during grading, excavation, and ground-disturbing activities. Impacts to paleontological resources would be less than significant after mitigation (MM 2). Thus, the project would not eliminate important examples of the major periods of California history or prehistory with the implementation of mitigation measures.

Implementation of mitigation measures for biological and paleontological resources and compliance with existing regulations on the disposition of human remains that may be found during excavation would result in less than significant impacts.

(Sources: General Biological Assessment, Jurisdictional Delineation, Phase I Cultural Resources Assessment)

b) Does the project have impacts that are individually limited, but cumulatively considerable? *("Cumulatively 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.)*	☐	☐	☒	☐

Less than Significant Impact.

The North Norco Channel Line NA upstream and the North Norco Channel downstream of the project site have been upgraded and are not proposed for improvement. There are no other District projects planned in the vicinity.

As discussed throughout this IS/MND, with compliance with the District's standard operating procedures and the implementation of mitigation measures, the project will not result in significant adverse effects to the environment. In all instances where the project has the potential to contribute to a cumulatively considerable impact to the environment, mitigation measures have been imposed to reduce potential impacts to less-than significant levels. As such, it is not expected that the project would contribute to significant environmental effects that are individually limited, but cumulatively considerable. Cumulative impacts would be less than significant.

(Sources: Project Description)

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Less than Significant Impact.

Project construction would not have the potential to generate significant adverse impacts on human beings, either directly or indirectly. Significant impacts related to air quality, hazards/hazardous materials, noise, and traffic and transportation would be avoided with compliance with existing regulations as standard operating procedures by the District. Therefore, potential environmental impacts on human beings, either directly or indirectly, would be less than significant.

(Sources: Project Description, Preliminary Environmental Assessment Report, Air Quality and Greenhouse Gas Emissions Technical Memorandum, Noise Technical Memorandum)

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

☐ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Signature _____ Date 8-28-17

JASON UHLEY, General Manager-Chief Engineer
Printed Name and Title

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Appendix A

Air Quality and Greenhouse Gas Emissions Technical Memorandum

VISTA ENVIRONMENTAL

December 5, 2016

Josephine Alido
Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707

Subject: **Riverside County Flood Control and Water Conservation District (District) – North Norco Channel Line NB, Stage 3 Project Air Quality and Greenhouse Gas Emissions Technical Memorandum.**

Dear Ms. Alido:

Vista Environmental has conducted an analysis to evaluate whether the North Norco Channel Line NB, Stage 3, Project No. 2-0-00145-03 (proposed project) would cause significant air quality or greenhouse gas impacts. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows the South Coast Air Quality Management District (SCAQMD) recommendations for quantification of emissions and evaluation of potential air quality and greenhouse gas impacts.

Project Description

The proposed project would consist of channel improvements to an existing 1,750-foot long channel located along the westerly extension of Gallop Way, east of Interstate 15 in the City of Norco. The proposed channel would consist of approximately 200 lineal feet of reinforced concrete box (RBC), 370 feet of concrete lined rectangular channel, and 1,180 feet of concrete lined trapezoidal channel. The project will also incorporate several catch basins for the safe introduction of flow from the surrounding neighborhoods into the channel. Catch basins would be located on Fortuna Road, Sierra Avenue, Gallop Way, and Valley View Avenue in close proximity to the channel.

The project site is surrounded by residential uses that are designated Residential Agricultural (RA) in the Norco General Plan and the nearest offsite sensitive receptors to the project site consist of single-family homes located as near as 10 feet from the project site. The nearest school to the project site is Sierra Vista Elementary School, located as near as 0.4 miles northeast of the project site.

Atmospheric Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographical features. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with physical features of the landscape to determine their movement and dispersal, and consequently, their effect on air quality. The combination of topography and inversion layers generally prevents dispersion of air pollutants in the South Coast Air Basin (Air Basin).

The climate of the Air Basin lies in the semi-permanent high-pressure zone of the eastern Pacific Ocean, which results in a mild climate, tempered by cool sea breezes. Although the Air Basin has a semiarid climate, the air near the surface is typically moist because of the presence of a shallow marine layer.

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Except for infrequent periods when dry air is brought into the basin by offshore winds, the ocean effect is dominant. Periods of heavy fog are frequent; and low stratus clouds, often referred to as "high fog" are a characteristic climate feature. Average temperatures for Corona, which is the nearest monitoring station to the project site (WRCC 2016), range from an average low of 39.7 degrees Fahrenheit (°F) in January to an average high of 92.3 °F in July. Rainfall averages approximately 12.71 inches a year, with almost all annual rainfall coming from the fringes of mid-latitude storms from late November to early April and summers being almost completely dry.

Winds are an important parameter in characterizing the air quality environment of a project site because they determine the regional pattern of air pollution transport and control the rate of dispersion near a source. Daytime winds in the Air Basin are usually light breezes from off the coast as air moves regionally onshore from the cool Pacific Ocean. These winds are usually the strongest in the dry summer months. Nighttime winds in the Air Basin result mainly from the drainage of cool air off the mountains to the east, and they occur more often during the winter months and are usually lighter than the daytime winds. Between the periods of dominant airflow, periods of air stagnation may occur, both in the morning and evening hours. Whether such a period of stagnation occurs is one of the critical determinants of air quality conditions on any given day.

During the winter and fall months, surface high-pressure systems north of the Air Basin, combined with other meteorological conditions, can result in very strong winds from the northeast called "Santa Ana Winds." These winds normally have durations of a few days before predominant meteorological conditions are reestablished. The highest wind speed typically occurs during the afternoon due to daytime thermal convection caused by surface heating. This convection brings about a downward transfer of momentum from stronger winds aloft. It is not uncommon to have sustained winds of 60 miles per hour with higher gusts during a Santa Ana Wind.

Regulatory Setting

The Proposed Project site lies within the Air Basin, which is managed by the SCAQMD. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone, sulfur dioxide (SO_2), nitrogen dioxide (NO_2), inhalable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead. The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility.

Areas are classified under the Federal Clean Air Act as either "attainment" or "nonattainment" areas for each criteria pollutant, based on whether the NAAQS have been achieved or not. Attainment relative to the state standards is determined by the California Air Resources Board (CARB). The Air Basin has been designated by the Federal Environmental Protection Agency (EPA) as a nonattainment area for O_3 and suspended particulates (PM_{10} and $PM_{2.5}$). Currently, the Air Basin is in attainment with the ambient air quality standards for CO, SO_2, and NO_2. The Air Basin is designated as partial nonattainment for lead and is based on two source specific monitors in Vernon and in the City of Industry that are both near battery recycling facilities. The 2012 Lead SIP for Los Angeles County provides measures to meet attainment of lead by December 31, 2015.

The EPA has designated the Air Basin as extreme nonattainment for the 8-hour average ozone standard. On March 12, 2008, the EPA strengthened its 8-hour "primary" and "secondary" ozone standards to 0.075 parts per million (ppm). The previous standard, set in 1997, was 0.08 ppm. The SCAQMD, which is the agency principally responsible for comprehensive air pollution control in the Air Basin, developed

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the 2007 Air Quality Management Plan (AQMP) that was approved by CARB on September 27, 2007 and provides measures to reduce 8-hour ozone levels to below the federal standard by June 15, 2021.

Additionally, the EPA has designated the Air Basin as nonattainment for $PM_{2.5}$ and PM_{10}. In 1997, the EPA established standards for $PM_{2.5}$ (particles less than 2.5 micrometers), which were not implemented until March 2002. $PM_{2.5}$ is a subset of the PM_{10} emissions whose standards were developed to complement the PM_{10} standards that cover a full range of inhalable particle matter. For the PM_{10} health standards, the annual PM_{10} standard was revoked by the EPA on October 17, 2006; and the 24-hour average PM_{10} attainment status was redesignated to attainment (maintenance) on July 26, 2013.

The 2007 AQMP provides measures to reduce $PM_{2.5}$ emissions to within the federal standard by 2015. On January 25, 2013 the CARB approved the 2012 AQMP that was prepared per the federal Clean Air Act requirements to show attainment of the $PM_{2.5}$ standard by the revised date of 2014. The 2012 AQMP builds upon the approaches taken in the 2007 AQMP utilized to reduce $PM_{2.5}$ emissions in the Air Basin. On December 14, 2012, the EPA revised the primary annual $PM_{2.5}$ NAAQS from 15 $\mu g/m^3$ to 12 $\mu g/m^3$. The SCAQMD is currently working on the preparation of 2016 AQMP in order to meet the revised $PM_{2.5}$ standard.

The Air Basin has been designated by CARB as a nonattainment area for ozone, NO_2, PM_{10}, $PM_{2.5}$, and lead. Currently, the Air Basin is in attainment with the state ambient air quality standards for CO, SO_2, and sulfates and is unclassified for visibility-reducing particles and hydrogen sulfide. The 2007 and 2012 AQMPs provide measures to meet the state standards for ozone, NO_2, PM_{10}, and $PM_{2.5}$.

Monitored Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates of the existing emissions in the Air Basin provided in the Final 2012 AQMP, December 2012, indicate that, collectively, mobile sources account for 59 percent of the volatile organic compounds (VOC), 88 percent of the NOx emissions, and 40 percent of directly emitted PM2.5, with another 10 percent of PM2.5 from road dust.

The SCAQMD has divided the Air Basin into 38 air monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in Air Monitoring Area 22, which covers the Corona/Norco Area. Since not all air monitoring stations measure all of the tracked pollutants, the data from the following two monitoring stations, listed in the order of proximity to the project site have been used; Norco-Norconian Monitoring Station (Norco Station) and Mira Loma Van Buren Monitoring Station (Mira Loma Station).

The Norco Station is located approximately 1.2 miles southwest of the project site at the US Navy Facility in Norco and the Mira Loma Station is located approximately 9 miles northwest of the project site at 5130 Poinsettia Court, Chino. PM10 was measured at the Norco Station and ozone, NO_2, and PM2.5 were measured at the Mira Loma Station. Since historical concentrations of carbon monoxide were found to be well below state and federal limits throughout the Air Basin, SCAQMD discontinued monitoring of carbon monoxide levels on March 31, 2013. It should be noted that due to the air monitoring stations distances from the project site, recorded air pollution levels at the air monitoring stations reflect with varying degrees of accuracy local air quality conditions at the proposed project site. Table A presents the composite of gaseous pollutants monitored from 2013 through 2015.

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Table A – Local Area Air Quality Monitoring Summary

Pollutant (Standard)	Year 2013	2014	2015
Ozone:[1]			
Maximum 1-Hour Concentration (ppm)	0.118	0.138	0.127
Days > CAAQS (0.09 ppm)	**11**	**17**	**29**
Maximum 8-Hour Concentration (ppm)	0.097	0.103	0.105
Days > NAAQS (0.075 ppm)	**21**	**29**	**36**
Days > CAAQs (0.070 ppm)	**32**	**55**	**51**
Nitrogen Dioxide:[1]			
Maximum 1-Hour Concentration (ppb)	53.7	57.7	68.1
Days > NAAQS (100 ppb)	0	0	0
Inhalable Particulates (PM10):[2]			
Maximum 24-Hour California Measurement (ug/m^3)	58	65	87
Days > NAAQS (150 ug/m^3)	0	0	0
Days > CAAQS (50 ug/m^3)	**2**	**3**	**3**
Annual Arithmetic Mean (AAM) (ug/m^3)	28.4	31.0	22.6
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	**Yes**	**Yes**
Ultra-Fine Particulates (PM2.5):[1]			
Maximum 24-Hour National Measurement (ug/m^3)	56.5	73.6	56.6
Days > NAAQS (35 ug/m^3)	**9**	**9**	**17**
Annual Arithmetic Mean (AAM) (ug/m^3)	18.6	19.0	ND
Annual > NAAQS and CAAQS (12 ug/m^3)	No	**Yes**	**ND**

Notes: Exceedances are listed in **bold.** CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; ppb = parts per billion; ND = no data available.
[1] Data obtained from the Norco Station.
[2] Data obtained from the Mira Loma Station.
Source: http://www.arb.ca.gov/adam/

Impact Analysis

CEQA Thresholds of Significance

Consistent with CEQA and the State CEQA Guidelines, a significant impact related to air quality and global climate change would occur if the proposed project is determined to result in:

- Conflict with or obstruct implementation of the applicable air quality plan;

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- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people.
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Impact 1: Air Quality Compliance

The proposed project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP). The following section discusses the proposed project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable GPs and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

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Criterion 1 - Increase in the Frequency or Severity of Violations?
Based on the air quality modeling analysis contained in this report, short-term regional construction air emissions created from the proposed improvements would not result in significant impacts based on SCAQMD regional thresholds of significance discussed in Table B or local thresholds of significance discussed in Table C. The ongoing use of the storm drain channel would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance discussed in Table B. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, no long-term impact would occur and no mitigation would be required.

Therefore, based on the information provided above, the proposed project would be consistent with the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?
Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to insure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The *2016-2040 Regional Transportation/Sustainable Communities Strategy*, which is a major planning document for the regional transportation and land use network within Southern California. This long-range plan is required by federal and state requirements placed on SCAG and is updated every four years. Local governments are required to use this plan as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the City of Norco Land Use Plan defines the assumptions that are represented in the AQMP.

The project site is currently designated as Residential Agricultural in the General Plan and is zoned Agricultural – Low Density 20,000 sq. ft. (A-1-20). The proposed project is consistent with the current land use designation and zoning and would not require a General Plan Amendment or zone change. As such, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur in relation to implementation of the AQMP.

Level of Significance
Less than significant impact.

Impact 2: Air Quality Standard Violation

The proposed project would not violate an air quality standard or contribute substantially to an existing or projected air quality violation. The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the SCAQMD standards.

Thresholds of Significance

Regional Air Quality
To estimate if the proposed project may adversely affect the air quality in the region, the SCAQMD has prepared CEQA Air Quality Handbook (SCAQMD 1993) to provide guidance to those who analyze the air quality impacts of proposed projects. The SCAQMD CEQA Handbook states that any project in the

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Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes of this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table B.

Table B – SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance

	Pollutant Emissions (pounds/day)					
	VOC	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Construction	75	100	550	150	150	55
Operation	55	55	550	150	150	55

Source: http://www.aqmd.gov/ceqa/handbook/signthres.pdf

Local Air Quality

Project-related construction and operational air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. SCAQMD has also provided Final Localized Significance Threshold Methodology (LST Methodology), July 2008, which details the methodology to analyze local air emission impacts. The LST Methodology found that the primary emissions of concern are NO_2, CO, PM10, and PM2.5.

The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. The project site is approximately 2.91 acres, which is closest to the 2-acre project site shown in the Look-Up Tables and was utilized for this analysis. As detailed above, the project site is located in Air Monitoring Area 22, which covers the Corona/Norco Area. The nearest sensitive receptors are single-family homes located as near as 10 feet (3 meters) from the project site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25 meter thresholds. Table C below shows the NO_x, CO, PM_{10}, and $PM_{2.5}$ for both construction and operational activities.

Table C – SCAQMD Local Air Quality Thresholds of Significance

	Allowable Emissions (pounds/day)[1]			
Activity	**NOx**	**CO**	**PM10**	**PM2.5**
Construction	170	1,007	6	5
Operation	170	1,007	2	2

Notes:

[1] The nearest offsite sensitive receptors are single-family homes located as near as 10 feet (3 meters) from the project site. According to LST Methodology, any receptor located closer than 25 meters shall be based on the 25 meter thresholds.

Source: Calculated from SCAQMD's Mass Rate Look-up Tables for two acres in Air Monitoring Area 22, Corona/Norco Area.

Construction Emissions

The proposed project would consist of channel improvements to an existing 1,750-foot long channel. Improvements would include the development of 250 lineal feet of reinforced concrete box (RBC), 370 feet of concrete lined rectangular channel, and 1,180 feet of concrete lined trapezoidal channel. The project will also incorporate several catch basins located on Fortuna Road, Sierra Avenue, Gallop Way, and Valley View Avenue in close proximity to the channel.

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Construction-Related Regional Impacts

The CalEEMod model has been utilized to calculate the construction-related regional emissions from the proposed project. The worst-case summer or winter daily construction-related criteria pollutant emissions from the proposed project for each phase of construction activities are shown below in Table D and the CalEEMod daily printouts are shown in Appendix A.

Table D – Construction-Related Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Excavation and Grading of Channel[1]						
Onsite	3.02	38.22	15.92	0.04	1.93	1.43
Offsite	0.66	8.33	9.02	0.02	0.83	0.31
Total	**3.68**	**46.55**	**24.94**	**0.06**	**2.76**	**1.74**
Channel Construction						
Onsite	1.61	16.24	10.01	0.02	0.86	0.81
Offsite	0.38	1.98	5.30	0.01	0.77	0.23
Total	**1.99**	**18.22**	**15.31**	**0.03**	**1.63**	**1.04**
Catch Basin Construction						
Onsite	2.45	24.79	13.59	0.03	1.21	1.14
Offsite	0.38	1.98	5.30	0.01	0.77	0.23
Total	**2.83**	**26.77**	**18.89**	**0.04**	**1.98**	**1.37**
Final Grading and Road Construction[1]						
Onsite	1.93	20.85	10.91	0.02	1.19	0.92
Offsite	0.08	0.53	1.11	0.00	0.14	0.04
Total	**2.01**	**21.38**	**12.02**	**0.02**	**1.33**	**0.96**
Paving						
Onsite	1.40	6.93	4.83	0.01	0.41	0.38
Offsite	0.02	0.03	0.29	0.00	0.06	0.02
Total	**1.42**	**6.96**	**5.12**	**0.01**	**0.47**	**0.40**
SCQAMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[2] Onsite emissions from equipment not operated on public roads.
[3] Offsite emissions from vehicles operating on public roads.
Source: CalEEMod Version 2013.2.2.

Table D shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

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