San Bernardino County
Subsequent Initial Study Environmental Checklist Form

This form and the descriptive information in the application package constitute the contents of the Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT DESCRIPTION

West Fontana Channel Flood Control Improvement Project	USGS Quad: Fontana, California T,R, Section: T1S, R6W, Section 10,11, 12 SBM Thomas Bros: Pg. 604, B3-H3(03 ed). Planning Area: Valley OLUD: Regional Industrial (County portion only, western project limits to ~1,300 west of Citrus Ave.) City of Fontana Zoning: Open Space, Medium Density Residential, Light Industrial

1. Project Title: West Fontana Channel Flood Control Improvement Project (SCH No. 2006121089)

2. Lead Agency and Address:
San Bernardino County Flood Control District
Environmental Management Division
825 East Third Street, Rm. 127
San Bernardino, California 92415-0835

3. Contact Person Email Address and Phone Number:
Nancy J. Sansonetti, AICP, Senior Planner
Department of Public Works, Environmental Management Division
909-387-8109
Nancy.Sansonetti@dpw.sbcounty.gov

4. Project Location:
The West Fontana Channel is a linear flood control channel that is within both the City of Fontana and an unincorporated area of the County of San Bernardino (see Figure 1). The Proposed Project is within the San Bernardino County Flood Control District (District) right of way, generally located south of Arrow Route adjacent to and north of the Burlington Northern Santa Fe (BNSF) and Southern California Regional Rail Authority (SCRRA) railroad right-of-way. The channel improvement limits are defined by Banana Basin on the west to approximately 640 feet west of Juniper Avenue on the east (see Figure 2).

5. Project Sponsor's Name and Address:
San Bernardino County Flood Control District
825 East Third Street
San Bernardino, California 92215-0835

6. Description of Project:
The existing West Fontana Channel is an unlined channel that flows westerly to eventually discharge into the Banana Basin. On May 8, 2007, the San Bernardino County Board of Supervisors adopted a Mitigated Negative Declaration based on the Initial Study prepared for channel improvements as designed at that time. The District is now proposing improvements along an extended alignment (an

additional 3,400 feet, or 25% increase) totaling approximately 3 miles of the channel from Banana Basin easterly to approximately 640 feet west of Juniper Avenue. The existing channel width generally ranges from 10 to 15 feet, and depth is approximately 4.5 feet. The channel flows through corrugated steel pipes that act as culverts under Cherry Avenue, Redwood Avenue, Beech Avenue, BNSF railway crossing near Lime Avenue, and Citrus Avenue. An unimproved District maintenance road (approximately 10 to 12 feet in width) runs parallel to most sections of the channel and has restricted gated access.

Proposed improvements to the West Fontana Channel would consist of re-sizing the existing dirt channel from the current interim condition to an ultimate concrete lined trapezoidal and/or rectangular channel, re-sizing of road crossing culverts, providing for all of the master planned inlets, and development of maintenance roads along with access ramps to the channel. Where there is sufficient right-of-way, the channel will feature an adjacent parallel bio-swale or similar water quality improvement feature. Work will include excavation, grading, concrete lining of the channel, six-foot high chain-link fencing with access gates, maintenance roads and substantial road improvements at the Beech Avenue and Citrus Avenue crossings. Utilities will be relocated as required.

The proposed channel improvements would increase channel capacity to alleviate flooding that occurs under existing conditions with storms of two year intensity. The proposed channel improvements have been designed in conformance with the ultimate condition design Qs (e.g. historically highest quantities of peak stormflow discharge and rainfall) in the City of Fontana Master Plan of Drainage; the improvements allow for safe conveyance of flow that minimizes risk of damage to nearby properties due to erosion, overtopping, and debris deposition.

The proposed reconfiguration of the channel includes design changes that incorporate a total of approximately 7,600 linear feet of bio-swales. The proposed bio-swales would be located adjacent to the north edge of the channel in locations where sufficient right-of-way exists. The bio-swales would provide water quality treatment of stormflows before discharge to the channel. The West Fontana Channel is tributary to the San Sevaine Creek, an inland stream covered under the Santa Ana Region Basin Plan. Intermittent Beneficial Uses of the San Sevaine Creek identified in the Santa Ana Region Basin Plan and San Bernardino County Stormwater Program Watershed Action Plan include: municipal and domestic water supply (MUN), ground water recharge (GWR), recreation (contact and non-contact) (REC1 and REC2), cold freshwater habitat (COLD), and wildlife habitat (WILD). The enhancement of the flood control facilities as proposed would reduce upstream flood hazards and safely convey stormflows through the West Fontana Channel and its series of detention basis before discharging to San Sevaine Creek.

Maintenance of the improved flood control channel will include concrete inspections, sealing of concrete joints and cracks, fencing repairs, trash and graffiti removal, mowing and sediment removal within the bio-swale, grading of the access roads and down ramps, and general repairs.

Overall, the project would be implemented in two phases. The first phase is from the channel outlet into Banana Basin to just east of Beech Avenue. The second phase would begin at the end of the first phase just east of Beech Avenue and continue to west of Juniper Avenue to the headwall of the Juniper Avenue reinforced concrete pipe outlet.

Generally, the following activities are proposed:

- Three miles of re-sizing the existing dirt channel and culverts from the existing condition to an ultimate concrete lined trapezoidal and/or rectangular channel. This work may include 300,000 to 500,000 cubic yards of excavation, disposal of excess dirt, removal and reconstruction of interfering existing improvements, 30,000 to 50,000 cubic yards of reinforced concrete

construction, and construction of miscellaneous associated improvements such as maintenance roads, fencing and water quality enhancement features.

- Construction of concrete box culverts and street improvements at Depot Road, Beech Avenue, and at Citrus Avenue, including restoration of road improvements impacted by the culvert construction, and construction of additional local drainage facilities.
- Construction of a concrete box culvert under an existing rail road spur line crossing located immediately west of the terminus of Lime Street; this portion of the project would require the removal and reinstallation of the railroad spur.
- Construction of a concrete box culvert in an approximately 1,300 foot reach of the alignment from approximately Depot Road to east of Cherry Avenue. This portion of the project would require acquisition of additional flood control and water conservation easement and removal and reinstallation of a BNSF railroad spur.
- Construction of storm drain stub-outs for planned future connections
- Construction of maintenance roads, along with access ramps to the channel invert.
- Construction of an adjacent parallel bio-swale or similar water quality enhancement feature on the north side of the channel where there is sufficient right-of-way. The bio-swale would include inlets from adjacent properties or streets where appropriate.

7. Lead Agency Discretionary Actions:

Discretionary actions that may be taken by the Lead Agency include, but are not limited to, the following:

- Right-of-way acquisition
- Project advertisement for construction

8. Surrounding Land Uses:

The approximately three mile alignment spans both incorporated and unincorporated land. The westernmost approximately 2.1 miles are located in unincorporated San Bernardino County within the Regional Industrial zoning/land use designation. The easternmost approximately 0.9 miles are located within the City of Fontana limits; zoning/land use designation in the Fontana portion of the channel include Open Space (OS-R), Medium Density Residential (R-2), and Light Industrial (M-1) (Zoning District Map, July 8, 2015).

Land uses adjacent to the channel alignment on the north include predominantly industrial land uses such as: auto storage, dismantling, and wrecking facilities, the Angelus Block Company, lumber/woodwork yards, recycling facilities, and scrap metal yards. Other existing land uses include an inactive quarry between Lime Avenue and Tokay Avenue and medium density residential development from Tokay Avenue east to Oleander Avenue. Single family residential structures occur east of Redwood Avenue on Whittram Avenue, and East of Oleander Avenue on Orange Avenue.

9. Environmental/Existing Site Conditions:

The project site is an existing flood control channel with widths averaging 10 to 15 feet, and depth averaging 4.5 feet. The portion of the channel to be improved totals three miles. The flood control right-of-way is defined by existing property fences along the north and by the BNSF/SCRRA railroad to the south.

The project site is void of native vegetation or native habitat. The project is highly disturbed and vegetation is minimal and mostly occurs in sparse ruderal patches on the bottom of the channel. The most notable vegetation is Eucalyptus trees (*Eucalyptus globulus*), which are present at various locations along the perimeter the flood control right-of-way. Soils in the project site are heavily disturbed and compacted as a result of surrounding development and grading/weed abatement activities. The project site primarily supports Russian thistle (*Salsola tragus*) with a mix of ruderal/weedy plant species including short-pod mustard (*Hirschefeldia incana*), golden crownbeard (*Verbasina encelioides*), horseweed (*Erigeron Canadensis*), ragweed (*Ambrosia psilostachya*), and Mediterranean grass (*Schismus barbatus*).

10. Earlier Analysis Used:

A Notice of Intent (NOI) for the subject project was originally published in 2006 and the San Bernardino County Board of Supervisors certified a Mitigated Negative Declaration (MND) on May 8, 2007 (SCH No. 2006121089). The project as currently designed is being re-evaluated in this Subsequent Initial Study to address changes in the project footprint and design from that described in the 2007 MND. Improvements to the West Fontana Channel presently proposed include an additional approximately 3,400 lineal feet east of Citrus Avenue and the addition of bio-swale water quality treatment features. The present channel improvements require the acquisition of additional right-of-way/conservation easement; a discretionary action that was not a part of the 2007 MND.

Per CEQA Guidelines §15162(a)(2) a subsequent negative declaration shall be prepared after a project has been certified and adopted if "substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity previously identified significant effects."

Section 15162(c) of the guidelines goes on to state that "once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) [of §15162] occur, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any."

At present, the Proposed Project involves new discretionary action by the San Bernardino County Flood Control District related to acquisition of right-of-way. Additionally, potentially significant impacts to biological resources have been identified and new mitigation (not proposed in the 2007 MND) has been incorporated into the Proposed Project. As a result of these changes in the Project conditions, a Subsequent Initial Study has been prepared to evaluate potential effects related to proposed changes to the project footprint and design and to disclose additional discretionary action related to right-of-way acquisition. This Subsequent Initial Study also includes analysis of the impacts to jurisdictional waters subject to authorizations from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act (CWA), Santa Ana Regional Water Quality Control Board under Section 401 of the CWA, and California Department of Fish and Wildlife under Section 1600 of the Fish and Game Code. Where appropriate, analysis from the 2007 MND has been incorporated into this Subsequent Initial Study.

Per the CEQA Guidelines Section 15162(d), "a subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed." The County will publish a Notice of Intent consistent with the requirements of Section 15072 and shall provide a public review period consistent with the requirements of Section 15073. The

2007 MND will be available for review during the public review period. Following the public review period the subsequent Mitigated Negative Declaration shall be considered for adoption by the San Bernardino County Board of Supervisor; if adopted, a Notice of Determination shall be filed.

11. Other Public Agencies Whose Approval is 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)

U.S. Army Corps of Engineers

State Agencies

California Department of Fish and Wildlife
California Water Quality Control Board, Santa Ana Region

City/County Agencies
N/A

Financing Approval or Participation Agreements
N/A

INTRODUCTION

Regulatory Framework

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction, operation and maintenance of the *West Fontana Channel Improvement* project (hereinafter referred to as the "Project" or “Proposed Project”). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the San Bernardino County Flood Control District (District) as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

Organization of the Initial Study

The Initial Study is organized as follows:

Introduction: Provides the regulatory context for the review along a brief summary of the CEQA process.
Project Information: Provides fundamental project information, such as the project description, project location and figures.

Lead Agency Determination: Identifies environmental factors potentially affected by the project and identifies the Lead Agency's determination based on the initial evaluation.

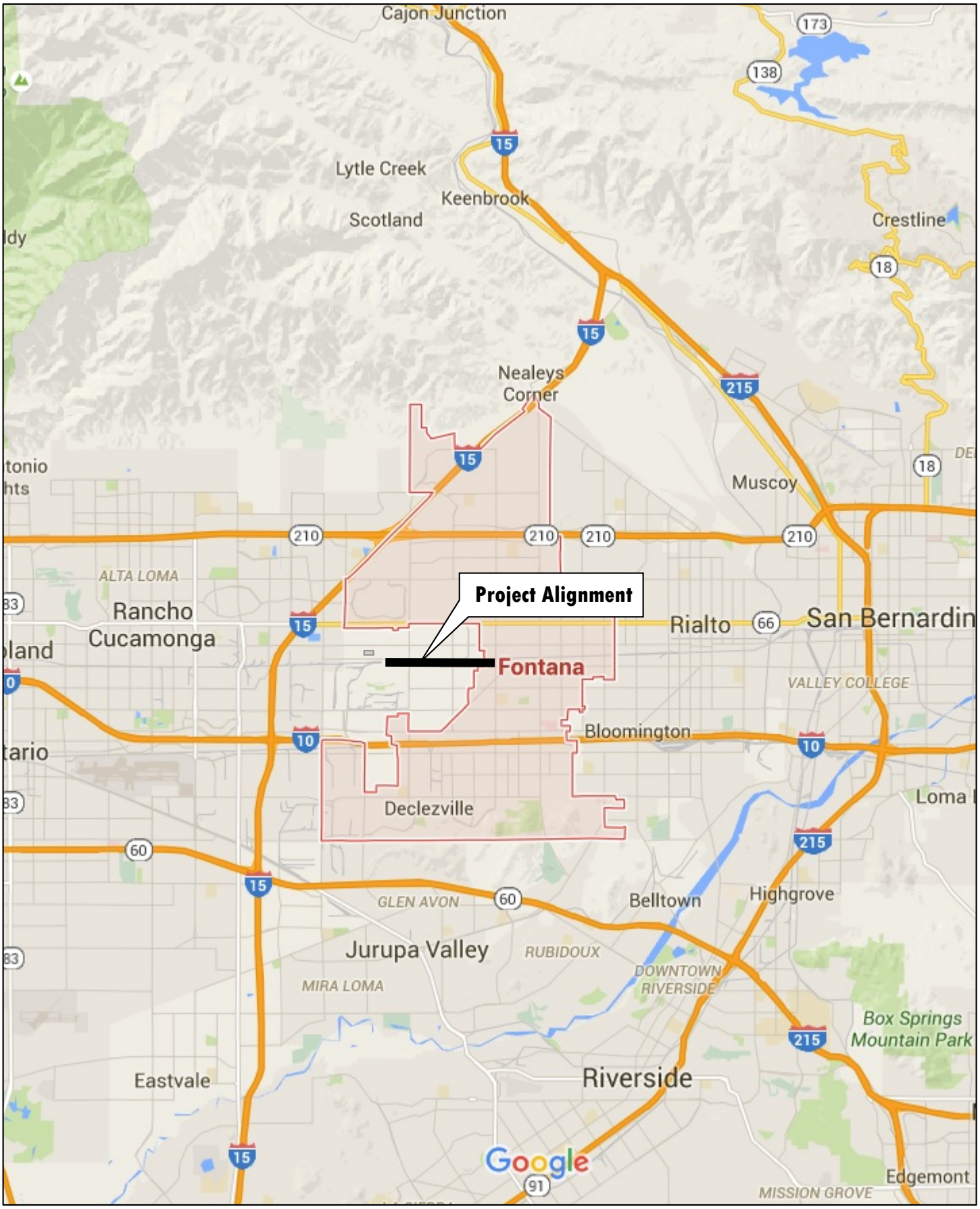
Mitigated Negative Declaration: Prepared when a determination can be made that no significant environmental effects will occur because revisions to the project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels.

Mitigation Monitoring Program Table: Identifies objectives, criteria, and specific procedures to administer the District's responsibilities under CEQA.

Evaluating Environmental Impacts: Provides the parameters the District uses when determining level of impact.

CEQA Checklist: Provides an environmental checklist and accompanying analysis for responding to checklist questions.

References: Includes a list of references and various resources utilized in preparing the analysis.



Source: Google Maps 2016

N

0 3

Approximate Miles

LILBURN CORPORATION

REGIONAL LOCATION

West Fontana Channel Subsequent IS

San Bernardino County, California

FIGURE 1

Source: Google Earth, Imagery Date: 2-9-2016

N

0 2,000

Approximate Feet

LILBURN CORPORATION

PROJECT LOCATION

West Fontana Channel Subsequent IS

San Bernardino County, California

FIGURE 2

LEAD AGENCY DETERMINATION

Environmental Factors Potentially Affected

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

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

Determination on the basis of this initial evaluation:

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

☒ **I find that although the proposed project 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: _____ Dated: 6/30/2016

Harold Zamora, P.E., Chief

Environmental Management Division

EVALUATING 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 offsite as well as onsite, 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 (-6) 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.

I. AESTHETICS – Would the project:

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

SUBSTANTIATION: (Check ☐ if project is located within a view-shed of any Scenic Route listed in the General Plan):

a) **No impact.** The immediate vicinity of the alignment is characterized by industrial development. The Burlington Northern Santa Fe (BNSF) and Southern California Regional Rail Authority (SCRRA) right-of-way is located adjacent to the south side of the channel alignment. Existing land uses to the north are generally industrial with some limited residential development on Whitram Avenue east of Redwood Avenue and on Orange Avenue east of Oleander Avenue. The City of Fontana General Plan identifies the lower San Gabriel Mountains and the Jurupa Hills as visually prominent topographic features that provide scenic vistas from mobile and stationary viewing locations throughout the community. Access along the channel right-of-way is restricted to the public; additionally, the project does not include improvements that would obstruct views. No impact is identified and no mitigation measures are recommended.

b) **No impact.** The West Fontana Channel is not located along a state scenic highway or County designated scenic route as identified in the California Scenic Highway Mapping System or in the County's General Plan. The West Fontana Channel is located adjacent to the existing BNSF/SCRRA railroad right-of-way and is not accessible to the public. Scenic resources such as trees, rock outcroppings, or historic buildings occur within the project area. No impact is identified and no mitigation measures are recommended.

c) **No impact.** The immediate vicinity is highly urbanized and developed predominantly with a mixture of commercial and industrial uses. Access to the right-of-way is restricted and the channel is not readily visible from the surrounding areas, except to those traveling on the Metrolink train. The proposed improvements would not substantially change the existing visual character or quality of the vicinity. No impact is identified and no mitigation measures are recommended.

d) **No impact.** The project does not propose to add lighting. No impact related to nighttime lighting is identified, and no mitigation measures are recommended.

No significant adverse impacts are identified or anticipated and no mitigation measures are required

II. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code 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))?	☐	☐	☐	☒
d) Result in loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

SUBSTANTIATION: (Check ☐ if project is located in the Important Farmlands Overlay):

a) **No impact.** The Project Site is identified as "Urban and Built-Up" as identified in the California Department of Conservation, Farmland Mapping and Monitoring Important Farmland Finder (April 7, 2016). The Project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project site is not designated for agricultural use and implementation of the proposed Project would not convert Farmland to non-agricultural use.

b) **No impact.** The Project Site is identified as "Urban and Built-Up" land in the "San Bernardino County Williamson Act FY 2014/2015 Sheet 2 of 2 map published by the California Department of Conservation's Division of Land Resource Protection (2015). No land under Williamson Act Contract occurs at the Project Site and no impacts will occur.

c) **No impact.** The portion of the alignment in unincorporated San Bernardino County has a zoning designation of "Regional Industrial." Zoning designations in the portion of the alignment within the City of Fontana include Open Space (OS-R), Medium Density Residential (R-2), and Light Industrial (M-1). Implementation of the Proposed Project would not conflict with existing zoning for, or cause

rezoning of, forest land, timberland, or timberland zoned Timberland Production because these designations do not occur at the Project site. No impact is identified and no mitigation measures are required.

d) **No impact.** The Project Site is developed with the existing West Fontana Channel. No forest land or forest uses exist on the site. No impact is identified and no mitigation measures are required.

e) **No impact.** Implementation of the Proposed Project would not result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact is identified and no mitigation measures are required.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

III. AIR QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

SUBSTANTIATION: (Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

a) **Less than significant impact.** The proposed project is improvements within an existing San Bernardino County Flood Control District channel right-of-way channel located south of Arrow Route adjacent to and north of the Burlington Northern Santa Fe (BNSF) and Southern California Regional Rail Authority (SCRRA) railroad right-of-way. The channel improvement limits are defined by Banana Basin on the west to approximately 640 feet west of Juniper Avenue. Proposed improvements include re-sizing the existing dirt channel to an ultimate concrete lined trapezoidal and/or rectangular channel, re-sizing of road crossing culverts, providing for all of the master planned inlets, and development of maintenance roads along with access ramps to the channel. Where there is sufficient right-of-way the channel will feature an adjacent parallel ten-foot wide bio-swale or similar water quality improvement feature. Work will include excavation, grading, and concrete lining of the channel, six-foot high chain-link fencing with access gates, maintenance roads and substantial road improvements at the Beech Avenue and Citrus Avenue crossings. Utilities will be relocated as required. Upon completion of construction activities, operational emissions would be consistent with existing conditions and limited to occasional maintenance activities. Implementation of the improvements would be consistent with the County's Master Drainage Plan. Therefore, the Proposed Project would not conflict with the South Coast Air Quality Management Plan. A less than significant impact is anticipated and no mitigation measures are required.

b/c) **Less than significant impact.** The proposed channel improvements within the existing right-of-way would require earthmoving, material removal, and other activities such as grading and paving.

The Proposed Project's construction activities were screened for emission generation using South Coast Air Quality Management District (SCAQMD) "Air Quality Handbook" guidelines, Emission Factors for On-Road Heavy-Heavy Duty Diesel Trucks (2016) and SCAQMD Off-Road Mobile Source Emissions Factors (2016). These tables are used to generate emissions estimates for development projects. The criteria pollutants screened for included: reactive organic gases (ROG), nitrous oxides (NO_x), carbon monoxide (CO), and particulates (PM_{10} and $PM_{2.5}$). Two of these, ROG and NO_x, are ozone precursors.

The following construction parameters/phases were assumed for the emissions modeling:

Phase I: Site Preparation/Clearing, Typical daily equipment:

- 1 Dozer
- 1 Loader
- 1 Water Truck
- 1 Dump/Haul Truck

Phase II: Excavation, Typical daily equipment:

- 1 Excavator
- 1 Water truck

Phase III: Hauling, Typical daily equipment:

- 1 Loader
- 21 Dump/Haul Trucks, 40-mile round-trip haul distance to/from the nearest landfill
- 1 Water Truck

Phase IV: Fill/Backfill/Compaction, Typical daily equipment:

- 1 Loader
- 4 Dump/Haul Truck, 2-mile haul distance, onsite use
- 1 Water Truck
- 1 Dozer
- 1 Grader
- 1 Roller

Phase V: Concrete Work/Street Improvements/Repairs, Typical daily equipment:

- 1 Water Truck
- 1 Grader
- 1 Miscellaneous Paving Equipment
- 1 Roller
- 31 Concrete Mixer Trucks, 20 mile haul distance from the nearest batch plant

Construction earthwork emissions are considered short-term, temporary emissions. The Proposed Project's calculated emissions levels as compared to SCAQMD thresholds for each criteria pollutant screened are shown in the following Tables 1 thru 5.

Table 1
Phase I: Site Preparation/Clearing
(Pounds per Day)

Source	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Dozer	2.1	16.7	7.9	0.7	0.7
Loader	0.8	5.7	3.6	0.3	0.3
Water Truck	0.6	4.5	2.9	0.2	0.2
Dump Trucks[1]	0.2	2.5	0.9	0.2	0.2
Totals (lbs/day)	**4.0**	**31.5**	**17.3**	**1.3**	**1.3**
SCAQMD Threshold	75	100	550	150	55
Significant	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD Off-Road Mobile Source Emissions Factors (2016)
[1] SCAQMD On-Road Heavy-Heavy Duty Diesel Trucks (2016)

Table 2
Phase II: Excavation
(Pounds per Day)

Source	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Excavator	0.8	5.3	4.2	0.3	0.3
Water Truck	1.0	8.3	3.9	0.3	0.3
Totals (lbs/day)	**1.8**	**13.6**	**8.1**	**0.6**	**0.6**
SCAQMD Threshold	75	100	550	150	55
Significant	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD Off-Road Mobile Source Emissions Factors (2016)

Table 3
Phase III: Hauling
(Pounds per Day)

Source	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Loader	4.1	33.4	15.7	1.4	1.4
Water Truck	0.6	4.5	2.9	0.2	0.2
Dump Truck[1]	4.8	57.0	20.5	5.2	5.2
Totals (lbs/day)	**9.6**	**95.0**	**39.4**	**6.8**	**6.8**
SCAQMD Threshold	75	100	550	150	55
Significant	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD Offroad Mobile Source Emission Factors (2016)
[1] SCAQMD On-Road Heavy-Heavy Duty Diesel Trucks (2016)

Table 4
Phase IV: Fill/Backfill/Compaction
(Pounds per Day)

Source	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Loader	0.8	5.7	3.6	0.3	0.3
Water Truck	0.6	4.5	2.9	0.2	0.2
Dozer	2.1	16.7	7.9	0.7	0.7
Grader	1.0	7.1	4.7	0.4	0.4
Roller	0.6	4.2	3.2	0.3	0.3
Dump Truck[1]	1.2	14.7	5.3	1.4	1.4
Totals (lbs/day)	**6.3**	**53.0**	**27.6**	**3.3**	**3.3**
SCAQMD Threshold	75	100	550	150	55
Significant	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD Offroad Mobile Source Emission Factors (2016)
[1] SCAQMD On-Road Heavy-Heavy Duty Diesel Trucks (2016)

Table 5
Phase V: Concrete Work/Street Improvements/Repairs
(Pounds per Day)

Source	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Water Truck	0.6	4.5	2.9	0.2	0.2
Miscellaneous Paving Equipment	0.8	5.1	3.4	0.3	0.3
Grader	1.0	7.1	4.7	0.4	0.4
Roller	0.6	4.2	3.2	0.3	0.3
Concrete Mixer/Truck[1]	1.1	13.2	4.8	1.2	1.2
Totals (lbs/day)	**4.1**	**34.1**	**19.0**	**2.4**	**2.4**
SCAQMD Threshold	75	100	550	150	55
Significant	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD Offroad Mobile Source Emission Factors (2016)
[1] SCAQMD On-Road Heavy-Heavy Duty Diesel Trucks (2016)

As shown in Tables 1 thru 5, construction emissions would not exceed SCAQMD thresholds. Construction Phases don't overlap. Therefore, less than significant impacts are anticipated.

Compliance with SCAQMD Rules 402 and 403

Although the Proposed Project does not exceed SCAQMD thresholds for construction emissions, the County is required to comply with all applicable SCAQMD rules and regulations as the South Coast Air Basin is in non-attainment status for ozone and suspended particulates (PM_{10}). The County shall comply with, Rules 402 nuisance, and 403 fugitive dust, which require the implementation of Best Available Control Measures (BACM) for each fugitive dust source; and the Air Quality Management Plan (AMCP) which identifies Best Available Control Technologies (BACT) for area sources and point sources, respectively. This would include, but not be limited to the following BACMs and BACTs as cited in the Rules:

1. The project proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.

    (a) The project proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being graded shall be watered regularly to ensure that a crust is formed on the ground surface, and shall be watered at the end of each workday.

    (b) The project proponent shall ensure that all disturbed areas are treated to prevent erosion.

    (c) The project proponent shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

Exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase NO_X and PM_{10} levels in the area. Although the Proposed Project does not exceed SCAQMD thresholds during construction, the County will be required to implement the following conditions as required by SCAQMD:

2. To reduce emissions, all equipment used in earthwork must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.

3. The project proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
4. The operator shall maintain and effectively utilize and schedule on-site equipment in order to minimize exhaust emissions from truck idling.
5. The operator shall comply with all existing and future CARB and SCAQMD regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

Less than significant impacts related to exceedance of air quality standards are anticipated and no mitigation measures are required.

d) **No impact.** The Proposed Project is within the existing flood control channel right-of-way. Development of the Proposed Project would increase the capacity of the channel to capture drainage flows within the vicinity. As shown in Tables 1 thru 5, construction impacts are not anticipated to exceed SCAQMD thresholds. No operational emissions are anticipated. Therefore, the Proposed Project would not impact any sensitive receptors as emissions do not exceed SCAQMD thresholds for any criteria pollutant. No impact is anticipated.

e) **No impact.** The Proposed Project is within the existing flood control channel right-of-way. Development of the Proposed Project would increase the capacity of the channel to capture existing drainage flows within the vicinity. As shown in Tables 1 thru 5, construction impacts are not anticipated to exceed SCAQMD thresholds and operational emissions are limited to infrequent maintenance activities. Objectionable odors would not be associated with maintenance activities. Therefore, the Proposed Project would not result in any impacts from objectionable odors.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

IV. BIOLOGICAL RESOURCES

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

SUBSTANTIATION: (☒ Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database):

a) **Less than significant with mitigation incorporated.** A Biological Resource Assessment (BRA) of the project site was completed by Jericho Systems Incorporated (Jericho). The purpose of the BRA was to address potential effects of the Proposed Project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act and the California Endangered Species Act or species designated as sensitive by the California Department of Fish and Wildlife and/or the California Native Plant Society. The BRA is attached in Appendix A.

An initial field survey was completed by Jericho biologists (Shay Lawrey, Eugene Jennings, and Shannon Dye) on March 9, 2016. On March 15, 2016, Shay Lawrey, Daniel Smith, and Travis McGill completed habitat suitability assessments for burrowing owl (*Athene cunicularia*; BUOW) and Delhi

Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*: DSF) was completed within and adjacent to the project site. The project site is located within the Ontario Recovery Unit for DSF as designated by the USFWS.

As described in the BRA, the entire project area is void of native vegetation or native habitat. During the field surveys, there was no indication of wildlife activity in the flood control channel. Because of the highly disturbed nature of the site, vegetation was minimal at best and mostly occurred in sparse ruderal patches on the bottom of the channel. The most notable vegetation is Eucalyptus trees (*Eucalyptus globolus*), which are present at various locations along the perimeter of the Project Site. Soils within the Project Site are heavily disturbed and compacted as a result of surrounding development and grading/weed abatement activities. The Project Site primarily supported Russian thistle (*Salsola tragus)* with a mix of ruderal/weedy plant species including short-pod mustard (*Hirschfeldia incana*),golden crownbeard (*Verbesina encelioides*), horseweed (*Erigeron Canadensis*) ragweed (*Ambrosia psilostachya*),and Mediterranean grass (*Schismus barbatus*).

No BUOW or sign (pellets, feathers, casting, or white wash) or suitable burrows were recorded during the surveys. The routine flood control, weed abatement, and human activities associated with the adjacent railroad and surrounding developments have precluded BUOW from inhabiting the Project Site. Due to the lack of BUOW sign, suitable burrows, and surrounding development, BUOW are presumed absent from the Project Site.

The soils within the boundaries of the project site have been mechanically disturbed by existing flood control activities and development in the general vicinity. These activities have mixed surface soils, none of which are Delhi Sand soils which are required by DSF. The entire project site was rated as Unsuitable/Very Low Quality for DSF. The project site was determined not to have the potential to provide suitable habitat for DSF and it is assumed that DSF is absent from the project site. No further actions or focused surveys are recommended.

Pursuant to the Migratory Bird Treaty Act and California Fish and Game Code, construction activities should be conducted outside of the avian nesting season. The nesting season generally extends from February 1 through August 31, but can vary slightly from year to year based upon seasonal weather conditions. The Mitigation Measure BIO-1 is recommended to avoid and minimize impacts to nesting bird species including BUOW.

BIO 1: **If construction activities are scheduled to occur during the avian nesting season, a pre-construction nesting bird clearance survey for nesting birds, including BUOW, should be conducted in accordance with accepted protocols. The biologist conducting the clearance survey should document the survey's findings with a report indicating whether impacts to active nests or BUOW will occur. If impacts are identified, avoidance measures, as recommended by the biologist, shall be implemented.**

b) **No impact.** As described in the BRA findings, no riparian habitat or other sensitive natural community identified in local or regional plans, polices, and regulations occurs on the Project Site. The Project Site is predominantly void of native vegetation or native habitat. Vegetation in the channel was minimal at best and mostly occurred in sparse ruderal patches on the bottom of the channel. No impact is identified and no mitigation measures are recommended.

c) **Less than significant impact.** Jericho completed a Jurisdictional Delineation (JD) of the West Fontana Channel Improvement Project area. The purpose of the JD was to determine the extent of State and federal jurisdictional waters within the project area potentially subject to regulation by the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water

Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and California Department of Fish and Wildlife (CDFW) under Section 1602 of the California Fish and Game Code.

As determined in the JD, the West Fontana Channel is a jurisdictional feature subject to CWA and Fish and Game Code (FGC) under the jurisdictions of the USACE, RWQCB, and CDFW respectively. The West Fontana Channel is an ephemeral stream that likely flows for less than 3 months per year, and would therefore be classified as a non-relatively permanent water by the USACE. The channel was assessed for wetland indicators (hydrophitic vegetation, hydric soils and/or wetland hydrology); none of the indicators were recorded in the area of impact. The channel flows into a relatively permanent water, the Santa Ana River (11.33 miles downstream); and a Traditionally Navigable Water (TNW), the Pacific Ocean (approximately 50 river miles downstream). Although not a wetland, the West Fontana Channel has a surface water connection to a TNW, and therefore would be considered a jurisdictional water of the US subject to CWA 404 regulation. The portion of the channel subject to the jurisdiction of the USACE is determined by the delineation of the Ordinary High Watermark (OHWM). The OHWM is indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and the presence of litter and debris. The OHWM at the West Fontana Channel was delineated as the channel bottom (toe-to-toe width).

The channel is also subject to CDFW jurisdiction under the FGC because defined channel bed and banks are present. CDFW jurisdiction is defined by the elevations of land that confine a stream to a definite course when its waters rise to their highest level and to the extent of associated riparian vegetation. In the absence of riparian vegetation outside the top of bank, the lateral extent of the CDFW jurisdiction encompasses the bank-full width which is measured from the top-to-top of each bank slope. The Proposed Project would result in temporary and permanent impacts to the jurisdictional areas identified in the JD and shown below.

The Jurisdictional Delineation Maps (Figure 1, 1A-1B) identify all on-site jurisdictional areas (refer to Appendix A). Table 6 includes a list of jurisdictional areas identified on the property including average OHWM, bank-full width, total channel length and maximum channel depth.

Table 6
West Fontana Channel Improvement Project
Summary of Acreages of Jurisdictional Waters

Feature	OHWM (feet)	Bank width (feet)	Length (feet)	Max Channel Depth (feet)	WUS Corps jurisdiction (acres)	FGC 1600 CDFW jurisdiction Areas (acres)
W. Fontana Channel	5	15	16,015	4.5	1.83	5.82

The flood control function of the West Fontana Channel would be improved by way of concrete lining, therefore, all project-related impacts to jurisdictional waters are considered permanent. As shown in the project plans, the existing channel would be reconfigured in its entirety; therefore, the above identified jurisdictional acreages are equivalent to the anticipated impacts to jurisdictional waters. Authorizations from the USACE, RWQCB, and CDFW will be required. Updates to the project design evaluated in the 2008 MND have been made to incorporate approximately 7,600 lineal feet of bio-swales. The addition of the bio-swales is expected to constitute the creation of jurisdictional waters and commensurately offset impacts to jurisdictional waters. The creation of jurisdictional waters will be discussed with the USACE, RWQCB, and CDFW during the consultation process to determine the need for permits.

Subject to regulatory approvals from USACE, RWQCB, and CDFW, and compliance with applicable conditions of approval, less than significant impacts are anticipated.

BIO 2: **The District shall submit findings of the Biological Resources Assessment and the Jurisdictional Delineation to the USACOE for informal consultation. Direction per the determination of the Army Corps of Engineers shall be followed. Implementation of the Proposed Project would also result in impacts subject to the jurisdiction of the CDFW and the Regional Water Quality Control Board. The District shall submit findings of the BRA and JD to the CDFW along with a 1602 Notification of Streambed Alteration and to the Regional Water Quality Control Board, Santa Ana Region to obtain permits and certifications as necessary.**

d) **No impact.** No indication of wildlife activity was recorded within the project area during field surveys completed by Jericho. The Project Site is developed with the existing West Fontana Channel and is subject to on-going disturbance associated with flood control maintenance including grading and weed abatement, as well as operations of the BNSF railroad immediately adjacent to the south. On the north, access to the channel is restricted by fencing and existing development. The proposed improvements to the West Fontana Channel would not interfere substantially with the movement of any native resident migratory fish or wildlife species. No impact is identified and no mitigation measures are recommended.

e) **No impact.** The Project Site is subject to ongoing disturbance as stated above. Vegetation in the existing channel is limited to non-native ruderal species on the channel bottom. Eucalyptus tree wind breaks occur at various locations along the 3-mile alignment on the north perimeter of the District's right-of-way. The trees are not native and do not qualify as regulated trees under Section 88.01.070(B) of the County's Development Code. No impact is identified and no mitigation measures are recommended.

f) **No impact.** The project site is located within the DSF Ontario Recovery Unit as established by the USFWS. The Ontario Recovery Unit includes all areas of Delhi Sand soils within the cities of Rancho Cucamonga, Ontario, and portions of Fontana. In the USFWS five-year review of the DSF Recovery Plan (USFWS, 2008), the USFWS identified one area that supports DSF within the Ontario Recovery Unit – specifically a 10-acre site near the intersection of Greystone and Milliken Avenue in the City of Ontario. Further, the USFWS recognized that it is likely that there are no longer any existing populations of DSF within the Ontario Recovery Unit and that property containing Delhi Sand soils within this Unit has been adversely affected by agricultural, commercial, and industrial land use and no longer has long-term conservation value.

Jericho completed a habitat suitability assessment of the Project Site; surface soils present were determined not to contain Delhi Sand soils. As a result, the Project Site was determined to not have the potential to provide suitable habitat for DSF and it is assumed that DSF is absent. Further, the channel is surrounded by existing development and no longer has connectivity to areas containing clean Delhi Sands soils or areas subject to Aeolian processes. No further actions or focused surveys were recommended. Improvements to the West Fontana Channel will not impact DSF or impede their recovery as defined by the USFWS DSF Recovery Plan (1997). No impact is identified and no mitigation measures are recommended.

V. CULTURAL RESOURCES

Would the project	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

SUBSTANTIATION: (Check if project is located in the Cultural ☐ or Paleontologic ☐ Resources overlays or cite results of cultural resource review)

McKenna et al. updated the research previously conducted for a cultural resources investigation of the project site completed by the County and documented in the 2008 Initial Study (Roger G. Hatheway, Cultural Resource Specialist, Cultural Resource Study: West Fontana Channel, Fontana Area, October 3, 2002). The findings of McKenna et al.'s research are documented in the *Phase I Cultural Resources Investigation of the Proposed West Fontana Flood Control Channel, Fontana, San Bernardino Co., California* (McKenna et al. 2016) on file with the County.

The 2016, a Phase I cultural resources investigation was conducted to provide basic information on the locations and types of resources within the defined project area. The investigation included an archaeological records search through the California State University, Fullerton, South Central Coastal Information Center, a Native American Consultation through the Native American Heritage Commission, a paleontological overview, a historic search, and a field investigation.

Over the course of the 2016 updated field survey, McKenna et al. recorded 32 items – predominantly pipes or channel related features, and some isolated artifacts. The existing flood control channel was recorded as a linear "site" and the individual components were identified as "features" of the site. Five isolated artifacts appeared to have been carried into the site by run-off water flows. The isolates were not representative of intact artifacts or features and cannot be associated with any point of origin; none of the isolated artifacts were determined to be unique or significant.

a) **Less than significant impact.** The BNSF railroad/railway right-of-way is located immediately south of the flood control right-of-way and defines the southern project limits. The railroad has been recorded as a resource in various areas and in numerous portions throughout San Bernardino County and has been identified as "ineligible" for listing in the National Register of Historic Places and/or the California Register of Historic Resources. The BNSF railroad occupies the historic alignment of the Atchison, Topeka, and Santa Fe Railroad and the "Old Kite Route" dating to pre-1892. The alignment is still in use and surface uses would not be impacted by the proposed project. The proposed project includes construction of an approximately 1,300 foot long concrete box culvert in a reach of the alignment from approximately Depot Road to east of Cherry Avenue. This portion of the flood control right-of-way does not have sufficient area for the development of a surface channel, the Flood Control District proposes to acquire a water conservation easement under the railroad right-of-way for construction of a subterranean concrete box culvert. Construction of the concrete box culvert would occur within the railroad right-of-way would require the removal and reinstallation of a BNSF railroad spur. The BNSF

railroad has been identified as "ineligible" for listing in the National Register of Historic Places and/or the California Register of Historic Places, therefore, this is a less than significant impact and no mitigation measures are recommended.

b) **Less than significant with mitigation incorporated.** McKenna et al. detected no evidence of prehistoric archaeological resources within the project area and it is not expected that prehistoric resources are present in a buried context. However, excavation activities associated with construction have the potential to unearth resources. Mitigation Measure CUL-1 is recommended in the event that resources are found.

McKenna et al. identified a very low potential for historic archaeological resources. McKenna et al. found documentation confirming that the existing flood control channel and its associated features date to the very late historic period. However, the resource is not considered significant. No evidence of significant historic archaeological resources was identified during the field investigation however, if evidence of historic activities are identified during construction activities, a reassessment by a qualified archaeologist would be required. The following mitigation is recommended.

CUL 1 **In the event that evidence of historic activities is unearthed during construction activities, work in the immediate vicinity of the find will be stopped and a qualified archaeologist will be contacted to assess the find and recommend appropriate mitigation. No disturbance shall occur in the vicinity of the find until the site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist. The project site is located within the San Manuel Band of Mission Indians ancestral territory; if the find is determined to be tribal in origin, the archaeologist will initiate consultation with the Tribe.**

c) **Less than significant impact.** Implementation of the proposed project would require grading and other ground disturbing activities. There is no evidence that the project site is located within an area that is likely to contain human remains, and the discovery of human remains during earthmoving activities is not anticipated. In the unlikely event of an accidental discovery of any human remains Health and Safety Code 7050.5, CEQA 1564.5(e), and Public Resources Code 5097.98 mandate the process to be followed. If human remains are encountered on the property, then the San Bernardino County Coroner's Office must be contacted within 24 hours of the find, and all work shall be halted until a clearance is given by that office and any other involved agencies. A less than significant impact is identified and no mitigation measures are recommended.

VI. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in §21074?	☐	☒	☐	☐

SUBSTANTIATION

a) **Less than significant impact with mitigation incorporated.** A Notice of Intent (NOI) for the project was originally published in 2006 and the San Bernardino County Board of Supervisors certified a Mitigated Negative Declaration (MND) on May 8, 2007 (SCH No. 2006121089). Presently, the project is being re-evaluated in this subsequent Initial Study to address changes in the project footprint and design from those described in the 2007 MND. Improvements to the West Fontana Channel presently proposed include an additional approximately 3,400 lineal feet east of Citrus Avenue and bio-swale water quality treatment features. A records search at California State University Fullerton was initiated in 2016 to obtain information on potential tribal cultural resources that may occur at the Project Site. The County of San Bernardino submitted the results to tribes that have requested project consultation for AB 52 compliance. Results of the records search and any correspondence received from the tribes will be presented to the County Board of Supervisors at the time of the public hearing. Potentially significant impacts are not anticipated based on prior research and mitigation measures presented above.

As part of the updated research McKenna et al. contacted the Native American Heritage Commission in Sacramento and acquired the most current listing for Native American representatives within San Bernardino County. Letters were sent to all listed individuals and other known to be interested in the area. A response was received from the San Manuel Band of Mission Indians. Leslie Mouriquand MA, RPA, representative of the San Manuel Band of Mission Indians, indicated the project is located within Tribe's ancestral territory but that no specific information about tribal cultural resources is known at the project location. Because the site is developed with an existing channel, the Tribe does not expect cultural resources to occur. If a resource is found during construction and determined to be tribal, consultation will be initiated as required in Mitigation Measures CR-1 above. No other responses were received. With incorporation of Mitigation Measure CR-1 less than significant impacts to tribal resources are anticipated.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

VII. PALEONTOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
Would the project				
a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

SUBSTANTIATION

a) **Less than significant with mitigation incorporated.** The project site is located on an alluvial fan consisting of deep deposits of recent alluvium originating from the Lytle Creek area - in some areas deposits are estimated to be hundreds of feet deep (McKenna et al. 2016). The alluvial deposits are unlikely to yield evidence of fossil specimens. The alluvial deposits overlay older Quaternary deposits (fossil bearing), but at considerable depth. As shown on the project plans the proposed channel would extend a maximum of 15 feet below the existing ground surface; therefore it is not expected that Quaternary deposits would be impacted during construction and paleontological monitoring is not recommended (McKenna et al. 2016). The proposed excavations are not expected to impact older alluvium. No impacts related to paleontological resources are anticipated and no mitigation measures are recommended.

VIII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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?	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

SUBSTANTIATION: (☐ Check if project is located in the Geologic Hazards Overlay District):

a) i) **Less than significant impact.** As described in the City of Fontana General Plan, the City's planning area (including the easternmost approximately 0.9 miles of the Proposed Project), straddles the junction between two major southern California geologic provinces, the Transverse Ranges to the north, and the Peninsular Ranges to the south, with the base of the San Gabriel Mountains (and the Cucamonga Fault zone) marking the boundary. More specifically, the City of Fontana including its sphere of influence is located in the central part of the Upper Santa Ana River Valley, a providence characterized by northwest-trending geologic structural grain aligned with the San Andreas Fault system, and represented by northwest-trending mountains and valleys stretching all the way to the Mexican border.

As identified in the City of Fontana General Plan, no Alquist-Priolo Earthquake Fault zones are mapped within the City's planning area (Fontana General Plan Figure 11-1). The Proposed Project is improvements to a flood control channel and impacts related to fault rupture are considered less than significant. No mitigation measures are recommended.

ii) **Less than significant impact.** The Project Site is subject to geologic hazards such as earthquakes that occur from time to time in the Southern California area. A maximum magnitude earthquake on any of the three faults in the region (Cucamonga, San Jacinto, or San Andreas) has the potential to generate significant damage to wood-frame, reinforced concrete and steel structures, and to mobile homes. The Proposed Project is improvements to a flood control channel and impacts related to ground shaking are considered less than significant. No mitigation measures are recommended.

iii) **Less than significant impact.** Liquefaction is a phenomenon in which cohesion-less, saturated, fine-grained sand and silt soils loose shear strength due to ground shaking. The Project Site is not located in an area with an identified liquefaction susceptibility in the San Bernardino County General Plan Geologic Hazard Overlay (Map FH29). Figure 11-2 of the City of Fontana General Plan identifies a generalized low liquefaction susceptibility in the project area. The susceptibility is generalized based on the presence of young (less than 10,000 years old) unconsolidated sediments that are generally too coarse to be susceptible to liquefaction. Potential impacts related to liquefaction susceptibility are considered less than significant and no mitigation measures are recommended.

iv) **No impact.** The Project Site does not have any identified landslide susceptibility as shown in Map FH29 of the San Bernardino County General Plan or in Figure 11-4 of the City of Fontana General Plan. No impact is identified and no mitigation measures are recommended.

b) **Less than significant impact.** The soils in the region are of the Tujunga series according to the USDA Web Soil Survey (report downloaded 4-11-2016). Soils in this group are generally characterized as somewhat excessively drained, nearly level to moderately sloping soils that formed on alluvial fans in granitic alluvium. These soils are rapidly permeable, runoff is very slow to slow, and available water capacity is three to four inches. The hazard of erosion is slight due to the gravelly surface layer of the channel. These soils would not create any barrier to the proposed channel improvements.

c) **Less than significant impact.** The West Fontana Channel has a relatively flat with elevations ranging from approximately 1,160 feet near banana Basin to 1,250 feet near the Juniper Avenue RCP. The project site and the immediate vicinity do not include prominent geologic features that would be susceptible to landslides. Figure 11-2 of the City of Fontana General Plan identifies a generalized low liquefaction susceptibility in the project area. The susceptibility is generalized based on the presence of young (less than 10,000 years old) unconsolidated sediments that are generally too coarse to be susceptible to liquefaction. Development of the proposed Project would be subject to safety provisions in the Uniform Building Code to reduce potential of landslide, lateral spreading, subsidence, liquefaction, or collapse. Less than significant impacts are identified and no mitigation measures are recommended.

d) **Less than significant impact.** The soils in the region are of the Tujunga series and are generally characterized as having a sand content greater than 35 percent; soils are non-expansive. The West Fontana Channel is an existing flood control facility. No impacts related to expansive soils are anticipated and no mitigation measures are proposed.

e) **No impact.** The Proposed Project does not include the installation of septic tanks or any other alternative waste disposal system. No impact is identified and no mitigation measures are required.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

IX. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.	☐	☐	☒	☐

SUBSTANTIATION

According to the County of San Bernardino "Greenhouse Gas Emissions Reduction Plan September 2011," updated March 2015, measurable reductions of GHG emissions will be achieved through the County's GHG Development Review Process (DRP) by applying appropriate reduction requirements as part of the discretionary approval of new development projects. Through its development review process, the County will implement CEQA requiring new development projects to quantify project GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. Mitigation of GHG emissions impacts through the DRP provides one of the most substantial reduction strategies for reducing external emissions. The DRP procedures for evaluating GHG impacts and determining significance for CEQA purposes will be streamlined by (1) applying a uniform set of performance standards to all development projects, and (2) utilizing Screening Tables to mitigate project GHG emissions. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. A review/screening standard of 3,000 metric tons of CO_2 equivalent per year (MTCO2e) will be applied to all land uses.

The complete Development Review Process, including the use of performance standards, for assessing and mitigating GHG emissions is outlined below.

> "All development projects, including those otherwise determined to be exempt from CEQA will be subject to applicable Development Code provisions, including the GHG performance standards, and state requirements, such as the California Building Code requirements for energy efficiency. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 MTCO2e per year will be considered to be consistent with the Plan and determined to have a less than significant individual and cumulative impact for GHG emissions".

a) **Less than significant impact.** Per CEQA guidelines, new project emissions are treated as standard emissions, and air quality impacts are evaluated for significance on an air basin or even at a neighborhood level. Greenhouse gas emissions are treated differently as the perspective is global, not local. Therefore, emissions for certain types of projects might not necessarily be considered as new emissions if the project is primarily population driven. Many gases make up the group of pollutants that are believed to contribute to global climate change. However the three gases that are currently evaluated are Carbon dioxide (CO_2) Methane (CH_4) and Nitrous oxide (N_2O).

GHGs emissions resulting from the Proposed Project's construction activities were evaluated using SCAQMD's Off-Road Mobile Source Emissions Factors (2016), Emission Factors for On-Road Heavy-Heavy Duty Diesel Trucks (2016), and California Climate Action Registry General Reporting Protocol, 2009I; Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2. Model results for GHG emissions related to the Proposed Project are shown in Table 7. A screening threshold of 3,000

MTCO2e per year has been adopted by County for determining a project's potential for significant impact to global warming for all development projects where the County is the lead agency.

Table 7
Greenhouse Gas Emissions
"Development Improvements"
MT Per Year

Source/Phase	CO_2	CH_4	N_20[2]
Phase I: Site Preparation/Clearing			
Dozer	2.9	0.0	0.0
Loader	1.3	0.0	0.0
Water Truck	1.5	0.0	0.0
Dump Trucks[1]	0.8	0.0	0.0
Total in MT Per Year: Phase I	6.5		
Phase II: Excavation			
Excavator	24.0	0.0	0.0
Water Truck	25.0	0.0	0.0
Total in MT Per Year: Phase II	48.6		
Phase III: Hauling			
Loader	104.6	0.0	0.0
Water Truck	59.0	0.0	0.0
Dump Truck[1]	675.4	0.0	0.0
Total in MT Per Year: Phase III	839.0		
Phase IV: Fill/Backfill/Compaction			
Loader	52.3	0.0	0.0
Water Truck	59.0	0.0	0.0
Dozer	114.7	0.0	0.0
Grader	63.8	0.0	0.0
Roller	321.6	0.0	0.0
Dump Truck[1]	174.8	0.0	0.0
Total in MT Per Year: Phase IV	786.2		
Phase V: Concrete Work/Street Improvements/Repairs			
Water Truck	3.0	0.0	0.0
Miscellaneous Paving Equipment	1.7	0.0	0.0
Grader	3.2	0.0	0.0
Roller	1.6	0.0	0.0
Concrete Mixer/Truck[1]	156.2	0.0	0.0
Total in MT Per Year: Phase V	165.7		
Total CO2e Per Year	**1,846**		
San Bernardino County Screening Threshold	3,000		
Significant	**No**		

Source: SCAQMD Off-Road Mobile Source Emissions Factors (2016)
[1] Emission Factors for On-Road Heavy-Heavy Duty Diesel Trucks (2016)
[2] California Climate Action Registry General Reporting Protocol, 2009I;
Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2

As shown in Table 7, GHG emissions related to the Proposed Project are not anticipated to exceed the GHG screening threshold. Therefore, impacts are anticipated to be less than significant and no mitigation measures are required.

b) **Less than significant impact.** No operational emissions from the Proposed Project are anticipated. The Proposed Project does not result in emissions exceeding the County's GHG Screening Threshold of the Reduction Plan. Therefore, impacts would be less than significant, and no mitigation would be required.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

X. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Create a significant hazard to the public or the Environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☐	☒

SUBSTANTIATION:

a-b) **Less than significant impact.** The Proposed Project would modify the existing West Fontana Channel. Construction, operation, and maintenance would involve short-term use of petroleum-based fuels, lubricants, pesticides and other small amounts of materials during construction and maintenance activities. The construction phase may include the transport of gasoline and diesel fuel to the Project site and on-site storage for the sole purpose of fueling construction equipment. All transport, handling, use and disposal of substances such as petroleum products, solvents, and paints related to operation and

maintenance will comply with all Federal, State, and local laws regulating the management and use of hazardous materials. Therefore potential impacts associated with the routine transport, use, or disposal of hazardous materials will be less than significant and no mitigation measures are recommended.

c) **Less than significant impact.** The Proposed Project would modify the existing West Fontana Channel; construction activities within the channel right-of-way in the vicinity of Oleander Avenue would occur within one-quarter mile of Oleander Elementary School. Construction activities would involve short-term use of petroleum based fuels, lubricants, and other similar materials. As described above, all transport, handling, use and disposal of substances such as petroleum products and solvents will comply with all Federal, State, and local laws regulating the management and use of hazardous materials. Less than significant impacts are anticipated and no mitigation measures are recommended.

d) **Less than significant impact.** As of April 15, 2016 the California Department of Toxic Substances Control EnviroStor database showed that the project area is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Two sites are identified immediately adjacent on the north of the West Fontana Channel right-of-way: Advanced Steel Recovery (Site No. 60002306) is identified as an active voluntary clean-up site; and an inactive quarry located between Lime Avenue and Tokay Avenue is identified as a site under evaluation [Boral Resources (Former), Site No. 37290008]. The identified limits of construction related to the West Fontana Channel improvement project do not coincide with the EnviroStor sites. Less than significant impact is identified and no mitigation measures are recommended.

e-f) **No impact.** The subject West Fontana Channel alignment is located approximately 6.5 miles northeast of the Ontario International Airport and approximately 4.5 miles southwest of the Rialto Municipal Airport. The project alignment is not located within the limits of the land use plan for either airport. No private airstrips occur in the vicinity of the project. No impacts related to air traffic are anticipated to occur.

g) **Less than significant impact.** The Proposed Project would not interfere with an adopted emergency response plan or emergency evacuation plan. The West Fontana Channel is located within a flood control right-of-way, access to the public is restricted. Temporary impacts to the public right-of-way would occur during construction of the concrete box culverts and street improvements at Deport Road, Beech Avenue, and Citrus Avenue. To minimize impacts, on-street construction activities would conform to all County of San Bernardino access standards to allow adequate emergency access. Once construction is complete, normal traffic patterns would resume. Less than significant impacts are anticipated during construction and no impacts are anticipated related to operations.

h) **No impact.** The West Fontana Channel is located in an urbanized area of Fontana and its sphere of influence. No wildlands occur in the immediate vicinity of the project and nor risks related to wildland fires are identified.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XI. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structure that would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

SUBSTANTIATION:

a) **No impact.** The Proposed Project is improvement to an existing flood control channel within San Bernardino County Flood Control District right-of-way. The Proposed Project is part of the City of Fontana Master Plan of Drainage. Urban storm water runoff in the subject region of the County and City of Fontana is regulated under Order No. R8-2010-0036 issued on February 3, 2010 by the Regional Water Quality Control Board, Santa Ana Region. The Proposed Project is designed to comply with the waste discharge requirements of Order No. R8-2010-0036 and has been designed consistent with the guidance in the *San Bernardino County Stormwater Program Watershed Action Plan* (2014). Design features such as bio-swales have been incorporated into the design to provide water quality treatment prior to storm flows being discharged into the flood control channel. The West Fontana Channel is tributary to San Sevaine Creek an inland surface stream regulated by the Santa Ana Regional Water Quality Control Board as outlined in the Santa Ana Region Basin Plan. Implementation of the proposed project, including the bio-swale water quality treatments feature, are expected to have a beneficial impact at the downstream San Sevaine Creek by furthering the Beneficial Uses of the stream including: municipal and domestic water supply (MUN), ground water recharge (GWR), water recreation (contact and non-contact) (REC1 and REC2), cold freshwater habitat (COLD), and wildlife habitat (WILD). No impact is identified and no mitigation measures are recommended.

b) **Less than significant impact.** The proposed impermeable concrete channel would reduce the amount of water draining into the underlying groundwater along the wash but flows would ultimately continue through the channel and discharge into Banana Basin. Banana Basin is a soft bottom detention basin that allows for groundwater infiltration. Flows that move past Banana Basin continue onto a soft bottom channel and through a series of soft bottom detention basins before discharging into San Sevaine Creek. The proposed project would restrict groundwater infiltration along an approximately three-mile long segment of the West Fontana Channel but would not significantly impact the system's overall capacity for groundwater infiltration in the detention basin portion of the system. Less than significant impacts are anticipated.

c) **Less than significant impact.** To avoid and minimize erosion related to construction Best Management Practices (BMPs) that work to reduce the discharge of pollutants to the storm drain system would be implemented. Construction activities covered under the General Construction Permit include removal of vegetation, grading, excavating, or any other activity that causes the disturbance of one acre or more. The General Construction Permit requires recipients to reduce or eliminate non-storm water discharges into storm water systems, and to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The Regional Water Quality Control Board (RWQCB), Santa Ana Region, has issued an area-wide National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit (MS4 Permit) for the County of San Bernardino, the San Bernardino County Flood Control District, and the incorporated cities of San Bernardino County within the Santa Ana Region. The MS4 Permit authorizes the discharge of storm water from construction projects, upon notification to the RWQCB's Executive Officer prior to commencement of the construction project.

d) **Less than significant impact.** The proposed project would result in improvements to the existing alignment of the West Fontana Channel within the Flood Control District's right-of-way. The proposed channel will be concrete lined and have a varying width between eight to 24 feet as allowed by the right-of-way. Additionally, where sufficient right-of-way exits, bio-swales will be constructed on the north edge of the concrete channel to provide storm water treatment before discharge to the channel. The channel will continue to connect to Banana Basin and flows would continue through to San Sevaine Creek. Implementation of the project would minimize flood risk associated with the existing channel capacity without substantially the watercourse. Less than significant impacts are identified and no mitigation measures are recommended.

e) **Less than significant impact.** Under existing conditions the West Fontana Channel storm water drainage system is under capacity and experiences flooding during storm events of two-year intensity or higher. Implementation of the proposed project would reconfigure the existing channel and increase its capacity to alleviate flooding risks. The West Fontana Channel is subject to the existing area-wide MS4 permit, the channel would continue to be subject to the water quality requirements of the MS4 Permit. Implementation of the project would result in a beneficial impact to the storm drainage system capacity, no impacts are identified and no mitigation measures are recommended.

f) **Less than significant impact.** During construction BMPs would be implemented as required under the General Construction Permit and outlined in a project specific SWPPP. Operation of the channel would be consistent with the requirements of the County's NPDES MS4 Permit. No impacts to water quality are anticipated and no additional mitigation measures are recommended.

g-h) **No impact.** The three-mile segment of the West Fontana Channel is mapped on the Federal Emergency management Agency (FEMA) Flood Insurance Rate Map number 06071C8651H and 06071C8652H. The alignment of the channel has a flood designation of "Zone A" and portions are identified as "Zone AO" with an identified inundation depth of one foot to three feet. The proposed project would expand the capacity of the flood control channel to alleviate flood risks. No housing or structures are proposed within the channel right-of-way; therefore, no impact is identified and no mitigation measures are recommended.

h) **Less than significant impact.** Refer to XI(g) above.

i) **Less than significant impact.** Under existing conditions the West Fontana Channel experiences flooding conditions during storm events of a two-year intensity or higher. As identified by FEMA, the flood depth ranges from one foot to three feet. The purpose of the proposed project is to reduce flood risks by increasing the capacity of the channel. Implementation of the project would reduce risk of loss, injury or death involving flooding. Beneficial impacts are anticipated and no mitigation measures are recommended.

j) **No impact.** The project site is not located in a coastal area; therefore impacts from a tsunami are not anticipated. Banana Basin does not detain water for prolonged periods of time and impacts from a seiche are not expected. No impact is identified and no mitigation measures are recommended.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XII. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SUBSTANTIATION:

a) **No impact.** The West Fontana Channel is an existing channel, existing adjacent land use consist of primarily commercial and industrial with limited residential development. The Proposed Project is improvements to the channel within the existing right-of-way; limited right-of-way acquisition would occur east of Cherry Avenue. The proposed right-of-way acquisition would occur along the south edge of the alignment in an area disturbed by and developed with railroad improvements. Improvements to the channel would not disrupt or divide the established community that exists in the surrounding area.

b) **Less than significant impact.** The Proposed Project would not conflict with any applicable land use plans or policies that exist in the area. The channel is located within a flood control right-of-way and is developed accordingly. The Proposed Project includes improvements to the existing flood control channel to alleviate existing flooding resulting from the channel's current size that is under capacity Implementation of the Proposed Project is consistent with the existing land use. The Proposed Project would not conflict with applicable land use plans.

The West Fontana Channel is a jurisdictional feature subject to the Clean Water Act and the Fish and Game Code under the jurisdictions of the USACE, RWQCB, and CDFW respectively. The resulting permanent impacts to the channel would require a Streambed Alteration Agreement with the CDFW, and CWA Sections 401/404 permits from the RWQCB and USACE respectively. Subject to regulatory permit acquisition, the project would not conflict with regulation of an agency with jurisdiction.

c) **No impact.** The West Fontana Channel is not within an area designated as open space or habitat conservation by the County of San Bernardino or the City of Fontana. The areas immediately surrounding the channel are zoned for industrial and commercial land uses; limited residential development occurs along the subject portion of the alignment. Channel improvements would not conflict with any habitat or community conservation plans.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XIII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SUBSTANTIATION:

a) The Project Site is located in an area classified as a Mineral Resource Zone (MRZ-2). A MRZ-2 zone contains deposits of known value and marketability. However, the State Geologist has determined that the area is not a designated area of available resources due to urbanization. No impacts would result and no mitigation measures are necessary.

b) The project area consist of a flood control right-of-way developed accordingly. Construction of flood control improvements would not result in the loss of availability of locally important mineral resources delineated on a local general plan, specific plan, or other land use plan. No impacts would result and no mitigation measures are necessary.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XIV. NOISE

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Less than significant impact.** Ambient noise in the project area is generated by vehicular traffic and by the BNSF railroad operations. Operation of the Proposed Project would not generate any noise that would impact nearby sensitive receptors. However temporary noise generated during the construction phase may exceed the acceptable ambient noise levels as established in the County of San Bernardino General Plan and noise ordinance. As defined in the in the San Bernardino County Development Code (SBCDC) the following noise thresholds are enforced for noise sources as they affect adjacent properties:

SBCDC Table 83-2 Noise Standards for Stationary Noise Sources		
Affected Land Uses (Receiving Noise)	7 am – 10 pm (Leq)	10 pm – 7 am (Leq)
Residential	**55 dB(A)**	**45 dB(A)**
Professional Services	**55 dB(A)**	**55 dB(A)**
Other Commercial	**60 dB(A)**	**60 dB(A)**
Industrial	**70 dB(A)**	**70 dB(A)**

Leq = (Equivalent Energy Level). The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period, typically 1, 8, or 24 hours.
dB(A) – (A-weighted Sound Pressure Level). The sound pressure level, in decibels, as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, placing greater emphasis on those frequencies within the sensitivity range of the human ear.
Ldn – (Day-Night Noise Level). The average equivalent A-weighted sound level during a 24-hour day obtained by adding 10 decibels to the hourly noise levels measured during the night (from 10 pm to 7 am). In this way Ldn takes into account the lower tolerance of people for noise during nighttime periods.

Per San Bernardino County Development Code Section 83.01.080(g)(3) noise exceeding the above listed thresholds shall be exempt from the Ordinance if it is a result of temporary construction, maintenance, repair, or demolition activities conducted between 7:00 a.m. and 7:00 p.m., except on Sundays and Federal holidays. Construction activities within street right-of-ways adjacent to residential and commercial uses may exceed the above identified thresholds. However, the noise would be temporary during construction and exempt from threshold limits; no ambient noise increase would occur from operation and maintenance of the flood control facility following construction. A less than significant impact is identified and no mitigation measures are recommended.

b) **Less than significant impact.** Is anticipated that construction of the Proposed Project would not involve pile-driving activities typically associated with ground-borne vibration. Use of jackhammers and/or pavement breakers associated with construction would be of limited duration and not expected to affect a given location along the channel alignment for more than a few days. Although construction would include use of heavy equipment, it is unlikely that construction would result in significantly perceptible ground-borne vibration or ground-borne noise levels. While not anticipated to occur, vibration associated with temporary construction, maintenance, repair or demolition activities between 7:00 a.m. and 7:00 p.m., except on Sundays and Federal holidays, is exempt from the provision of the San Bernardino County Development Code vibration standards (SBCDC 83.01.090(c)(3)). A less than significant impact is anticipated and no mitigation measures are recommended.

c) **No impact.** Operation of the flood control channel will not generate noise and will not result in a permanent increase in ambient noise levels. No long term or permanent noise increases are identified and no mitigation measures are recommended.

d) **Less than significant impact.** A temporary increase in ambient noise would occur during construction. Construction noise is exempted per SBCDC 83.01.080(g)(3) as discussed in Section XIV(a) above. A less than significant impact is identified and no mitigation measures are recommended.

e-f) **No impact.** The project site is not located within the vicinity of an airport and therefore would not expose people working along the alignment to increased noise levels related to airport land uses. No impact related to airport noise is anticipated and no mitigation measures are recommended.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XV. POPULATION AND HOUSING

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SUBSTANTIATION:

a) **No impact.** The Proposed Project is improvements to the existing West Fontana Channel. The Proposed Project would not change existing land uses or include any uses related to population growth. Implementation of the Proposed Project would not induce substantial population growth in the area; employees during construction are anticipated to come from the local labor pool. No impact is identified and no mitigation measures are required.

b) **No impact.** Implementation of the Proposed Project would not reduce the number of existing housing units or necessitate the construction of replacement housing elsewhere. No impact is identified and no mitigation measures are required.

c) **No impact.** The Project Site is developed with existing flood control improvements. Implementation of the Proposed Project would not displace substantial numbers of people or necessitate the construction of replacement housing elsewhere. No impact is identified and no mitigation measures are required.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XVI. PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

SUBSTANTIATION:

a) **No impact.** The Proposed Project consists of improvements to an existing channel to reduce flooding hazards to the surrounding area. The Proposed Project will improve the existing earthen channel to construct a concrete-lined trapezoid/rectangular channel consistent with the City of Fontana Master Plan of Drainage that minimizes risk of flood damage to nearby properties due to erosion, overtopping, and debris deposition. Construction of the proposed improvements will not change the existing function of the channel. Implementation of the Proposed Project would not result in substantial adverse physical impacts to public services. The Proposed Project would not impact existing fire and police service ratios or response times and would not generate demand that would impact the existing service ratios or schools or parks. No impact is identified and no mitigation measures are recommended.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XVII. RECREATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SUBSTANTIATION:

a) **No impact.** Implementation of the Proposed Project does not include the development of residential or other land uses that would cause a substantial increase in the use of existing neighborhood and regional parks or other recreational facilities. Substantial physical deterioration of local recreational facilities is not anticipated as a result of the Proposed Project. No impact is identified, and no mitigation measures are recommended.

b) **No impact.** The Proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impact is identified, and no mitigation measures are recommended.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XVIII. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Less than significant.** Under existing conditions the West Fontana Channel is accessible via adjacent access roads where sufficient right-of-way exists. The access roads are gated at each intersection with public streets; public access is restricted. The Proposed Project would develop 15- to 20-foot wide access roads on the north and/or south side of the channel as allowed by right-of-way width. The access roads will include down ramps into the channel for maintenance access. The access roads would be gated and would not be open for general public use. During construction there would be a temporary increase of traffic consisting of trucks and equipment. Temporary impacts during construction are not anticipated to result in a significant traffic load or congestion. Operation of the flood control channel is considered a passive activity and would not generate new traffic. Less than significant impacts are anticipated during construction and no mitigation measures are proposed.

b) **Less than significant.** Construction of the proposed flood control improvements would result in localized short-term impacts to local circulation within the project area. Operation and maintenance of the flood control channel would not impact local traffic because the channel is located within a flood control right-of-way with no public access. No conflicts with the County Congestion Management Plan are anticipated. No impact is identified, and no mitigation measures are proposed.

c) **No impact.** The proposed flood control improvement project would realign an existing flood control channel and its access/maintenance roads. The project site is not located within an airport safety review area as identified in Map FH29B of the County of San Bernardino General Plan. Implementation of the project would not conflict with an airport land use plan and would not cause a change in air traffic patterns. No impact is identified, and no mitigation measures are proposed.

d) **Less than significant impact.** Temporary changes to traffic patterns and levels of service may occur during the construction phase at public road intersections where access to the flood control channel right-of-way is available. The project does not propose design features (e.g. sharp curves or dangerous intersections). The Proposed Project is the re-configuration of an existing flood control channel and access roads within the existing District right-of-way. No changes to the land use are proposed; therefore, no incompatible land uses would result. A less than significant impact is anticipated during construction and no mitigation measures are required.

e) **No impact.** The Proposed Project would not hinder emergency access to the area. All construction staging would occur within the limits of the District's flood control right-of-way outside of the public right-of-way. Operation and maintenance of the flood control channel would not impede emergency access. No impact is identified, and no mitigation measures are recommended.

f) **No impact.** The West Fontana Channel is located in a flood control right-of-way with no public access. Implementation of the Proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities because these facilities do not occur in the project area. No impact is identified and no mitigation measures are recommended.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

SUBSTANTIATION:

a) **No impact.** The Proposed Project is improvement to an existing flood control channel within San Bernardino County Flood Control District right-of-way. The Proposed Project is part of the City of Fontana Master Plan of Drainage. Urban storm water runoff in the subject region of the County and City of Fontana is regulated under Order No. R8-2010-0036 issued on February 3, 2010 by the Regional Water Quality Control Board, Santa Ana Region. The Proposed Project is designed to comply with the waste discharge requirements of Order No. R8-2010-0036. Additionally, design features such as bio-swales have been incorporated into the design to provide water quality treatment prior to storm flows discharging water into the flood control channel. No impact is identified and no mitigation measures are recommended.

b) **No impact.** No structures requiring wastewater collection or treatment services would be developed as part of the Proposed Project. The Proposed Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. No impact is identified and no mitigation measures are recommended.

c) **Less than significant with mitigation incorporated.** The Proposed Project is the construction of flood control channel improvements on an approximately 3-mile segment of the existing West Fontana Channel. The project would increase channel capacity and reduce flooding hazards. With mitigation measures as identified in this Subsequent Initial Study, less than significant impacts are anticipated.

d) **No impact.** The Proposed Project would generate temporary and minimal water demand during construction. Operation and maintenance of the flood control facility would not generate a water demand. No impact is identified and no mitigation measures are recommended.

e) **No impact.** The Proposed Project would not generate wastewater or require wastewater treatment. No impact is identified and no mitigation measures are recommended.

f) **Less than significant impact.** The contractor would be required to manifest and remove construction debris. Necessary arrangements for disposal at an approved site would be arranged by the contractor. Solid waste would only be generated during construction activities (e.g. channel clean up and existing culvert recycling). The project is not anticipated to generate a significant volume of solid waste and would not significantly impact capacity at the local landfill. Less than significant impacts are identified, and no mitigation measures are required.

g) **No impact.** All solid waste would be disposed of by the contractor at an approved site. The County of San Bernardino requires construction projects that will generate waste or unused materials to submit a Construction Waste Management Plan to the County of San Bernardino Solid Waste Management Division. The intent of the Construction Waste Management Plan is to comply with State Law by diverting a minimum of 50% of non-hazardous debris from landfills. The contractor is required to comply with federal, State, and local statues and regulations regarding solid waste; no impact is identified and no mitigation measures are required.

XX. MANDATORY FINDINGS OF SIGNIFICANCE:

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	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?	☐	☐	☒	☐
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)?	☐	☐	☐	☒
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly Or indirectly?	☐	☐	☒	☐

SUBSTANTIATION

XX a) The Proposed Project does not have the potential to significantly degrade the overall quality of the region's environment, or substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population or 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. There are no rare or endangered species or other species of plants or animals or habitat identified by the Biological Resources Assessment (Jericho 2016.) as being significantly and negatively impacted by this project. There are no significant identified historic or prehistoric resources identified on this site. If any archaeological or paleontological resources are identified during construction, the contractor will halt construction activities in the area and identify appropriate authorities, who properly record and/or remove for classification any such finds.

XX b) The Proposed Project does not have impacts that are individually limited, but cumulatively considerable.

XX c) The Proposed Project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly, as there are no such impacts identified by the studies conducted for this project or identified by review of other sources or by other agencies.

Only minor temporary increases in emissions and noise will be created by implementation of the Proposed Project. These potential impacts have been thoroughly evaluated and have been deemed to be neither individually significant nor cumulatively considerable in terms of any adverse effects upon the region, the local community or its inhabitants.

No significant adverse effects have been identified and all necessary mitigation measures have been identified in the preceding sections and are summarized in the following section.

XXI. MITIGATION MEASURES

BIO 1: **If construction activities are scheduled to occur during the avian nesting season, a pre-construction nesting bird clearance survey for nesting birds, including BUOW, should be conducted in accordance with accepted protocols. The biologist conducting the clearance survey should document the survey's findings with a report indicating whether impacts to active nests or BUOW will occur. If impacts are identified, avoidance measures, as recommended by the biologist, shall be implemented.**

BIO 2: **The District shall submit findings of the Biological Resources Assessment and the Jurisdictional Delineation to the USACOE for informal consultation. Direction per the determination of the Army Corps of Engineers shall be followed. Implementation of the Proposed Project would also result in impacts subject to the jurisdiction of the CDFW and the Regional Water Quality Control Board. The District shall submit findings of the BRA and JD to the CDFW along with a 1602 Notification of Streambed Alteration and to the Regional Water Quality Control Board, Santa Ana Region to obtain permits and certifications as necessary.**

CUL 1: **In the event that evidence of historic activities is unearthed during construction activities, work in the immediate vicinity of the find will be stopped and a qualified archaeologist will be contacted to assess the find and recommend appropriate mitigation. No disturbance shall occur in the vicinity of the find until the site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist. The project site is located within the San Manuel Band of Mission Indians ancestral territory; if the find is determined to be tribal in origin, the archaeologist will initiate consultation with the Tribe.**

GENERAL REFERENCES (List author or agency, date, title)

California Department of Conservation. California Important Farmland Finder. Accessed April 25, 2016.

California Department of Toxic Substances Control. Envirostor. Accessed April 25, 2016.

California Regional Water Quality Control Board – Santa Ana Region. February 3, 2010. *Waste Discharge Requirements for the County of San Bernardino and the Incorporated Cities of San Bernardino County, Order No. R8-2010-0036, NPDES No. CAS618036, Areawide Urban Storm Water Runoff.*

CEQA Guidelines, Appendix G.

City of Fontana General Plan, Adopted October 21, 2003.

County of San Bernardino Development Code, 2007 and Revised 2014.

County of San Bernardino General Plan, Adopted 2007.

County of San Bernardino Areawide Stormwater Program, Watershed Action Plan. November 5, 2014.

Water Quality Control Plan for the Santa Ana River Bain (Basin Plan). Accessed online from http://www.swrcb.ca.gov/santaana/water_issues/programs/basin_plan/index.shtml. April 25, 2016.

Federal Emergency Management Agency Flood Insurance Rate Map and Flood Boundary Maps – 06071C8651H and 06071C8652H.

PROJECT SPECIFIC REFERENCES

Jericho Systems Incorporated. March 28, 2016. Biological Resources Assessment County of San Bernardino Department of Public Works West Fontana Channel Phase III. Prepared for Lilburn Corporation.

Jericho Systems Incorporated. May 6, 2016. Jurisdictional Delineation Report County of San Bernardino Department of Public Works West Fontana Channel Phase III. Prepared for Lilburn Corporation.

McKenna et al. May 9, 2016. A Phase I Cultural Resources Investigation of the Proposed West Fontana Flood Control Channel, Fontana, San Bernardino Co., California. Prepared for Lilburn Corporation.

APPENDIX A

June 28, 2016

Lilburn Corporation
Attn: Cheryl Tubbs
1905 Business Center Drive
San Bernardino, CA 92408

RE: Jurisdictional Delineation Report
County of San Bernardino Department of Public Works
West Fontana Channel Phase III

Dear Ms. Tubbs:

Jericho Systems Inc. is pleased to present this letter report of findings for the routine jurisdictional delineation (JD) conducted for the County of San Bernardino Department of Public Works Flood Control District's (District's) proposed West Fontana Channel Improvement Project (Project). This letter report presents regulatory framework, methods, and results of our JD of jurisdictional waters found in the Project construction envelope. The purpose of the JD is to determine the extent of state and federal jurisdictional waters within the project area potentially subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and California Department of Fish and Wildlife (CDFW) under Section 1602 of the California Fish and Game Code.

Location

The survey area encompassed approximately three miles of the existing West Fontana flood control channel, located in the City of Fontana, east of the City of Rancho Cucamonga and west of the City of Rialto, in the County of San Bernardino, California. The project site is depicted on the *Fontana* United States Geological Survey's (USGS) 7.5-minute topographic map series, and is located in or adjacent to sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16 of Township 1 south, Range 6 west; Sections 5, 6, 7, 8, 17, 18 of Township 1 south, Range 5 west.

Specifically, the project site begins at the intersection of Banana Ave and Whittram Ave, in the City of Fontana, County of San Bernardino, California. The project site is located 0.3 miles south of Arrow Blvd and 1.9 miles north of Interstate 10 freeway. The project site terminates 640 feet west of the intersection of Orange Way and Juniper Ave. The project site is located immediately north of the Burlington Northern Santa Fe (BNSF) railway and runs parallel to the railroad tracks for the entire 3 mile run of the project. Various commercial properties boarder the project site to the north

Site Setting

The local area is subject to both seasonal and annual variations in temperature and precipitation. Average annual maximum temperatures typically peak at 95 degrees Fahrenheit (°F) in August, and fall to an annual minimum temperature of 44°F in December. Average annual temperature is 65°F with a range of 25-114°F. Average annual precipitation is greatest from December through March and reaches a peak in February (3.5 inches). Precipitation is lowest in the month of July (0.00 inches). Annual precipitation averages 11.7 inches.

The immediate vicinity is composed of a mixture of rural residential developments, commercial properties, and vacant parcels. The rural residential and commercial properties are found to the north, east, south and west of the project site. The project site is an existing flood control channel with an average width of 15 feet, average height of 4.5 feet and an overall length of 3 miles. The channel slopes from east to west and terminates in the Banana Basin.

Hydrologically, the Fontana area is located within the Middle Santa Ana River Sub-unit (HUC 1807020308) which comprises a 292.4 square mile drainage area within the larger Santa Ana River Watershed (HUC 18070203). The Santa Ana River watershed is located in southern California, south and east of the city of Los Angeles. The watershed includes much of Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. The watershed is bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea and Southern Mojave watersheds, and on the north/west by the Mojave and San Gabriel watersheds. The watershed is approximately 2,800 square miles in area.

Methods

Prior to the field visit, available databases and documentation relevant to the project site were reviewed. Historical aerial photographs were also examined to gain an understanding of the impact of land use on natural drainage patterns in the area. The U.S. Fish and Wildlife Service National Wetland Inventory and the Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) soil maps for San Bernardino County were used to identify the soil series in the area and to check these soils to determine whether they are regionally identified as hydric soils. A complete list of references is provided as part of report.

On March 9, 2016, Regulatory Specialists Shay Lawrey and Field Biologists Eugene Jennings and Shannon Dye evaluated the Project site and adjacent property for the presence of biological resources, riverine-riparian habitat and jurisdictional waters (i.e., waters of the U.S. as regulated by the USACE and RWQCB, and/or jurisdictional streambed and associated riparian habitat as regulated by the CDFW). Ms. Lawrey is an experienced and qualified Regulatory Specialist who led the JD. The JD was conducted on the ground and all areas identified as supporting jurisdictional waters were measured to the nearest foot. Suspected jurisdictional areas were checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. The JD was conducted in accordance with regulations set forth in 33CFR part 328 and the USACE guidance documents referenced below:

- *USACE Wetlands Research Program Technical Report Y-87-1 (on-line edition), Wetlands Delineation Manual, Environmental Laboratory, 1987 (Wetland Delineation Manual).*
- *USACE Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest, 2001 (Arid Southwest Guidelines).*
- *USACE Minimum Standards for Acceptance of Preliminary Wetlands Delineations, November 30, 2001 (Minimum Standards).*
- *USACE Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, December 2006 (Arid West Supplement).*
- *USACE Jurisdictional Determination Form Instructional Guidebook, May 30, 2007 (JD Form Guidebook).*
- *USACE A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, August 2008 (Delineation Manual).*
- *USACE Updated Datasheet for the Identification of the OHWM in the Arid West Region of the Western United States, July 2010*

Ms. Lawrey, Mr. Jennings and Ms. Dye assessed the channel for indicators of active surface flow. All apparent flow regimes and corresponding hydrogeomorphic features were subsequently identified. The lateral extent of USACE jurisdiction was measured at the Active Flood Plain as directed in the 2010 Guidance document for determination of the Ordinary High Watermark (OHWM), which is indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and the presence of litter and debris. In this case, the OHWM is the channel bottom, toe-to-toe width.

Evaluation of CDFW jurisdiction followed guidance in the Fish and Game Code and A Review of Stream Processes and Forms in Dryland Watersheds (CDFW, 2010). Specifically, CDFW jurisdiction was delineated by measuring the elevations of land that confine a stream to a definite course when its waters rise to their highest level and to the extent of associated riparian vegetation. In the absence of riparian vegetation outside top of bank, as is in this case, the lateral extent of the CDFW jurisdiction encompasses the bank-full width which is measured from the top-to-top of each bank slope.

Other channel aspects assessed included bank height and morphology, substrate type, and vegetation within the streambed and adjacent to the streambed. Upstream and downstream connectivity of waterways was reviewed in the field and on aerial photographs and topographic maps to determine jurisdictional status according to the CWA. Ephemeral washes with a physical connection to the Pacific Ocean were determined to be potential WUS as well as CDFW streambeds.

The site was also assessed for indicators wetlands (presence of hydrophytic vegetation, staining, cracked soil, ponding, etc). Depressions/ponded areas where water appears likely to collect were also evaluated. Features indicated on aerial photographs (dark/saturated areas, etc.) were field verified during the site visit. Plant species were identified and given an indicator status as prescribed in the 2013 National Wetland Plant List (Arid West Region) (Lichvar, 2013). Vegetation nomenclature follows The Jepson Manual, Vascular Plants of California, 2nd Edition (Baldwin, 2012). When The Jepson Manual does not list a common name, common name nomenclature follows the United States Department of Agriculture, Natural Resources Conservation Service (USDA) Plants Database (USDA, 2014a). In order to be considered a *jurisdictional wetland* under Section 404, an area must possess three wetland characteristics: hydrophytic *vegetation*, hydric *soils*, and wetland *hydrology*.

Hydrophytic vegetation. Hydrophytic vegetation is plant life that grows, and is typically adapted for life, in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, and herb layers) is considered hydrophytic. Hydrophytic species are those included on the 2013 National Wetland Plant List (Arid West Region) (Lichvar, 2013). Each species on the list is rated according to a wetland indicator category, as shown in Table 1. To be considered hydrophytic, the species must have *wetland indicator status*, i.e., be rated as OBL, FACW or FAC.

Table 1: Wetland Indicator Vegetation Categories

Category	Probability
Obligate Wetland (OBL)	Almost always occur in wetlands (estimated probability >99%)
Facultative Wetland (FACW)	Usually occur in wetlands (estimated probability 67 to 99%)
Facultative (FAC)	Equally likely to occur in wetlands and non-wetlands (estimated probability 34 to 66%)
Facultative Upland (FACU)	Usually occur in non-wetlands (estimated probability 67 to 99%)
Obligate Upland (UPL)	Almost always occur in non-wetlands (estimated probability >99%)

Hydric Soil . Soil maps from the USDA-NRCS Web Soil Survey (USDA 2015) were reviewed for soil types found within the subject property. Hydric soils are saturated or inundated long enough during the

growing season to develop anaerobic conditions that favor growth and regeneration of hydrophytic vegetation. There are a number of indirect indicators that may signify the presence of hydric soils including hydrogen sulfide generation, the presence of iron and manganese concretions, certain soil colors, gleying, and the presence of mottling. Generally, hydric soils are dark in color or may be gleyed (bluish, greenish, or grayish), resulting from soil development under anoxic (without oxygen) conditions. Bright mottles within an otherwise dark soil matrix indicate periodic saturation with intervening periods of soil aeration. The hydric soil criterion is satisfied at a location if soils in the area can be inferred or observed to have a high groundwater table, if there is evidence of prolonged soil saturation, or if there are any indicators suggesting a long-term reducing environment in the upper part of the soil profile. Reducing conditions are most easily assessed using soil color. Soil colors were evaluated using the Munsell Soil Color Charts (Gretag/Macbeth, 2000).

Wetland Hydrology. The wetland hydrology criterion is satisfied at a location based upon conclusions inferred from field observations that indicate an area has a high probability of being inundated or saturated (flooded, ponded, or tidally influenced) long enough during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE, 1987 and 2008b).

Results

The site consists of an existing channel with an average toe to toe width of five (5) feet (OHWM USACOE jurisdiction) bank-full width of 15 feet (CDFW jurisdiction) and an average height of 4.5 feet. The channel slopes from east to west and terminates at the Banana Basin. Elevations within the proposed project area range from approximately 1,140 to 1,240 feet above mean sea level. The segments of West Fontana Channel under review consist of rocky slopes with gravel and silt bottoms. The project area is bordered by the BNSF railroad tracks on the south side and commercial buildings on the north. According to the NRCS soil survey, the Project site consists of soils characterized as Tujunga gravelly loamy sand (TvC), 0 to 9 percent slopes. TvC is an alluvium derived from granite and is somewhat excessively drained, gravelly sandy loam. This soil type is not considered prime farmland. Soils in this group have low runoff potential when thoroughly wet and water is transmitted freely through the soil. West Fontana Channel trends to the west and is tributary to the East Etiwanda Creek (confluence is 1.2 miles away), which is a tributary to the Santa Ana River (confluence is 10.13 miles away). The channel bottom has a gradual slope to the west and contains gravel, sand and fine silts. The average bank-to-bank full width is 15 feet, with in-stream channel width at toe of slope averaging 5 feet.

Jurisdictional Determination

Non-wetland waters of the U.S.

Waters of the U.S. (WUS) are defined as: "All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters". CWA jurisdiction exists over the following:

1. all traditional navigable waters (TNWs);
2. all wetlands adjacent to TNWs;
3. non-navigable tributaries of TNWs that are relatively permanent (RPW) (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally); and
4. every water body determined to have a significant nexus with TNWs.

West Fontana Channel is an ephemeral stream that likely flows for less than 3 months per year, and would therefore be classified as a non-relatively permanent water (RPW) by the USACE. This channel feature flows into a RPW, the Santa Ana River, 11.33 miles downstream of the property; and a Traditionally Navigable Water (TNW), the Pacific Ocean, approximately 50 river miles downstream of the property. West Fontana Channel has a surface water connection to a TNW, and therefore would be considered a jurisdictional WUS. Due to the proximity of West Fontana Channel to the Santa Ana River, it is likely that the USACE would consider it to have a "significant nexus" with a TNW, and be considered a jurisdictional WUS.

Wetlands

Areas meeting all three parameters would be designated as USACE wetlands. None of the three required parameters, hydrophitic vegetation, hydric soils and/or wetland hydrology, are present. Therefore, no wetlands were identified in the study area during this investigation based of the absence of hydrophitic vegetation, hydric soil indicators and/or wetland hydrology.

California Streambed

West Fontana Channel meets the criteria of streambed subject to CDFW jurisdiction because defined channel bed and banks are present.

The Jurisdictional Delineation Maps (Figure 1, 1A-1B) identify all on-site jurisdictional areas. Table 2 includes a list of jurisdictional areas identified on the property including average OHWM, top-of-bank to top-of-bank width, total channel length and maximum channel depth.

Table 2: Summary of Acreages of Jurisdictional Waters on site

Feature	OHWM (feet)	Bank –full width (feet)	Length (feet)	Max Channel Depth (feet)	WUS Corps jurisdiction (acres)	FGC 1600 CDFW jurisdiction Areas (acres)
W. Fontana Channel	5	15	16,015	4.5	1.83	5.82

<u>Conclusions</u>

A top priority for any project that has jurisdictional waters on site is to avoid any and all impacts to those areas. However, impacts cannot be avoided in this case because the project is improvements to a flood control channel for public safety purposes. This project proposes to improve the channel's flood control function by way of concrete lining. Therefore, all project-related impacts to jurisdictional waters are considered permanent. Authorizations from the USACE, RWQCB, and CDFW are required for permanent impacts to jurisdictional areas (see Attachment A - regulatory frame work). The County intends to off-set impacts with the addition of bio-swales. The creation of jurisdictional waters as an offset to impacts will be discussed with the USACE, RWQCB and the CDFW during their review of permit applications. Subject to regulatory approvals from USACE, RWQCB, and CDFW, and compliance with applicable conditions of approval, less than significant impacts are anticipated.

Streambed Alteration Agreement

A 1602 Streambed Alteration Agreement is required for all activities that alter streams and lakes and their associated riparian habitat. In addition to the formal application materials and fee (based on cost of the project), a copy of the appropriate CEQA documentation must be included with the application.

401 certification

The project area is within the jurisdiction of the Santa Ana RWQCB. Under Section 401 of the CWA, the RWQCB must certify that the discharge of dredged or fill material into WUS does not violate state water quality standards. The RWQCB also regulates impacts to WSC under the Porter Cologne Water Quality Control Act through issuance of a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending upon the level of impact and the waterway. In addition to the formal application materials and fee (based on area of impact), a copy of the appropriate California Environmental Quality Act (CEQA) documentation must be included with the application.

404 permit

The two most common types of permits issued by USACE under Section 404 of the CWA to authorize the discharge of dredged or fill material into WUS are: a nation-wide permit (NWP) or an individual permit (IP). NWPs are general permits for specific categories of activities that result in minimal impacts to aquatic resources. The discharge must not cause the loss of greater than ½ acre to WUS, including the loss of no more than 300 linear feet of streambed.

For project impacts that do not meet the provisions of an existing NWP, the USACE would require an IP. An IP requires detailed analysis and compliance with the USACE formal review process. This process includes preparation of an alternatives analysis as required by EPA Section 404(b)(1) Guidelines and the National Environmental Policy Act (NEPA), and requires compliance with NEPA's environmental review process. This process provides opportunities for public notice and comment. The USACE must comply with the federal Endangered Species Act and Section 106 of the National Historic Preservation Act when issuing a NWP or IP.

Please do not hesitate to contact me at 909-915-5900 should you have any questions or require further information.

Sincerely,

Shay Lawrey, President
Ecologist/Regulatory Specialist

Attachments:

Attachment A - Regulatory Framework and Relative Regulatory Agencies
Attachment B - Site Photos
Figures JD Overview and 1A-1C

Regulatory Framework and Relevant Regulatory Agencies

Clean Water Act (CWA)

The CWA is the principal federal law that governs pollution in the nation's lakes, rivers, and coastal waters. Originally enacted in 1972 as a series of amendments to the Federal Water Pollution Control Act of 1948 the Act was last amended in 1987. The overriding purpose of the CWA is to "restore and maintain the chemical, physical and biological integrity of the nation's waters." The statute employs a variety of regulatory and non-regulatory tools to eliminate the discharge of pollutants into the nation's waters and achieve water quality that is both "swimmable and fishable". Section 303 of CWA requires that states establish ambient water quality standards for water bodies, consisting of the beneficial use or uses of a water body (e.g. recreation, public water supply, etc.), and the water quality criteria necessary to protect the use or uses. Section 303(d) requires states to identify waters that are impaired by pollution, even after application of pollution controls.

Discharges of dredged or fill material in waters of the United States (WUS) are regulated pursuant to Section 404 of the CWA. WUS are defined as follows:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
- All impoundments of waters otherwise defined as WUS under the definition;
- Tributaries of WUS;
- The territorial seas;
- Wetlands adjacent to WUS (other than waters that are themselves wetlands).

In the Arid West Region non-wetland waters are identified by the ordinary high water mark (OHWM) in ephemeral and intermittent channels (USACE, 2008a). The OHWM is as: "…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." Identification of OHWM involves assessments of stream geomorphology and vegetation response to the dominant stream discharge. Determining whether any non-wetland water is a jurisdictional WUS involves further assessment in accordance with the regulations, case law, and clarifying guidance as discussed below. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Sections 404 and 401 of the Federal CWA are founded on a connection, or nexus, between the water body in question and traditionally navigable waters, such as the Pacific Ocean or interstate commerce.

California Fish and Game Code

Sections 1600 to 1616 of the California Fish and Game Code require any person, state, or local government agency or public utility to notify the California Department of Fish and Game (CDFG) before beginning any activity that will substantially modify a river, stream, or lake. Drainages A and B contain habitat that meet the definition of streambed in Section 1600 of the FGC and any impacts to either Drainage A or B would require Lake and Streambed Alteration Agreement.

U.S. Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. Waters of the United States include wetlands and non-wetland bodies of water that meet specific criteria. The Corps' regulatory jurisdiction pursuant to Sections 404 and 401 of the Federal CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations. One of the mechanisms adopted by Congress to achieve restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters is a prohibition on the discharge of any pollutants, including dredged or fill material, into "navigable waters" except in compliance with other specified sections of the Act.

Regional Water Quality Control Board

The RWQCB's regulatory jurisdiction is pursuant to Section 401 of the Federal CWA. The RWQCB typically regulates discharges of dredged or fill material into Waters of the United States, however they also have regulatory authority over waste discharges into Waters of the State, which may be isolated, under the Porter-Cologne Water Quality Control Act issued by the State Water Resources Board. In the absence of a nexus with the Corps, the Regional Board requires the submittal of a Waste Discharge Requirement (WDR) application, which must include a copy of the project Stormwater Pollution Prevention Plan (SWPPP) and a copy of the project Water Quality Management Plan (WQMP), otherwise called a Standard Urban Stormwater Management Plan (SUSMP). The Regional Board's role is to ensure that disturbances in the stream channel do not cause water quality degradation.

California Department of Fish and Wildlife (formerly Fish and Game)

Unlike the Corps, CDFW regulates not only the discharge of dredged or fill material, but all activities that alter streams and lakes and their associated habitats. The CDFW, through provisions of the California Fish and Game Code (Sections 1601-1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. The CDFW typically extends the limits of their jurisdiction laterally beyond the channel banks for streams that support riparian vegetation. In these situations the outer edge of the riparian vegetation is generally used as the lateral extent of the stream and CDFW jurisdiction. CDFW regulates wetland areas only to the extent that those wetlands are a part of a river, stream, or lake as defined by CDFW.

	Photo 1 – Project start (West End)
	Photo 2 – Cherry Ave. bridge crossing

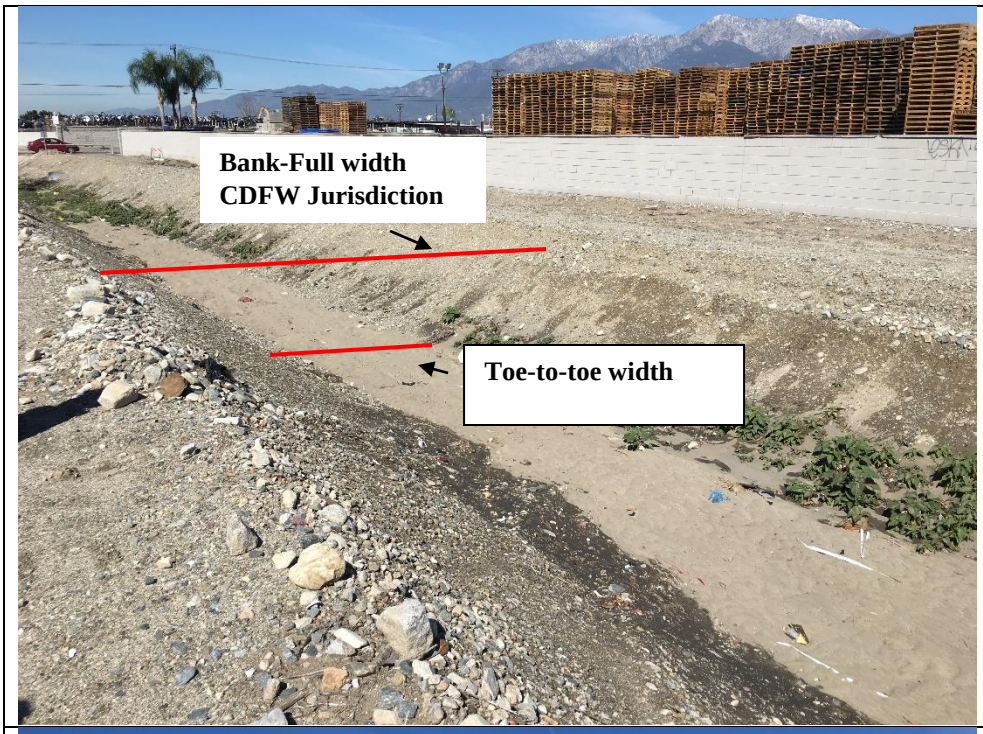
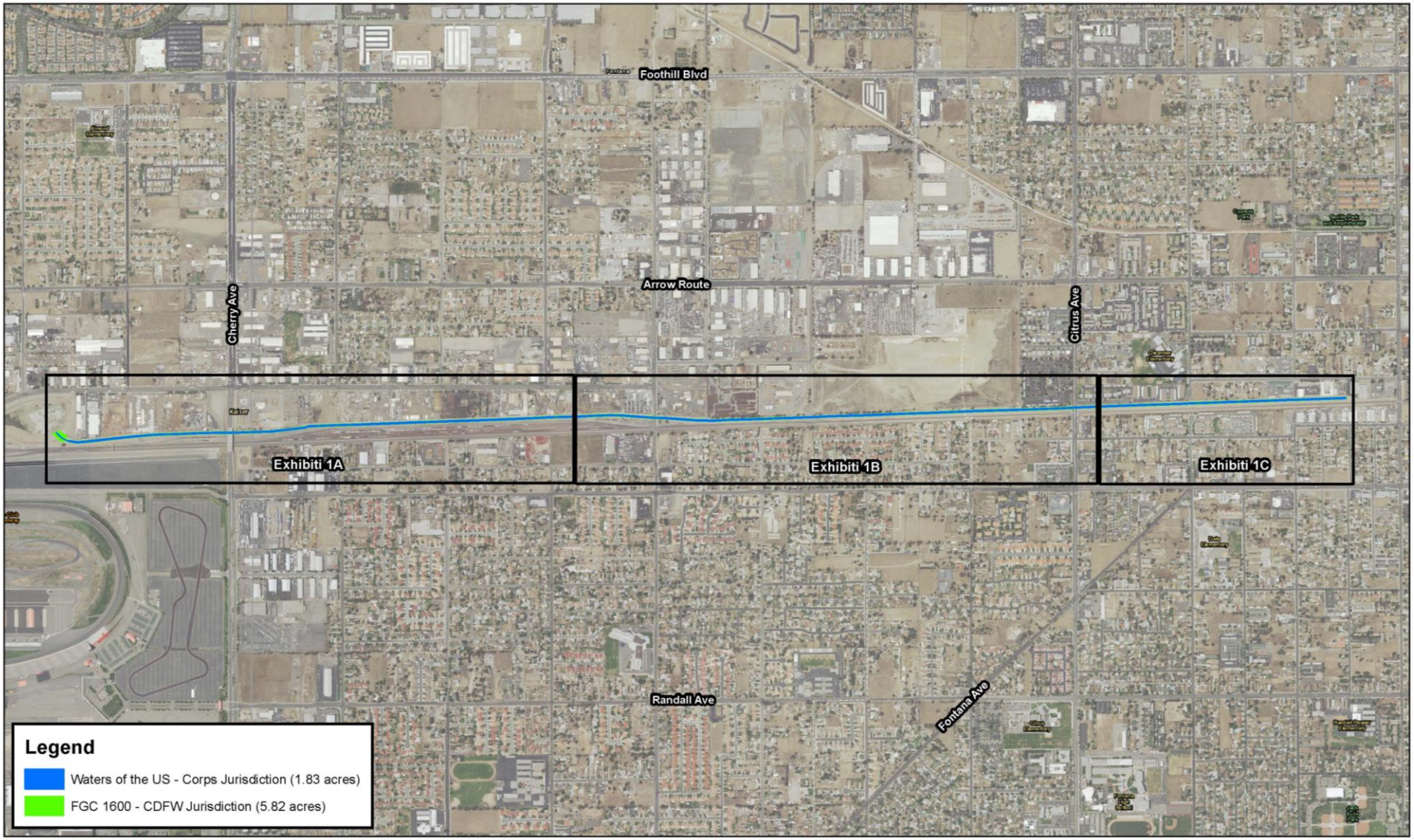
	Photo 3 – Middle of project site facing Beech Ave.
	Photo 4 – Channel at the termination of Lime Ave.

	Photo 5 – Citrus Ave. crossing
	Photo 6 - Project termination point (East End)



0 1,250 2,500 5,000 Feet

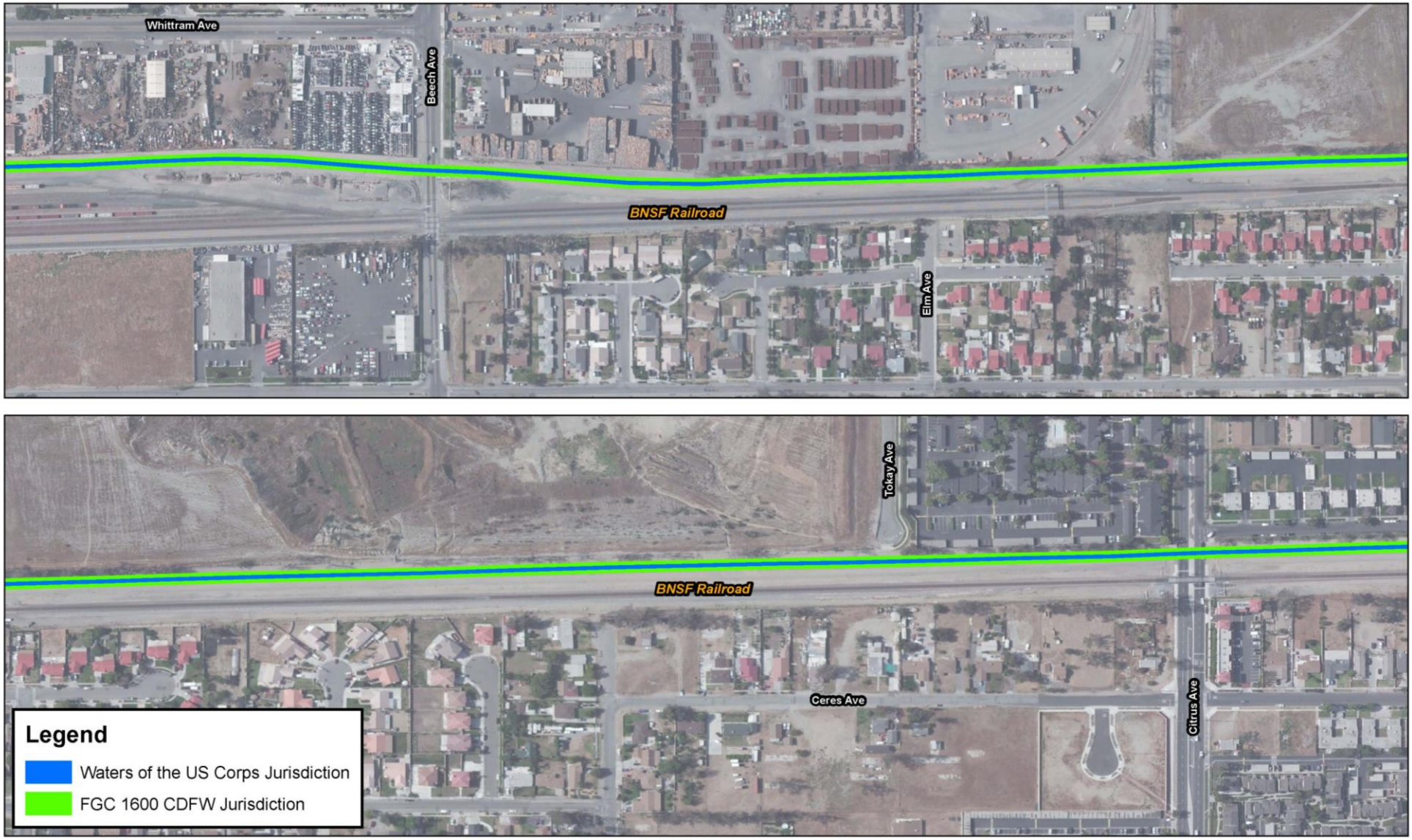
West Fontana Channel
Jurisdictional Map Overview

Figure 1

0 125 250 500 Feet

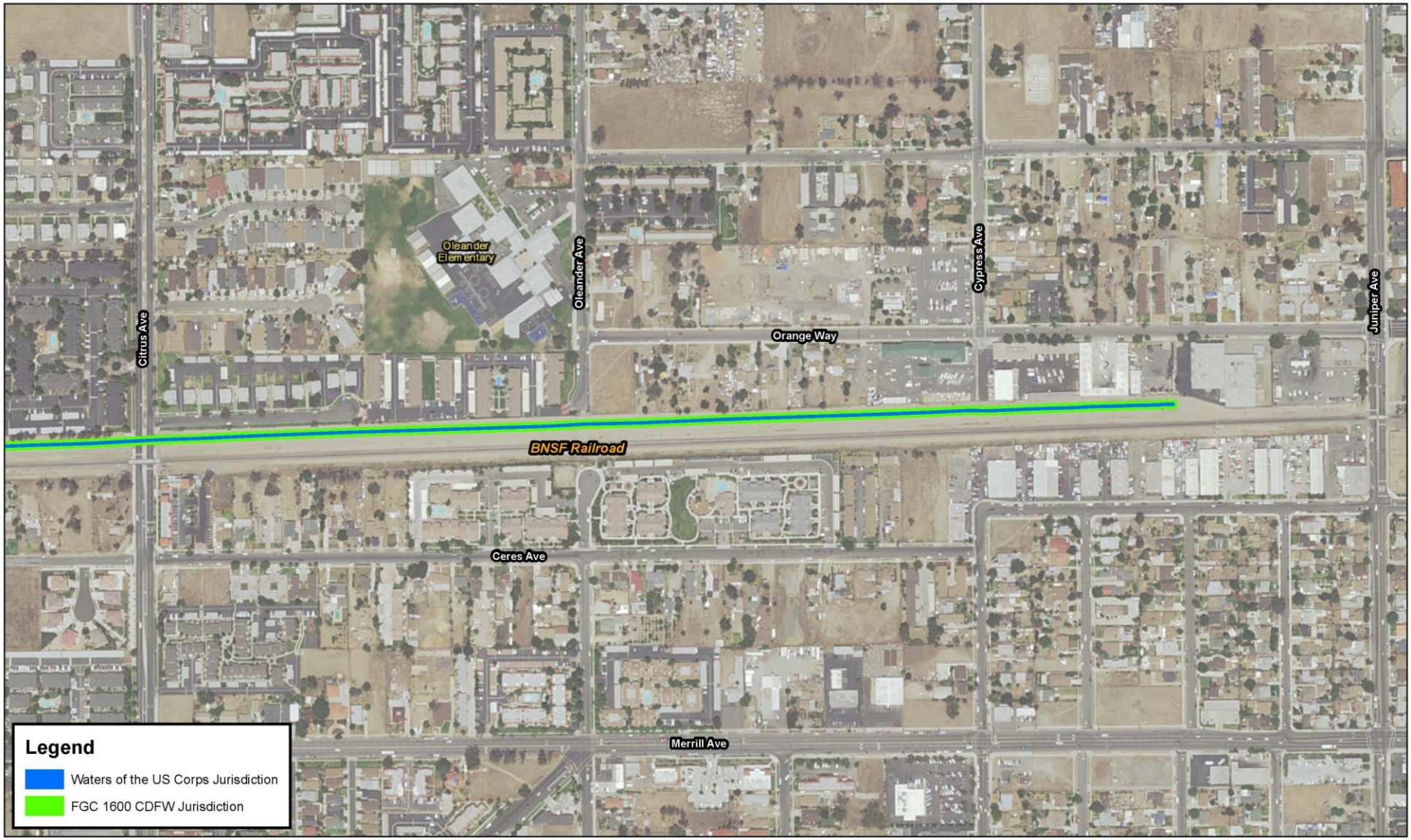
West Fontana Channel
Jurisdictional Map

Figure 1A



West Fontana Channel
Jurisdictional Map

Figure 1B



0 125 250 500 Feet

West Fontana Channel
Jurisdictional Map

Figure 1C

March 28, 2016

Lilburn Corporation
Attn: Cheryl Tubbs
1905 Business Center Drive
San Bernardino, CA 92408

RE: Biological Resources Assessment
County of San Bernardino Department of Public Works
West Fontana Channel Phase III

Dear Ms. Tubbs:

Jericho Systems Inc. is pleased to present this letter report of findings for the biological resources assessment (BRA) conducted for the County of San Bernardino Department of Public Works Flood Control District's (District's) proposed West Fontana Channel Improvement Project (Project). The purpose of the proposed Project is to improve a 3-mile segment of the West Fontana Channel. The existing channel is generally an earthen channel with average bank-full width of 15 feet and an average height of 4.5 feet.

This purpose of the BRA was to address potential effects of the proposed Project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW, formerly California Department and Fish and Game) and/or the California Native Plant Society (CNPS). We assessed the site for sensitive species known to occur locally, and focused our attention on those which have been documented in the immediate vicinity, namely, the burrowing owl (*Athene cunicularia*; BUOW) and Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*; DSF).

PROJECT LOCATION

The Project site is generally located within Township 1 south and Ranges 6 and 5 west in the *Fontana* United States Geological Survey's (USGS) 7.5-minute topographic map. The Project site is specifically located 0.3 miles south of Arrow Blvd and 1.9 miles north of Interstate 10 freeway, immediately north of and parallel to the Burlington Northern Santa Fe (BNSF) railway. The proposed channel improvements begin at the intersection of Banana Ave and Whittram Ave. and terminate 640 feet west of the intersection of Orange Way and Juniper Ave., in the City of Fontana, County of San Bernardino, California. Land use adjacent to the Project consists of a mixture of residential development, commercial/industrial, and vacant parcels.

STUDY METHODOLOGY

The primary focus of the BRA was to identify potential habitat for special status wildlife within the County's flood control channel and surrounding area. The suitability of habitat on-site was assessed for sensitive species known to occur locally, taking into consideration the different habitat requirements and any Primary Constituent Elements (PCEs) defined for these species.

Literature Review

Prior to the field visit, available databases and documentation relevant to the project site were reviewed. The U.S. Fish and Wildlife Service (USFWS) threatened and endangered species occurrence data overlay, as well as the most recent versions of the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory (CNPSEI) databases were searched for sensitive species data in the Fontana USGS 7.5-minute series quadrangle.

Field Investigation

Jericho Biologists Shay Lawrey, Eugene Jennings and Shannon Dye, conducted an initial field review on March 9, 2016, by driving and walking the project area. On March 15, 2016, S. Lawrey, Daniel Smith and Travis McGill conducted habitat suitability assessments for BUOW and DSF within and adjacent to the Project Site.

Burrowing Owl

The BUOW habitat suitability survey was conducted on March 15 at the beginning of the 2016 breeding season (February 1 to August 31) by biologist Shay Lawrey who is knowledgeable in the habitats and behavior of BUOWs.

Areas providing potential habitat for BUOW were surveyed for suitable burrows, consisting of natural and non-natural substrates in areas with low, open vegetation. All burrows encountered were examined for shape, scat, pellets, white-wash, feathers, tracks, and prey remains. The location of all suitable BUOW habitat, potential burrows, BUOW sign, and any owls observed were recorded and mapped, with a hand-held GPS unit. Methods to detect presence of BUOW included direct observation, aural detection, and signs of presence; including pellets, white wash, feathers, or prey remains. Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence.

Delhi Sands Flower-loving Fly

On-site and adjoining soils were researched prior to the field visit using the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey for San Bernardino County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes the project site has undergone. In particular, the USDA NRCS was reviewed to determine the location of mapped Delhi sand soils on or within the immediate vicinity of the project site.

Biologists Daniel Smith and Travis J. McGill surveyed the project site on March 15, 2016. The habitat suitability assessment consisted of a visual and tactile inspection of all areas on the project site that contain Delhi Sand soils. The Project site was evaluated for the quality or purity and for its potential to support DSF. Areas were assigned one or more ratings ranging between 1 and 5, with 5 being the best quality and most suitable habitat:

1. *Soils dominated by heavy deposits of alluvial material including coarse sands and gravels with little or no Delhi sands and evidence of soil compaction. Unsuitable Quality*
2. *Delhi Sand soils are present but the soil characteristics include a predominance of alluvial materials (Tujunga Soils and Hilmar loamy sand). Very Low Quality*
3. *Although not clean, sufficient Delhi Sand soils are present to prevent soil compaction. Some sandy soils exposed on the surface due to fossorial animal activity. Low Quality*
4. *Abundant clean Delhi Sand soils with little or no alluvial material (Tujunga soils or Hilmar loamy sand) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. Moderate Quality*

5. *Sand dune habitat with clean Delhi Sand soils. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. High Quality*

The criteria above were used to rate the relative abundance of Delhi Sands versus the amount of Cienba, Tujunga, or other alluvial soils, to rate the suitability of the habitat to support DSF. Soils high in gravel and alluvial materials, or high in fine materials such as silts and clays, were rated low, while soils that appear to be high in Aeolian deposited sands were rated high. This qualitative assessment of DSF habitat was further refined by considering the relative degree of soil compaction. Alluvial soils have a tendency to solidify to a hard surface pavement, while Aeolian soils are easier to penetrate and provide good substrate for DSF.

RESULTS

Literature Review Results

According to the CNDDB, CNPSEI, and other relevant literature and databases, approximately 24 sensitive species and one sensitive habitat have been documented in the Fontana USGS 7.5-minute series quadrangle. Table 1 provides this list of sensitive species occurrence in the Fontana quadrangle and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions.

The project site is located within a heavily developed area of Fontana and is not mapped within any designated Critical Habitat. Surrounding development has primarily converted natural habitats into commercial land uses. The project site has been routinely subject to human disturbances (i.e., flood control and weed abatement activities) and is surrounded by development.

Burrowing Owl

The BUOW is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. BUOWs use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground. BUOWs are dependent upon the presence of fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*), whose burrows are used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, BUOWs have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

BUOWs have crepuscular (dawn and dusk) hunting habits but are often observed perched in or near the burrow entrance during the day. They prey upon invertebrates and small vertebrates through the low vegetation which allows for foraging visibility. The nesting season occurs between February 1 and August 31. BUOW in California may migrate southerly, but often remain in the breeding area during the non-breeding period.

The BUOW was once abundant and widely distributed within coastal southern California, but it has declined precipitously in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino. A petition was filed to list the California population of the western burrowing owl as an Endangered or Threatened species (Center for Biological Diversity 2003); however, the California Department of Fish and Wildlife (CDFW) declined to list the BUOW as either Endangered or Threatened. The CDFW currently lists the BUOW as a California Species of Special Concern.

Delhi Sands Flower-loving Fly

The DSF occur in Delhi sands, particularly clean dune formations composed of Aeolian sands (wind deposited). Conversely, soils and sands deposited by fluvial processes from the surrounding alluvial fans do not support DSF. These alluvial soils are composed of course sands, cobble and gravel (Tujunga soils) or course sands, silts and clays (Cieneba soils). In this part of San Bernardino County the separation of soil types has been lost due to the mixing and cross contamination from years of agricultural activities, development, and other man-made disturbances.

Depending on the extent of mixing and contamination, some areas formally mapped in 1970 as Delhi Sands no longer have potential to support DSF populations. Conversely, some areas formally mapped as Cieneba soils may now be composed of Delhi Sands and have potential to support DSF. Six DSF experts (Ken Osborne, Greg Ballmen, Rudy Matoni, Karen Cleary-Rose, Alison Anderson and Tom McGill) used this criterion, the relative abundance of clean Delhi Sands verses the amount of Cienba or other alluvial soils, to rate the suitability of the habitat to support DSF (Michael Brandman Associates, 2003). Soils high in gravel and alluvial materials, or high in fine materials such as silts and clays, were rated low, while soils that appear to be high in Aeolian deposited sands were rated high. This qualitative assessment of DSF habitat was further refined by considering the relative degree of soil compaction. Alluvial soils have a tendency to solidify to a hard surface pavement, while Aeolian soils are easier to penetrate and provide good substrate for DSF.

Although it has been common to attribute the presence of four common plant species - California buckwheat (*Eriogonum fasciculatum*), California croton (*Croton californicus*), deer weed (*Acmispon glaber*), and telegraph weed (*Heterotheca grandiflora*) as indicators of habitat suitability, this assessment did not give much weight to vegetation composition because plant species may not be directly relevant to larval development. The known immature life histories of the nine asiloid fly families, including that to which the DSF is classified, are primarily predatory and/or parasitic on other invertebrate species (mainly insects) and the presence or absence of plant species appears not to be relevant to the life history of these flies.

Land with suitable DSF habitat include only those areas with open, undisturbed Delhi Series soils that have not been permanently altered by residential, commercial, or industrial development, or other human actions. Areas known to contain Delhi Sands and/or to be occupied by DSF have been divided by USFWS into three recovery units (Colton, Jurupa, and Ontario Recovery Units [(USFWS, 1997)). These recovery units are defined as large geographic areas based on geographic proximity, similarity of habitat, and potential genetic exchange. Within these three recovery units, are areas that have been previously protected by conservation easements:

- *Colton: Eight sites have been permanently protected in the Colton recovery unit:*

- *Jurupa: Approximately 21 ha (52-acres) of DSF habitat have been protected for this population along the Jurupa Hills. Approximately 12 ha (30-aces) are protected under a conservation easement within Riverside County ("I-15/Galena" Biological Opinion; FWS-WRIV-774). An additional 9 ha (22-acres) will be placed under a conservation easement and managed in San Bernardino County as a result of interagency consultation between the USFWS and the U. S. Army Corps of Engineers (Corps) ("Fontana Business Center" Biological Opinion; FWS-SB-1788.9), in accordance with section 7 of the Endangered Species Act.*

- *Ontario: In 2000, 4 ha (10-acres) of DSF habitat near the intersection of Greystone and Milliken Avenues in the City of Ontario, San Bernardino County, were acquired for conservation and an additional 1.2 ha (3-acres) of contiguous habitat was avoided, but not permanently conserved. At that time, these properties were surrounded by undeveloped land with some characteristics of DSF habitat, and the USFWS anticipated that a larger DSF reserve would be created that could sustain a robust DSF population. However, most of the surrounding property has subsequently been developed for commercial or industrial uses, and it is unlikely that the existing population can be sustained over the long term.*

The project site is located within the Ontario Recovery Unit, outside the areas protected under the conservation easements. The Ontario Recovery Unit includes all areas of Delhi Sand soils within the cities of Rancho Cucamonga, Ontario and portions of Fontana. In the USFWS five-year review of the DSF Recovery Plan (USFWS, 2008), the USFWS identified one area that supports DSF within the Ontario Recovery Unit – specifically a 10-acre site near the intersection of Greystone and Milliken Avenues in the City of Ontario. Further, the USFWS recognized that it is likely that there are no longer any existing populations of DSF within the Ontario Recovery Unit and that property containing Delhi Sand soils within this Unit has been adversely affected by agricultural, commercial, and industrial land use and no longer has long-term conservation value. Given the lack of existing populations of DSF and the ongoing build-out of the Ontario Recovery Unit, this area is no longer considered sustainable DSF habitat.

Field Investigation Results

During the field surveys, the weather was clear,with wind speeds less than 3 mph, and cool with average temperatures of 68 degrees Fahrenheit. The entire Project area is void of native vegetation or native habitat. There was no indication of wildlife activity in the channel. Because of the highly disturbed nature of the site, vegetation was minimal at best and mostly occurred in sparse ruderal patches on the bottom of the channel. The most notable vegetation is Eucalyptus trees (Eucalyptus globulus), which are present at various locations along the perimeter of the project location. Soils within the project site are heavily disturbed and compacted as a result of surrounding development and grading/weed abatement activities. The project site primarily supported Russian thistle (*Salsola tragus*) with a mix of ruderal/weedy plant species including short-pod mustard (*Hirschfeldia incana*), golden crownbeard (*Verbesina encelioides*), horseweed (*Erigeron Canadensis*), ragweed (*Ambrosia psilostachya*), and Mediterranean grass (*Schismus barbatus*).

Burrowing Owl

Despite a systematic search of the project site, no BUOWs or sign (pellets, feathers, castings, or white wash) or suitable burrows were observed on-site. The routine flood control, weed abatement activities and human activities associated with the adjacent railroad and surrounding developments have precluded BUOW from inhabiting the project site. Due to the lack of BUOW sign, suitable burrows, and surrounding development, BUOW are presumed absent from the project site. However, out of abundance of caution, a BUOW pre-construction clearance survey is recommended to ensure BUOW remain absent from the project site.

Delhi Sands Flower-loving Fly

The project site is not mapped by the USDA NRCS Soil Survey within Delhi Sand soils, but because Delhi Sand soils are wind deposited (Aeolian) the boundaries established by USDA are not exact and change over time. The soils within the boundaries of the project site have been mechanically disturbed by existing flood control activities and development in the general vicinity. These activities have mixed surface soils, none of which are Delhi Sand soils which are required by DSF. The entire project site was rated as Unsuitable/Very Low Quality with a habitat quality rating of 1/2 for DSF. There were no areas identified on the project site that provide restorable Delhi Sand soils (a habitat quality rating of 3/4), or suitable habitat (a habitat quality rating of 4 or 5), clean Delhi Sand soils.

CONCLUSION

Though varied floristic influences exist in the surrounding area, this region has been subject to historic land uses such as transportation, flood control, farming, grazing, recreation, water diversion and commercial development.

Burrowing Owl: The channel slopes and bed are covered in rigid gravel which is not conducive to burrowing. On-site and surrounding land uses have eliminated most of the naturally occurring habitats in the immediate vicinity of the project site, reducing the suitability of the habitat to support any sensitive species

including BUOW and DSF. As a result, and based on the findings of the site survey, it was determined that the project site does not provide suitable habitat that would support BUOW and/or DSF. No BUOW or BUOW sign was observed during the 2016 site survey. The absence of any suitable burrows, surrounding development, and high level of human activity precludes the use of the site by BUOW. BUOW is presumed absent from the project site.

Delhi-sands flower loving fly. Based on the results of the DSF habitat suitability assessment, surface soils present on the project site were determined not to contain Delhi Sand soils. As a result, the project site was determined not to have the potential to provide suitable habitat for DSF and it is assumed that DSF is absent from the project site. Further, the project site is surrounded by existing development and no longer has connectivity to areas containing clean Delhi Sands soils or areas subject to Aeolian processes. No further actions or focused surveys are recommended. Development of this property will not impact DSF or impede their recovery as defined by the United States Fish and Wildlife Service (USFWS) DSF Recovery Plan (1997).

Therefore, based on the site surveys, there is no potential for any of the sensitive species known to occur locally to occupy the West Fontana Channel or adjacent land.

RECOMMENDATIONS

Pursuant to the Migratory Bird Treaty Act and California Fish and Game Code, construction activities should be conducted outside the avian nesting season. The nesting season generally extends from February 1 through August 31, but can vary slightly from year to year based upon seasonal weather conditions. If construction activities occur during the avian nesting season, a pre-construction nesting bird clearance survey for nesting birds, including BUOW, should be conducted in accordance with accepted protocols. The biologist conducting the clearance survey should document the survey findings with a report indicating whether impacts to active avian nests or BUOW will occur.

Please do not hesitate to contact at me at 909-915-5900 should you have any questions or require further information.

Sincerely,

Shay Lawrey,

Attachments:

A. *Site Photographs*
B. *Table 1*
C. *Figures*

	Photo 1 – Project start (West End)
	Photo 2 – Cherry Ave. bridge crossing

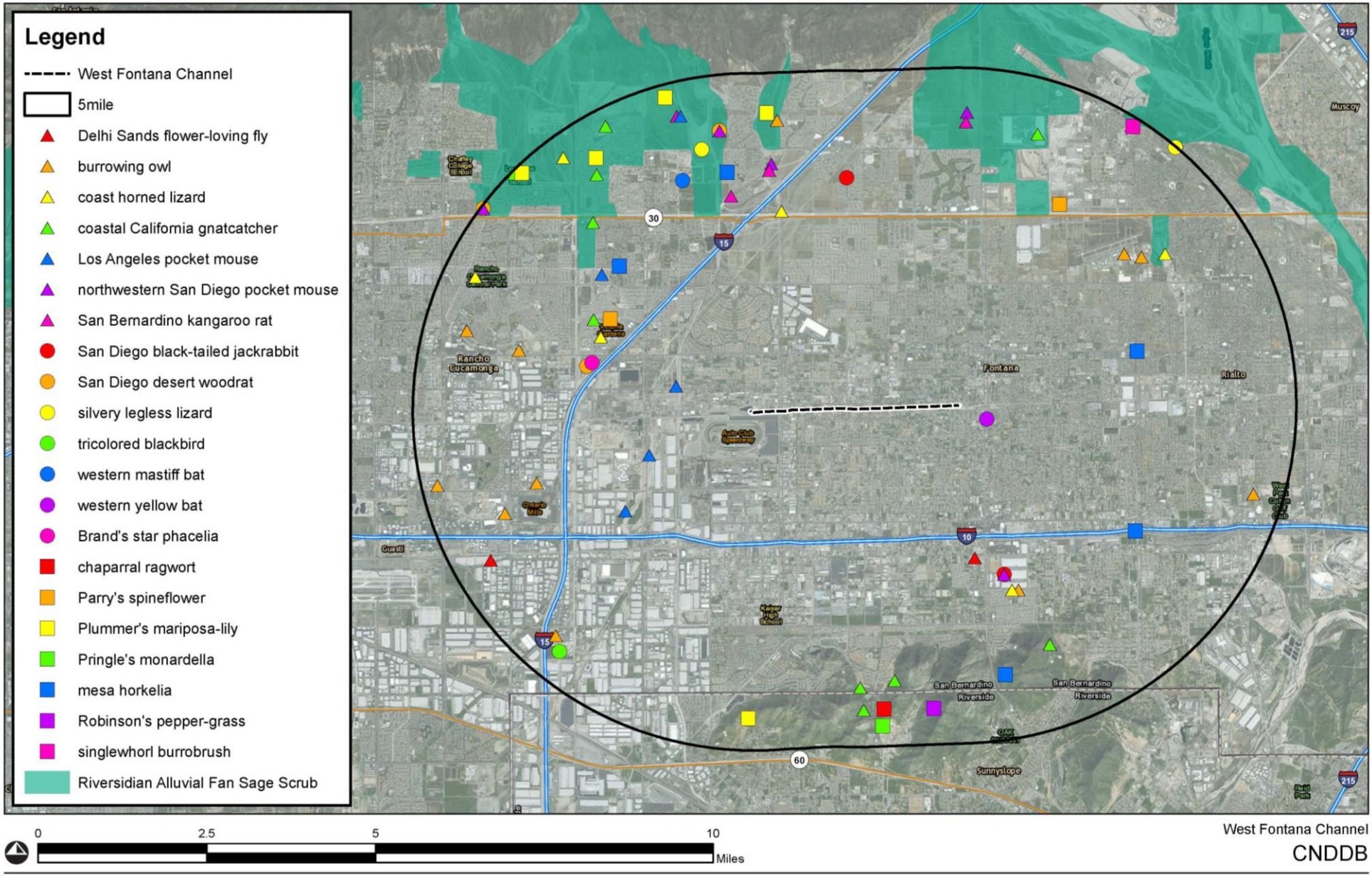
	Photo 3 – Channel at the termination of Lime Ave.
	Photo 4 - Project termination point (East End)

Table 1. Sensitive Species Occurrence Potenial

Scientific Name	Common Name	State/Federal Listings	CDFW/CNPS Listing	Other Listings	Habitat	Potential to Occur
Arenaria paludicola	marsh sandwort	Endangered/ Endangered	1B.1	G1, S1	Occurs in marshes and swamps, growing up through dense mats of *Typha*, *Juncus*, *Scirpus*, etc. in freshwater marsh. 10-170m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Athene cunicularia	burrowing owl	None/None	SC	G4, S2	Found in open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, most notably, the California ground squirrel.	Marginal habitat for this species exists adjacent to the project site. BUOW were systematically searched for and no indication of BUOW was found. No burrows occur on site. Occurrence potential is **low-moderate.**
Calochortus plummerae	Plummer's mariposa-lily	None/None	1B.2	G3, S3	Occurs in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 90-1610m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Catostomus santaanae	Santa Ana sucker	None/ Threatened	SC	G1, S1	Endemic to Los Angeles basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, & algae.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/None	SC	G5T3, S2S3	Occurs in coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego Co. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Endangered/ Endangered	1B.2	G4T2, S2.1	Occurs in coastal salt marsh, coastal dunes. Limited to the higher zones of the salt marsh habitat. 0-30m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Chorizanthe parryi var. parryi	Parry's spineflower	None/None	1B.1	G3T2, S2	Occurs in coastal scrub, chaparral. Dry slopes and flats; sometimes at interface of two vegetative types, such as chaparral and oak woodland; dry, sandy soils. 40-1705m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Cicindela tranquebarica viridissima	greenest tiger beetle	None/None		G5T1, S1	Inhabits the woodlands adjacent to the Santa Ana river basin. Usually found in open spots between trees.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Dodecahema leptoceras	slender-horned spineflower	Endangered/ Endangered	1B.1	G1, S1	Occurs in chaparral, coastal scrub (alluvial fan sage scrub). Flood deposited	No suitable habitat for this species exists on the project site.

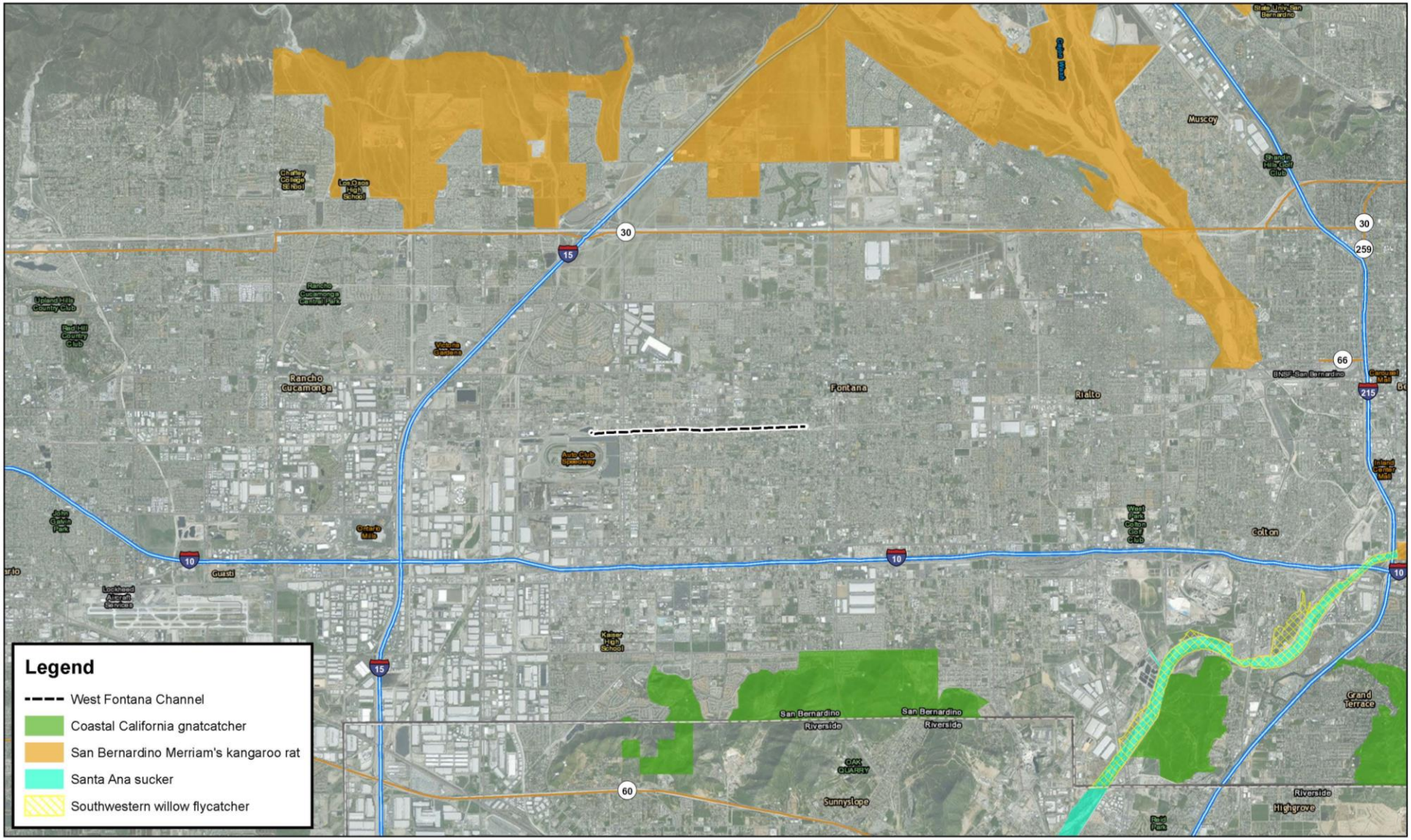
					terraces and washes; associated species include *Encelia, Dalea, Lepidospartum*, etc. 200-760m.	Occurrence potential is **low.**
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Endangered/ Endangered	1B.1	G4T1, S1	Occurs in coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits. 150-610m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Gila orcuttii	arroyo chub	None/None	SC	G2, S2	Native to streams from Malibu Cr to San Luis Rey river basin. Introduced into streams in Santa Clara, Ventura, and Santa Ynez. Found in slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation & associated invertebrates.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Horkelia cuneata ssp. puberula	mesa horkelia	None/None	1B.1	G4T2, S2.1	Occurs in chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Lasiurus xanthinus	western yellow bat	None/None	SC	G5, S3	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	None/None	1B.2	G5T2, S2.2	Occurs in chaparral, coastal scrub. Dry soils, shrubland. 1-945m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/None	SC	G5T3, S3	Prefers intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Lycium parishii	Parish's desert-thorn	None/None	2.3	G3, S2S3	Occurs in coastal scrub, Sonoran desert scrub. 300-1000m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Monardella pringlei	Pringle's monardella	None/None	1A	GX, SX	Occurs in coastal scrub. Sandy hills. 300-400m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Nyctinomops femorosaccus	pocketed free-tailed bat	None/None	SC	G4, S2S3	Found in a variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert ripa rocky areas with high cliffs.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Phrynosoma blainvillii	coast horned lizard	None/None	SC	G4G5, S3S4	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, & abundant supply	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**

					of ants & other insects.	
Polioptila californica californica	coastal California gnatcatcher	None/ Threatened	SC	G3T2, S2	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas & slopes. Not all areas classified as coastal sage scrub are occupied.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	None/ Endangered		G1T1, S1	Found only in areas of the Delhi sands formation in southwestern San Bernardino & northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition requires shade.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Senecio aphanactis	chaparral ragwort	None/None	2.2	G3, S1.2	Occurs in cismontane woodland, coastal scrub in drying alkaline flats. 20-575m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Sphenopholis obtusata	prairie wedge grass	None/None	2.2	G5, S2.2	Occurs in cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 360-2325m.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**
Vireo bellii pusillus	least Bell's vireo	Endangered/ Endangered		G5T2, S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, or mesquite.	No suitable habitat for this species exists on the project site. Occurrence potential is **low.**



West Fontana Channel
CNDDB

Figure 1



0 2.5 5 10 Miles

West Fontana Channel
Critical Habitat

Figure 2