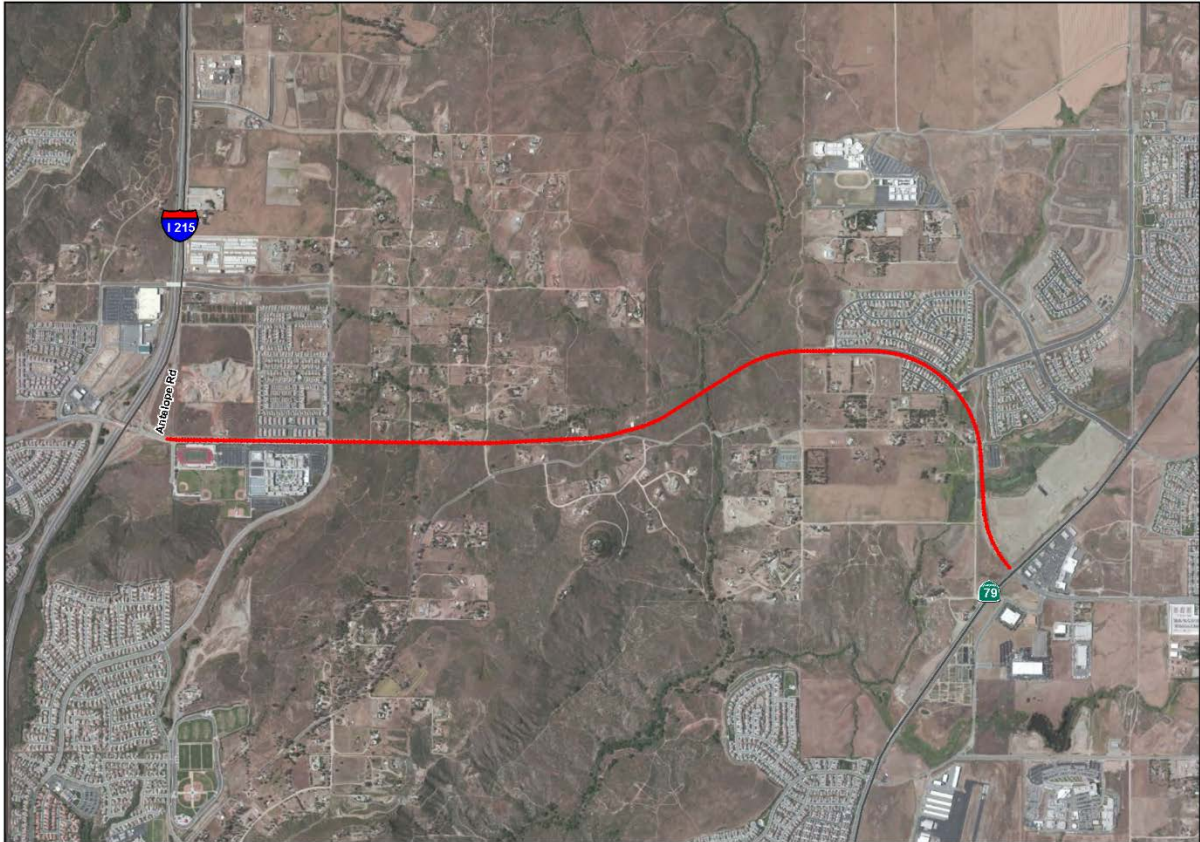


Clinton Keith Road Extension Project

Addendum to Supplemental Environmental Impact Report

(SCH#1995062022)



Clinton Keith Road Extension Project
Riverside County, California

Prepared for
County of Riverside – Transportation Department

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Contents

Section	Page
1.0 Introduction and Overview	1-1
1.1 Project Phasing.....	1-2
1.2 Supplemental EIR (SEIR)	1-2
1.3 SEIR Addendum	1-3
1.4 Basis for SEIR Addendum	1-5
2.0 Project Description.....	2-8
2.1 Proposed Project Phasing	2-8
2.2 Roadway Cross Section.....	2-9
2.2.1 Phase 1 of Segment 2 (Design Option 1)	2-10
2.2.2 Phase 1 of Segment 2 (Design Option 2)	2-11
2.2.3 Phase 2 of Segment 2	2-11
2.2.4 Segment 4.....	2-12
2.3 Bridge Structures.....	2-13
2.4 Construction Activities.....	2-13
2.4.1 Phase 1 of Segment 2 (Design Option 1)	2-13
2.4.2 Phase 1 of Segment 2 (Design Option 2)	2-14
2.4.3 Phase 2 of Segment 2	2-14
2.4.4 Segment 4.....	2-14
2.5 Right of Way	2-15
2.6 Operations and Maintenance	2-15
2.7 Permits and Approvals	2-15
3.0 Environmental Analysis.....	3-17
3.1 Aesthetics	3-17
3.1.1 Updated Environmental Setting	3-18
3.1.2 Impact Assessment	3-18
3.1.3 Mitigation Measures.....	3-19
3.1.4 Level of Significance after Mitigation	3-20
3.2 Air Quality.....	3-21
3.2.1 Updated Environmental Setting	3-21

3.2.2	Impact Assessment	3-23
3.2.3	Mitigation Measures.....	3-28
3.2.4	Level of Significance after Mitigation	3-29
3.3	Biological Resources.....	3-29
3.3.1	Updated Environmental Setting	3-29
3.3.2	Impact Assessment.....	3-54
3.3.3	Mitigation Measures.....	3-68
3.3.4	Level of Significance after Mitigation	3-74
3.4	Cultural Resources	3-74
3.4.1	Updated Environmental Setting	3-74
3.4.2	Impact Assessment.....	3-78
3.4.3	Mitigation Measures.....	3-82
3.4.4	Level of Significance after Mitigation	3-84
3.5	Greenhouse Gas Emissions	3-84
3.5.1	Updated Environmental Setting	3-84
3.5.2	Impact Assessment.....	3-86
3.5.3	Mitigation Measures.....	3-88
3.5.4	Level of Significance after Mitigation	3-88
3.6	Hydrology/Water Quality.....	3-88
3.6.1	Updated Environmental Setting	3-88
3.6.2	Impact Assessment.....	3-90
3.6.3	Mitigation Measures.....	3-95
3.6.4	Level of Significance after Mitigation	3-97
3.7	Noise.....	3-97
3.7.1	Updated Environmental Setting	3-97
3.7.2	Impact Assessment.....	3-98
3.7.3	Mitigation Measures.....	3-98
3.7.4	Level of Significance after Mitigation	3-100
3.8	Traffic and Transportation.....	3-100
3.8.1	Updated Environmental Setting	3-100
3.8.2	Impact Assessment.....	3-101
	Level of Service Definitions and Procedures	3-103
	Level of Service Standards.....	3-106
3.8.3	Mitigation Measures.....	3-120

3.8.4	Level of Significance after Mitigation	3-122
4.0	Cumulative Impacts	4-1
4.1	List of Cumulative Projects in 2006 SEIR	4-2
4.2	Updated Cumulative Projects	4-2
4.3	Cumulative Impacts of Phasing Segment 2 and Construction of the Ultimate 6-Lane Facility of Segment 4	4-2
4.3.1	Aesthetics	4-3
4.3.2	Air Quality.....	4-3
4.3.3	Biological Resources.....	4-4
4.3.4	Cultural Resources	4-4
4.3.5	Greenhouse Gas Emissions	4-5
4.3.6	Hydrology/Water Quality.....	4-5
4.3.7	Noise	4-5
4.3.8	Transportation/Traffic	4-6
5.0	Growth-Inducing Impacts	5-1
6.0	Irreversible Environmental Effects	6-1
7.0	Significant Unavoidable Adverse Impacts	7-1
7.1	Significant Unavoidable Hydrology Impact.....	7-1
7.2	Significant Unavoidable Air Quality Impact - NOx Emissions During Construction	7-1
7.3	Significant Unavoidable Aesthetic Impact.....	7-1
8.0	List of Preparers.....	8-1
9.0	References	9-1

Appendix

A Mitigation Monitoring and Reporting Program

Appendixes (Volume II)

B Project Permits

C Supplemental Jurisdictional Delineation Reports

D Habitat Assessment at Three Locations for the Clinton Keith Road Extension Project,
Riverside County, California

E Traffic Analysis for Clinton Keith Road Extension Project

Tables

Table 2-1	Permits and Approvals Required for the Proposed Project	2-16
Table 3-1	Summary of Maximum Monitored Ambient Air Quality Near the Project Study Area	3-21
Table 3-2	Attainment Designations of the Project Area (Riverside County)	3-23
Table 3-3	Comparison of Vehicle Volume and LOS of the Worst-Case Intersections of Phase 2	3-25
Table 3-4	Maximum Predicted CO Impacts – 6-Lane at Build-out (Phase 2)	3-25
Table 3-5	Comparison of Vehicle Volume and LOS of the Worst-Case Intersections	3-27
Table 3-6	MSHCP Riparian/Riverine Areas within the Study Area of Segments 2 and 4	3-36
Table 3-7	Jurisdictional Water Features within the Study Area	3-40
Table 3-8	Clinton Keith Road Extension Project Jurisdictional WoUS Comparison for Segment 2	3-51
Table 3-9	Clinton Keith Road Extension Project CDFW Jurisdictional Water Features Comparison for Segment 2	3-52
Table 3-10	Clinton Keith Road Extension Project Jurisdictional WoUS Comparison for Segment 4	3-60
Table 3-11	Clinton Keith Road Extension Project CDFW Jurisdictional Drainages Comparison for Segment 4	3-61
Table 3-12	Impacts to Jurisdictional Water Features	3-63
Table 3-13	Impacts to MSHCP Riparian/Riverine Resources	3-64
Table 3-14	Assessing the Project’s Potential to Cause a Substantial Adverse Change to a Historical Resource	3-81
Table 3-17	Level of Service Definitions, Roadway Segments	3-105
Table 3-18	Summary of Intersection Analysis – Existing Conditions	3-108
Table 3-19	Summary of Roadway Segment Analysis – Existing Conditions	3-109
Table 3-20	Summary of Intersection Analysis – Opening Year (2018) Without Project Conditions	3-110
Table 3-21	Summary of Roadway Segment Analysis – Opening Year (2018) Without Project Conditions	3-110
Table 3-22	Summary of Intersection Analysis – Opening Year (2018) With Phase 1 (2-Lane Design Option) Conditions	3-112
Table 3-23	Summary of Roadway Segment Analysis – Opening Year (2018) With Phase 1 (2-Lane Design Option) Conditions	3-113

Table 3-24 Summary of Intersection Analysis – Opening Year (2018) With Phase 1
(4-Lane Design Option) Conditions3-114

Table 3-25 Summary of Roadway Segment Analysis – Opening Year (2018) With Phase 1
(4-Lane Design Option) Conditions3-115

Table 3-26 Summary of Intersection Analysis –Year 2035 With Phase 2 Conditions.....3-116

Table 3-27 Summary of Roadway Segment Analysis – Year 2035 With Phase 2 Conditions 3-117

Table 4-1 Projects Occurring Adjacent to the Project Impact Area4-2

Figures

1-1 Regional Project Location

1-2 Project Location Map

2-1 Segment 2, Phase 1 Map

2-2 Segment 2, Phase 2 Map

2-3 Segment 4

2-4 Interim Typical Cross Section (Design Option 1)

2-4a Interim Typical Cross Section (Design Option 2)

2-5 Ultimate Typical Cross Section

3-1 Viewshed Map

3-2 Jurisdictional Water Features

3-3 Impacts to Waters of the U.S.

3-4 Impacts to CDFW Jurisdictional Water Features

3-5 MSHCP Riparian/Riverine Resouces

4-1 Cumulative Projects

1.0 Introduction and Overview

The Riverside County Transportation Department (The County), in cooperation with the City of Murrieta, proposes to construct a six-lane urban arterial in the City of Murrieta and unincorporated Riverside County that would extend the existing Clinton Keith Road between Antelope Road and State Route 79 (SR 79) [Figures 1-1 and 1-2]. This alignment is consistent with County General Plan Amendment 409 (CGPA 409). The County is the California Environmental Quality Act (CEQA) lead agency for the Clinton Keith Road Extension Project (the Project). A *Supplemental Environmental Impact Report (SEIR)* for the Project was certified in January 2006 (CH2M HILL 2006). The Supplemental Environmental Impact Report (SEIR) analyzed changes associated with the design of the Project that had occurred since the original Environmental Impact Report (EIR) was approved in 2000 (SCH Number 1995062022). This SEIR Addendum is to evaluate minor changes in the Project's construction phasing and the environment adjacent to the Project.

Since the approval of the SEIR, two segments of the Project have been constructed as part of the City of Murrieta's local road improvement project for access to a new hospital, and as part of Tract 29484, respectively. Therefore, there are two segments remaining to be built. The four segments of the Project are as follows (Refer to Figure 1-2):

- Segment 1 – between Antelope Road and Whitewood Road (already constructed)
- Segment 2 – between Whitewood Road and Trois Valley Street (not yet constructed)
- Segment 3 – between Trois Valley Street and Leon Road (already constructed)
- Segment 4 – between Leon Road and SR 79 (not yet constructed)

Construction of Segments 2 and 4 of Clinton Keith Road will occur in compliance with the analysis and conclusions in the SEIR and will complete Clinton Keith Road between I-215 and SR 79.

The SEIR Addendum confirms that the Project's construction phasing identified below would not affect the previously adopted CEQA findings or Statement of Overriding Considerations as certified with the SEIR. Therefore, a new subsequent EIR is not required for the Project, as none of the conditions necessitating the preparation of a subsequent EIR under Section 15162 of the CEQA Guidelines has occurred (See CEQA Guidelines Section 15164[e]).

1.1 Project Phasing

The phasing of the Project consists of options to construct the road improvements in a sequence that can be funded as monies are available, consistent with the Circulation Element and design standards. A variety of funding sources are under consideration and may be utilized for the construction of the Project.

Segment 2 consists of two design options under the first phase. Design Option 1 for Segment 2 would provide a two lane facility by paving the south half of the roadway and striping to include one travel lane in each direction with a 6-foot-wide painted median, sidewalk along the south curb and full grading for the future six-lane facility. Design Option 2 for Segment 2 would provide a four lane facility by paving two lanes on the south half of the road and two lanes on the north half of the road with grading to accommodate the two future additional lanes, raised median and sidewalk on the north side. The second phase of Segment 2 consists of paving the remaining lanes, restriping to the ultimate six-lane facility, and installing the raised median and the sidewalk on the north side.

Segment 4 will be constructed in the future as a separate phase of the Project, as funding becomes available or it is built (in part or in whole) by adjacent development.

1.2 Supplemental EIR (SEIR)

The alignment of Clinton Keith Road between I-215 and SR 79 was determined by an Alternatives Analysis and EIR in 2000 that involved extensive community input. The SEIR was certified in 2006 to address minor modifications to the centerline of the road and changes in local access to ensure that Clinton Keith Road is constructed as a limited access facility, consistent with the Circulation Elements of the County and City. The SEIR also addressed the requirements of the Western Riverside County Multiple Species Plan (MSHCP), which had been adopted in 2003, after the completion of the EIR. The MSHCP envisioned features to enhance wildlife connectivity to a system of conserved lands north and south of Clinton Keith Road. Therefore, the SEIR addressed inclusion of those features into the Project, at significant cost to the Project.

The SEIR determined the Project would result in less than significant impacts to the following resources:

- Agriculture
- Air Quality (non-construction related)
- Biological

- Cultural
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Mineral
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic (long term)
- Utilities and Service Systems

The findings in the SEIR include a determination of less than significant impact determinations for each of these resources.

1.3 SEIR Addendum

Phasing of the Project's Segment 2 is necessary, due to the constraint of obtaining construction funds. As a result of phasing Segment 2, each resource was evaluated to identify which of them, if any, would require further analysis. Phasing of Segment 2 does not change the environmental footprint or the distance of the Project analyzed in the SEIR. Project features identified in the SEIR are addressed in the Addendum.

Additionally, as a result of changes in existing biological conditions, land ownership, and CEQA guidelines related to greenhouse gas emissions, and to ensure that the less than significant impact determinations would still apply, an analysis of potential impacts and mitigation associated with the Project's construction phasing was conducted for the following:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Hydrology/Water Quality

- Noise
- Transportation/Traffic

In addition to these, a greenhouse gas emissions analysis was added to the SEIR Addendum, as this is a CEQA requirement that occurred after the SEIR was approved.

All other resources included in the SEIR including Agriculture, Geology and Soils, Hazards and Hazardous Materials, Land Use and Planning, Minerals, Population and Housing, Public Services, Recreation, and Utilities and Services would not be affected by the Project's phasing or changes in the existing environment that have occurred since the approval of the SEIR and are therefore not discussed in this SEIR Addendum. Therefore, the finding of no significant impact is still valid.

The SEIR determined there would be significant and unavoidable impacts related to the following resources. A summary description of the impacts is provided:

- Aesthetics
 - Significant project-level and cumulative impacts to existing residential views.
- Air Quality (during construction)
 - Significant unavoidable impacts related to oxides of nitrogen (NO_x) emissions during construction; additional cumulative impacts could occur if additional projects were under construction at the same time as the Project was under construction.
- Hydrology/Water Quality (flooding)
 - Significant unavoidable flooding impact due to a potential accidental failure of Skinner Reservoir dam.
- Transportation/Traffic (short-term)
 - Significant short-term traffic congestion and level of service (LOS) impact if Clinton Keith Road/I-215 Interchange does not get constructed prior to the Project; however, this interchange has since been constructed.

Each of the resources with a significant and unavoidable impact determination listed above was included in this SEIR Addendum to determine if the phasing of Segment 2 and/or changes to the existing environment would change the conclusions presented in the SEIR. All of these significant and unavoidable impact determinations would remain, except for the determination regarding

Transportation/Traffic. Since the approval of the SEIR, the Clinton Keith Road/I-215 Interchange has been constructed, and no longer presents a short-term significant traffic impact. This is discussed in Section 3.8.4 of this SEIR Addendum.

1.4 Basis for SEIR Addendum

An agency may prepare an addendum to a prior EIR pursuant to CEQA Guidelines Section 15164 which states, in pertinent part, that “The lead agency [...] shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred.” Section 15162 states that a subsequent EIR would be required if any of the following conditions exist: (1) changes to the project that require major revisions to the previously certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the project is undertaken that require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance, which was not known or could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified, shows that the project will have one or more significant effects not discussed in the previous EIR, significant effects previously examined will be substantially more severe than shown in the previous EIR, or mitigation measures or alternatives that were previously found not to be feasible or that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measure or alternative.

Based on review of the minor technical changes and additions associated with the Project’s construction phasing, and as described below in Sections 3.1 through 3.8, the County has determined that an SEIR Addendum is the appropriate type of document based on CEQA Guidelines Section 15162 and 15164. The basis for this determination is:

Section 15162 (a)(1): Phasing of the construction of the Project and the minor changes in the existing environment do not involve substantial changes because there are no new significant environmental impacts that would occur. The Project remains the same as the Project that was evaluated under the SEIR. The Project is the construction of Clinton Keith Road as assessed in the SEIR, consistent with the County and City General Plan Circulation Elements, and the MSHCP. The length and environmental footprint are the same. All of the Project’s features that ensure consistency with the

Circulation Element and MSHCP will be constructed within the first phase of construction, regardless of which Design Option is selected. Additionally, no substantial increases in the severity of any previously-identified adverse environmental impacts would occur. The Addendum documents that previously identified significant effects accounted for by the SEIR either occur as expected or are diminished based on current conditions. Furthermore, the mitigation measures from the SEIR are fully considered and incorporated as appropriate into the Addendum.

Section 15162(a)(2): Phasing of the construction of the Project and the minor changes in the existing environment is not a substantial change in the circumstances under which the Project is being undertaken. The Project is the same as the Project evaluated by the SEIR. Major revisions to the SEIR are not involved, because the environmental effects of the Project have been previously documented by the SEIR, and as referenced above, do not include new significant effects or a substantial increase in the severity of previously identified significant effects. Minor changes in the existing environment documented in this Addendum involve streambeds and wetland areas within the Project's construction footprint that are the result of adjacent construction and associated changes in topography. This change in the existing environment would not require a subsequent EIR because the SEIR had already documented that this type of impact would occur, and included mitigation measure B-2, that addresses the potentially significant adverse impacts of proposed Clinton Keith Road streambeds and associated wetlands. Measure B-2 included coordination with the permitting agencies that would require mitigation to result in no net loss of streambeds or wetlands. The Project will follow the SEIR mitigation measures that require no net loss of wetlands. The Addendum documents the increased area of streambed and wetland impacts and provides mitigation consistent with the SEIR. No substantial change in circumstances has occurred because the SEIR acknowledged the impacts to the drainage areas and provided mitigation measures which the Addendum is implementing.

Section 15162(a)(3): All new information discussed in this SEIR Addendum could not have been known with the exercise of reasonable diligence at the time the SEIR was certified, and impacts would not be more severe than those presented in the SEIR. The EIR adopted an environmentally approved alignment for Clinton Keith Road based on an Alternative Analysis; the SEIR advanced the Project with engineering of the road alignment jointly with an updated environmental analysis based on current conditions and compliance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The SEIR acknowledged and provided mitigation for significant effects resulting from the Project, in accordance with the EIR. The Addendum is implementing the measures identified in the SEIR. In addition, completion of the final engineering plans provides the level of

detail required to verify the amount of some of the impacts and mitigation measures for the Project. For example, the SEIR required further investigation of cultural resources during construction. The Addendum provides the documentation process and the Native American involvement required by the SEIR and provides specific mitigation measures. An additional example is the permitting process for impacts to streambeds through the US Army Corps of Engineers, Regional Water Quality Control Board and the California Department of Fish & Wildlife. The level of detail needed for completion of these permits is now available based on the engineering plans; the expected mitigation laid out in the SEIR will occur through this permit process. No new information or more severe impacts come to light as a result of the Addendum, rather, the Addendum documents that the SEIR acknowledged the Project's impacts and provided measures to address the environmental impacts. The Mitigation Monitoring and Reporting Program (MMRP) can be found in Appendix A, MMRP.

Based on the above findings, the preparation of a subsequent EIR is not warranted, and an Addendum is the appropriate tool for analysis of the phasing of the Project under CEQA.

This SEIR Addendum is based on information provided in the Plans, Specifications, & Estimates (PS&E) documents, the SEIR, the EIR, and the associated technical studies for the Project.

2.0 Project Description

The Project is located in western Riverside County along the northern jurisdiction of the City of Murrieta and within unincorporated Riverside County (Figure 1-1). The Project is generally located between I-215 and SR 79 on existing Clinton Keith Road, and the alignment extension included in CGPA 409. The limits of the Project described in the SEIR extend between Antelope Road (600 feet east of the I-215 interchange) and SR 79 at Benton Road.

As described above in Section 1.0, the segments of Clinton Keith Road between Antelope Road and Whitewood Road (Segment 1), and between Trois Valley Street and Leon Road (Segment 3) have already been constructed. The remaining two segments, which are the focus of this SEIR Addendum, include the portions of the Project that extend between Whitewood Road and Trois Valley Street (**Segment 2**) and between Leon Road and SR 79 (**Segment 4**). Refer to Figure 1-2.

2.1 Proposed Project Phasing

Clinton Keith Road is to be ultimately constructed as a six-lane urban arterial road between Whitewood Road and SR 79 at Benton Road in western Riverside County. Clinton Keith Road currently exists as a paved road from Antelope Road to Whitewood Road (Segment 1), and as a dirt road east of Whitewood Road to Los Alamos Road. Clinton Keith Road does not currently exist east of Los Alamos Road, except for the portion that was constructed as part of Tract 29484 between Trois Valley Street and Leon Road [Segment 3].

The remaining two segments of the Project would be constructed separately and are the focus of this SEIR Addendum (Refer to Figures 2-1 through 2-3). Segment 2 consists of two phases with two design options under the first phase.

Design Option 1 for Segment 2 would provide a two lane facility by paving the south half of the roadway and striping to include one travel lane in each direction with a 6-foot-wide painted median, sidewalk along the south curb, and full grading for the future six-lane facility. At the intersection of Clinton Keith Road/Whitewood Road, additional width will be provided to align lanes with the existing improvements west of Whitewood Road, and the existing traffic signal will be modified. At the intersection of Clinton Keith Road with Trois Valley Street, the road will be widened to align lanes with the existing improvements east of Trois Valley Street. A new traffic signal will be installed at this intersection as previously identified in the SEIR. The segment between Trois Valley Street and

Leon Road (Segment 3 as previously identified) will have minor striping modifications to accommodate the new traffic patterns (Figures 2-1 and 2-2).

Design Option 2 for Segment 2 would provide a four lane facility by paving two lanes on the south half of the road and two lanes on the north half of the road, with grading to accommodate the two future additional lanes, raised median, and sidewalk on the north side. At the intersection of Clinton Keith Road/Whitewood Road, additional width will be provided to align lanes with the existing improvements west of Whitewood Road and the existing traffic signal will be modified. At the intersection of Clinton Keith Road/Menifee Road, a traffic signal will be constructed as previously identified in the SEIR. At the intersection of Clinton Keith Road with Trois Valley Street, the road will be widened to align lanes with the existing improvements east of Trois Valley Street. A new traffic signal will be installed at this intersection as previously identified in the SEIR. The segment between Trois Valley Street and Leon Road (Segment 3 as previously identified) will have minor striping modifications to accommodate the new traffic patterns (Figures 2-1 and 2-2).

The second phase of Segment 2 consists of paving the remaining improvements identified in the SEIR within this segment, including lanes, restriping to the ultimate six-lane facility, installing the raised median and the sidewalk on the north side (Figure 2-2).

Segment 4 will be constructed in the future, as a separate phase of the Project, as funding becomes available or it is built (in part or in whole) by adjacent development. All improvements will be consistent with the SEIR and this SEIR Addendum, including a six lane roadway with curb, gutter and sidewalk, raised median, a traffic signal at the intersection with Leon Road, a traffic signal at the intersection with Porth Road, widening at the connection to SR79, and on SR 79, and a traffic signal modification to accommodate the required lanes as identified and analyzed in the SEIR and this SEIR Addendum (Figure 2-3)

Three bridge structures are to be built with the Project; a bridge over French Valley Creek, a bridge over Warm Springs Creek, and a wildlife overcrossing bridge east of the Warm Springs Creek Bridge. Construction of Segment 2 will include full width construction of the Warm Springs Creek Bridge and the wildlife overcrossing with the first phase of construction. Construction of Segment 4 will include the full 6 lane width bridge over French Valley Creek.

2.2 Roadway Cross Section

2.2.1 Phase 1 of Segment 2 (Design Option 1)

Clinton Keith Road

The proposed roadway cross section between Whitewood Road and SR 79 is typically 110 feet wide, with a minimum right of way (ROW) width of 134 feet based on the previous Riverside County design standards for an Urban Arterial Highway that was used when the ROW was purchased. This width varies at the intersections where the road is widened to accommodate right turn pockets.

The roadway cross section for Phase 1 includes full width grading and paving for two 13-foot lanes (one on each side of a 6-foot striped median). On the outside of the two lanes, an 8-foot-wide shoulder would be constructed adjacent to the outside lane in both directions and an 8-inch curb. The cross section dimensions are shown in Figure 2-4. A variation to this cross section occurs near the Warm Springs Creek area. In this area (approximately between Stations 276+00 and 320+00), a concrete barrier would be utilized instead of curb and gutter to separate the roadway traffic from the pedestrian traffic on the sidewalks.

Local Access Streets

Local access streets adjacent to Clinton Keith Road that require improvements to maintain a roadway connection would be included as part of Phase 1. These streets include Arendt Lane and Greenberg Place. Arendt Lane will be cul-de-sac'd with no further connection to Clinton Keith Road. It will be graded from Greenberg Place to the south approximately 400 feet, opening up the connection to Greenberg Place. Greenberg Place will be graded from Avenida Manana to the west approximately 650 feet only and will not be paved or maintained by the City or County. Greenberg Place will be graded to a width of 26 feet and Arendt Lane will be graded to a width of 20 feet.

Changes in Local Access

The local access changes described in Section 2.2.4 of the SEIR would remain the same for the Project and would occur during construction of Phase 1 of Segment 2. As described in Section 2.2.4 of the SEIR, the Project would revise local roadway access connections along existing Clinton Keith Road. Between Whitewood Road and Los Alamos Road, all local access roads (Arendt Lane and Avenida Manana) and driveways currently accessing Clinton Keith Road would be permanently removed except for Menifee Road. Menifee Road would continue to connect to Los Alamos Road. All residences within this area would access Clinton Keith Road through either Whitewood Road or Menifee Road after the Project is constructed. When access is permanently removed from Clinton Keith Road to Arendt Lane, a cul-de-sac would be constructed north of Clinton Keith Road to allow vehicles to turn around and additional grading would occur to connect Arendt Lane to Greenberg Place. Greenberg Place will also be improved from east of Menifee Road to Avenida Manana.

Grading of this road will open up access to Avenida Manana so property owners can get access to Menifee Road. An existing driveway along Clinton Keith Road at the northwest corner of Menifee will be replaced with a new driveway along Menifee Road. The proposed improvements can be reviewed in Figure 2-1.

The following are general locations where improvements to local roads are proposed within Segment 2, consistent with the SEIR:

- Arendt Lane would become a cul-de-sac, north of Clinton Keith Road and would be graded to gain access to Greenberg Place
- A driveway will be provided at the northwest corner of the Menifee Road and Clinton Keith Road intersection along Menifee Road
- Greenberg Place would be extended east to connect to Avenida Manana
- A utility access road would be constructed on the north side of Clinton Keith Road from Liberty Lane to Trois Valley Street (under Design Option 2)
- A utility access road would be constructed on the south side of Clinton Keith Road from Liberty Lane to Trois Valley Street

2.2.2 Phase 1 of Segment 2 (Design Option 2)

Under Design Option 2, the proposed roadway cross section would include full width grading and paving of two 12-foot lanes in each direction. On the outside of the two lanes, an 8-foot-wide shoulder would be constructed adjacent to an 8-inch curb. On the inside of the two lanes, a 2-foot-wide shoulder would be constructed adjacent to the inside lane in both directions. The cross section dimensions for Design Option 2 are shown in Figure 2-4a.

Local access streets and changes in local access would be the same under Design Option 2 as Design Option 1, except that a utility access road would be constructed on the north side of Clinton Keith Road from Liberty Lane to Trois Valley Street.

2.2.3 Phase 2 of Segment 2

Clinton Keith Road

In Phase 2 of Segment 2, the remainder of the full width of Clinton Keith Road would be paved, and the pavement would be restriped to include six travel lanes. This roadway cross section would contain three 12-foot lanes on each side of a 14-foot median, for a total of six travel lanes (three lanes in each direction). A 2-foot inside shoulder and a 10-foot outside shoulder would be constructed adjacent to

the outside lane in both directions, and will include a bike lane. On the inside and outside of these three lanes, a curb would be constructed. Adjacent to the outside shoulder, a 6-foot-wide sidewalk and a 6-foot-wide parkway would be constructed. An additional slope easement (variable in width) would be acquired adjacent to the parkway, if required, based on the Project grading plans. The cross section dimensions are shown in Figure 2-5.

Local Access Changes

All local access changes would be constructed under Phase 1 of Segment 2, except for the new local access road that would be constructed on the north side of Clinton Keith Road from Liberty Lane to Trois Valley Street. This access road would still be constructed under Phase 1, if the 4-lane Design Option 2 is selected. If this design option is not selected, then the access road would be constructed under Phase 2. No other additional access changes are proposed to occur under Phase 2.

2.2.4 Segment 4

Ultimately, construction of Segment 4 will include the full width consisting of three 12-foot lanes on each side of a 14-foot median, for a total of six travel lanes (three lanes in each direction). A 2-foot inside shoulder and a 10-foot outside shoulder would be constructed adjacent to the outside lane in both directions, and will include a bike lane. On the inside and outside of these three lanes, a curb would be constructed. Additional slope easements (variable in width) have been acquired adjacent to the parkway, where required, based on the Project grading plans. Adjacent to the outside shoulder, a 6-foot-wide sidewalk and a 6-foot-wide parkway would be constructed. The cross section dimensions are shown in Figure 2-5. It is anticipated that Segment 4 may be constructed in part or whole by development or as a final phase of the Project.

Local Access Streets

Local access streets adjacent to Clinton Keith Road that require improvements to maintain a roadway connection within Segment 4 include Briggs Road and Porth Road. Briggs Road and Porth Road will be graded and realigned to match existing roads. Briggs Road will be graded to a width of 26 feet. The section of Porth Road between Briggs Road and Clinton Keith Road would be graded to a width of 40 feet near the Porth Road/Clinton Keith Road intersection, and taper to 26 feet west of the new intersection at Briggs Road to match existing Porth Road.

Changes in Local Access

The local access changes described in Section 2.2.4 of the SEIR would remain the same for Segment 4. As described in Section 2.2.4 of the SEIR, the Project would revise local roadway access

connections along existing Clinton Keith Road. The proposed improvements can be reviewed in Figure 2-3, Segment 4.

The following are general locations where improvements to local roads are proposed within Segment 4, consistent with the SEIR:

- Porth Road would be extended east to connect to Clinton Keith Road
- The intersection of Porth Road and Briggs Road would be realigned west of its existing location
- Los Alamos Road will be realigned to tie directly into Briggs Road
- Existing access at Briggs Road/SR 79 would be closed

2.3 Bridge Structures

All bridge structures would be constructed as described in Section 2.2.5 of the SEIR and would be constructed during Phase 1 of Segment 2 and during construction of Segment 4 (Figures 2-1 and 2-3). These include: Warm Springs Creek Bridge, a Wildlife Overcrossing, and French Valley Creek Bridge. In Phase 2 of Segment 2, the six-lane roadway will meet up with the bridges constructed during Phase 1.

2.4 Construction Activities

Due to the Project now being phased, the description of construction activities in Section 2.2.6 of the SEIR has slightly changed. This section describes the differences in construction activities between what was presented in Section 2.2.6 of the SEIR and what is currently proposed. All construction activities previously described in Section 2.2.6 of the SEIR would remain the same except for the following:

2.4.1 Phase 1 of Segment 2 (Design Option 1)

- All of the cut and fill grading for the ultimate facility within Segment 2 would occur during Phase 1, which would consist of developing a roadbed, typically 110 feet wide, with the width varying at the intersections to accommodate right turn pockets, from Whitewood Road to SR 79.
- Only two travel lanes would be paved within the 110-foot wide roadbed, as described above in Section 2.3.2, Roadway Cross Section.
- Erosion control (Type BFM with seed mix) and Fiber Rolls would be spread among the remaining graded areas to prevent impacts from storm water run-off.

- One detention basin would be constructed in Phase 1.
- The duration of construction for Phase 1 is anticipated to be 18 months.
- One, six-lane bridge over Warm Springs Creek and one wildlife overcrossing that spans the six-lane facility) would be constructed in Phase 1.
- Sidewalk would be installed along the south side of the roadway.

2.4.2 Phase 1 of Segment 2 (Design Option 2)

All construction activities would be the same for Phase 1 of Segment 2 under Design Option 2 as Design Option 1, except that two travel lanes in each direction would be paved within the 110-foot wide roadbed, as described above in Section 2.3.2, Roadway Cross Section.

2.4.3 Phase 2 of Segment 2

All other elements of construction activities described in Section 2.2.6 of the SEIR would be completed during Phase 2 of Segment 2 and would include:

- Sidewalk along the north side
- Curb ramps at the north side of the intersections with crosswalks across Clinton Keith Road
- Street lighting along the length of the facility
- Traffic signal at Menifee Road and Porth Road

The duration of construction for Phase 2 is anticipated to be 12 months.

2.4.4 Segment 4

Construction of Segment 4 would not involve phasing. Segment 4 would be constructed as an ultimate six lane facility, and therefore, all elements of construction activities described in Section 2.2.6 of the SEIR would be the same. These include:

- All of the cut and fill grading for the ultimate facility would consist of developing a roadbed, typically 110 feet wide, with the width varying at the intersections
- Six travel lanes would be paved within the 110-foot wide roadbed, as described above in Section 2.3.4, Roadway Cross Section, Segment 4.
- Erosion control (Type BFM with seed mix) and Fiber Rolls would be spread among the remaining graded areas to prevent impacts from storm water run-off.
- Two detention basins would be constructed in Segment 4.

- The duration of construction is anticipated to be 18 months.
- One (six-lane) bridge would be constructed in Segment 4 that spans over French Valley Creek.
- Sidewalk would be installed along the north and south side of the road.

2.5 Right of Way

No changes in ROW impacts are anticipated as a result of the construction phasing. However, since the approval of the 2006 SEIR, conditions involving four parcels (APN 392-340-025, APN 467-230-008, APN 392-330-015, and APN 467-230-015) have changed (Figures 2-1 through 2-4). APN 392-340-025 has been acquired by The County, and negotiations are under way for the acquisition of APN 467-230-015. Additionally, a mobile home residence previously occupied APN 467-230-008, and a trailer resided on APN 392-330-015; however, these residences have since been relocated outside of the Project impact area. Therefore, previously proposed noise walls have been eliminated from the Project description (See Section 3.7, Noise).

2.6 Operations and Maintenance

Information presented in Section 2.2.8, Operations and Maintenance of the SEIR, would remain the same. In general, the portion of the Project located in the City of Murrieta would be maintained by the City and the portion within unincorporated areas and would be maintained by Riverside County. Near the Clinton Keith Road and Menifee Road intersection the City/County limits and the curvature of the roadway are incongruent and create acute angles in the jurisdictional boundaries within the roadway. The City and County have entered into a Construction and Maintenance agreement to create more reasonable maintenance boundaries within this area. Maintenance for this type of facility would include erosion control, cleaning of drainage facilities, occasional pavement repair such as crack sealing and overlays, replacement of damaged signs and/or guardrail due to accidents, replacement of failed electrical equipment, and litter abatement. All maintenance activities would occur within the Project impact area.

2.7 Permits and Approvals

The County has already obtained some permits for the Project which are attached in Appendix B. These include:

- A Clean Water Act Section 401 Water Quality Certification for the west side of the Project, which extends from I-215 to Liberty Lane

- Joint Project Review and Multiple Species Habitat Conservation Plan (MSHCP) consistency from the Regional Conservation Authority (RCA)
- Formal Section 7 Consultation letter from United States Fish and Wildlife Service (USFWS)
- Operation of Law Letter from California Department of Fish and Wildlife (CDFW)

Although the four permits/approvals above have been obtained, there are still several permits/approvals that must be obtained or updated prior to construction of the Project. Table 2-1 identifies permits and approvals required to construct the remaining segments of the Project.

Table 2-1 Permits and Approvals Required for the Proposed Project

Agency	Permit or Approval
Federal	
United States Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit for Segment 2; Section 404 Individual Permit for Segment 4
State	
California Department of Fish and Wildlife	Fish and Wildlife Code Section 1600 et. seq. Streambed Alteration Agreement
California Department of Transportation	Encroachment Permit for impacts to ROW for SR 79
State Water Resources Control Board-San Diego Regional Water Quality Control Board	Amended Clean Water Act Section 401 Water Quality Certification for Segment 2; Clean Water Act Section 401 Water Quality Certification for Segment 4 General Construction National Pollutant Discharge Elimination System Permit/Storm Water Pollution Prevention Plan Best Management Practices
Local	
City of Murrieta	Encroachment Permit

3.0 Environmental Analysis

This section provides an analysis of those resources that may be affected by phasing Segment 2 and/or changes in the existing environment, as described in Sections 1.0, 2.0 and 2.5 above. Each resource analyzed in the SEIR for the Project was considered in an effort to determine if the Project phasing or changes in the existing environment would result in varying impacts and/or mitigation measures. As a result, seven resources are discussed in this SEIR Addendum: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hydrology/Water Quality, Noise and Transportation/Traffic. All other conclusions and proposed measures for the remaining resources presented in the SEIR would not change as a result of the phasing of Segment 2 and/or changes in the existing environment.

Section 3.5 has been added to this SEIR Addendum to address greenhouse gas emissions which is included in the 2012 CEQA Appendix G Environmental Checklist Form (CEQA Checklist). Greenhouse gas emissions were not discussed in the SEIR since the 2004 CEQA Checklist that was used to prepare the SEIR did not include a section on this resource.

The sources of thresholds of significance in this SEIR Addendum are the 2012 CEQA Checklist questions and relevant General Plan policies and agency standards. All CEQA 2012 threshold questions are addressed within each of the Impact Assessment sections of each resource presented below.

For each resource addressed in this section, mitigation measures from the SEIR were evaluated for applicability to the construction of Segments 2 and 4. This section explains which mitigation measures from the SEIR remain applicable and which mitigation measures have been deleted because they no longer apply to the Project. In some cases, mitigation measures from the SEIR have been deleted, if no longer applicable, and in other cases new mitigation measures have been included to address either a shift in impacts or new impacts associated with the changes to the existing environment. The following Sections 3.1 through 3.8 describe the environmental setting, impacts, and mitigation measures for the Project consistent with the requirements of Sections 15125 and 15126 of the CEQA Guidelines.

3.1 Aesthetics

This assessment is based on information provided in the PS&E for the Project and the SEIR.

3.1.1 Updated Environmental Setting

Changes to the existing visual environment since approval of the SEIR include the completion of a residential development located on the north side of Clinton Keith Road near Trois Valley Street (Tract 29484) as shown in Figure 3-1. As part of Tract 29484, Segment 3 of the Project was built from Trois Valley Street to Leon Road.

Even with these improvements, the existing visual character of the Project site remains the same as described in Section 3.15.1 of the SEIR. The visual characteristics include agricultural, rural residential, lowland foothill, and foothill visual characteristics, including a portion of improved roadway.

3.1.1.1 Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities” (CA Public Resources Code [PRC] Section 21001[b]).

3.1.2 Impact Assessment

3.1.2.1 Thresholds of Significance

Would the project:

- a) *Have a substantial adverse effect on a scenic vista?*
- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*
- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*
- d) *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

3.1.2.2 Methodology

To assess changes to impacts on aesthetics, the previous surrounding conditions as described in the SEIR were reviewed against existing conditions and changes in land ownership. A discussion is provided below in Section 3.1.3, Mitigation Measures.

3.1.2.3 Updated Environmental Impacts

Construction

Construction impacts on aesthetics would remain the same as presented in Section 3.15.2 of the SEIR. Construction of the Project likely would result in adverse aesthetic impacts on residences with

foreground views of the Project site; however, these impacts are not considered to be significant because they are temporary.

Operation

Phasing the Project would not change or create new adverse impacts on scenic vistas or resources or the visual character of the Project site. New adverse impacts related to light or glare would not occur as a result of phasing the Project.

The recently constructed Tract 29484 would not change the conclusions presented in Section 3.15.2 of the SEIR, which states that operation of Clinton Keith Road would change the visual character of the area from rural residential, lowland foothills, and agricultural to that of an urban arterial highway. It also states that the Project improvements would result in a long-term significant adverse aesthetic impact on residents who have views of the Project site.

3.1.3 Mitigation Measures

Mitigation measure A-1, as described in the SEIR, has been modified, as described below, due to changes in land ownership, which has resulted in the loss of sensitive residential viewers. A Landscape Plan will still be implemented for all design options and phases of Segments 2 and 4; however, an analysis of a viewshed map is no longer needed, since there are no sensitive residential viewers. The previously identified sensitive residential viewers in the SEIR are shown in Figure 3-1 as properties A through D. Visual impacts to these four properties have been mitigated as follows:

- Property A in Segment 2 has been acquired by the County and is no longer occupied.
- Property B in Segment 2 used to contain a mobile home residence that has since been relocated.
- Property C in Segment 4 will be acquired by the County prior to construction.
- The trailer located on property D in Segment 2 has been relocated.

With acquisition and removal of these existing sensitive residential viewers, specific property landscape plans and the need for sound walls, as described in A-1 in the SEIR, has been eliminated; therefore, A-1, as described below, has been modified.

Mitigation measure T-1, as described in the SEIR, has been revised since all slopes will be graded at a 2:1 ratio and grading to replicate existing topography, as previously identified as part of T-1, is not feasible due to the large cuts and amount of fill material required for the Project. Measure T-1 has also been changed to GEO-1 to avoid confusion with Traffic measure T-1 in Section 3.8.3.

Additionally, this measure was revised to clarify the use of removed boulders within the Project

limits, and is described below. The revisions made to T-1 (GEO-1) provides equivalent mitigation as the mitigation measure T-1 originally proposed in the SEIR.

Mitigation Measure A-1 (Modified)

A-1 Implementation through phasing of construction activities

Phase 1 Implementation

Phase 1 aesthetic plans, for both design options of Segment 2 will include seeding the future roadbed (where grading occurs for the ultimate facility adjacent to the pavement installed with Phase 1), side slopes and back slopes with native and naturalized grasses and shrubs, together with installation of occasional rock outcroppings that have been repurposed from the roadway excavation. This treatment replicates the visual characteristics throughout the Project alignment.

Phase 2 Implementation and Construction of Segment 4

A final design Landscape Plan will be completed as part of Phase 2 of Segment 2 and for Segment 4. It will be approved by the City of Murrieta and County of Riverside. The landscape plan will be implemented during the final build out of the Clinton Keith Road Extension Project.

Mitigation Measure GEO-1 (Revised and changed from T-1)

During final design of the Project, the County will ensure that the following recommendations are incorporated for Clinton Keith Road and are implemented by the Project contractor during construction:

- All grading and landform modifications will be conducted in conformance with state-of-the-practice design and construction parameters. These typical standard minimum guidelines are set forth in Chapter 70 of the *Uniform Building Code*
- All graded slopes will be constructed to be grossly and surficially stable
- Boulders removed during grading will be reused, as feasible, to replicate the key features of the local topography

3.1.4 Level of Significance after Mitigation

Sensitive residential viewers adjacent to the Project have been or will be removed, and mitigation measures A-1 and GEO-1 will be incorporated during construction of Segments 2 and 4, as stated in Section 3.15.4 of the SEIR. The Project would still result in a significant long-term operational aesthetic impact after mitigation. Operation of Clinton Keith Road would change the visual character of the area from rural residential, lowland foothills, and agricultural to that of an arterial highway. The phasing of Segment 2 and construction of the ultimate six lane facility within Segments 2 and 4

of the proposed Project would still result in a long-term significant adverse aesthetic impact on the traveling public or residents adjacent to the Project area who have views of the proposed Project site, as stated in the SEIR.

3.2 Air Quality

This assessment is based on information provided in the PS&E for the Project, a Traffic Operations Analysis (LSA 2015) and the SEIR.

3.2.1 Updated Environmental Setting

In terms of air quality, the environmental setting of the Project has not changed from that described in Section 3.10.1, Updated Environmental Setting, of the SEIR. The Project is still within the South Coast Air Basin and is in the South Coast Air Quality Management District (SCAQMD).

SCAQMD operates a network of ambient monitoring stations in the South Coast Air Basin (SCAB), which includes Riverside County, where the Project is located. The monitoring station closest to the project area is the Lake Elsinore-W Flint Street Station. Since the existing air quality data presented in the SEIR were monitored during 2001 to 2004, the data has been updated in this analysis. The maximum pollutant levels measured, and the number of days each year the ambient concentrations were above the federal and California standards from 2009 to 2013, are presented in Table 3-1. As shown in Table 3-1, ozone and PM_{2.5} concentrations exceeded the federal and California standards during each of the 5 years. The PM₁₀ concentrations also exceeded the 24-hour California standards during the last 5 years. The federal PM₁₀ standard, however, was not exceeded. CO and NO₂ concentrations did not exceed federal or California standards in the 5 years.

Table 3-1 Summary of Maximum Monitored Ambient Air Quality Near the Project Study Area

Pollutant (Monitoring Station)	Year	Maximum Concentration (ppm)		Number of Days Standard Exceeded	
		1 hour	8 hour	State 1 hour/8 hour	Federal 1 hour/8 hour
CO	2009	1.0	0.73	0/0	0/0
	2010	1.1	0.67	0/0	0/0
	2011	2.7	0.67	0/0	0/0
	2012	2.7	0.52	0/0	0/0
	2013	3.3	^a	0/0	0/0

Table 3-1 Summary of Maximum Monitored Ambient Air Quality Near the Project Study Area

Pollutant (Monitoring Station)	Year	Maximum Concentration (ppm)		Number of Days Standard Exceeded	
		1 hour	8 hour	State 1 hour/8 hour	Federal 1 hour/8 hour
Ozone	2009	0.128	0.105	24/65	NA/35
	2010	0.107	0.092	15/40	NA/24
	2011	0.133	0.107	19/45	NA/28
	2012	0.111	0.090	10/32	NA/17
	2013	0.102	0.090	6/25	NA/12
Pollutant	Year	Maximum Concentration (ppm)		Number of Days Standard Exceeded	
		1-hour	Annual Arithmetic Mean	State 1 hour	
NO ₂	2009	0.055	0.013	0	
	2010	0.051	0.010	0	
	2011	0.050	0.009	0	
	2012	0.048	0.010	0	
	2013	0.047	a	0	
Pollutant	Year	Maximum Concentration (µg/m ³)		Number of Days Standard Exceeded	
		24 hour	Annual Arithmetic Mean	State 24 hour	Federal 24 hour
PM ₁₀	2009	75.2	28	a	0
	2010	54.4	23.7	a	0
	2011	99.8	24.7	a	0
	2012	65.5	21.9	a	0
	2013	112.3	25	a	0
PM _{2.5}	2009	34.2	13	NA	a
	2010	29.8	13	NA	a
	2011	40.7	13	NA	a
	2012	24.9	11	NA	a
	2013	37.4	11	NA	a

Source: ARB <http://www.arb.ca.gov/adam/topfour/topfourdisplay.php> and United States Environmental Protection Agency (USEPA) http://www.epa.gov/airquality/airdata/ad_rep_mon.html

NA = not applicable.

The Lake Elsinore-W. Flint Street Station is located at 506 West Flint Street, Lake Elsinore, CA.

^a There was insufficient (or no) data available to determine this value.

Area designations under national and state air quality have also changed since the 2006 SEIR.

Updated attainment status is summarized in Table 3-2. A region that is meeting the air quality standard for a given pollutant is designated as being in attainment for that pollutant. If the region is not meeting the air quality standard, then it is designated as being in nonattainment for that pollutant.

Areas that were previously designated as nonattainment areas but have recently met the standard are designated as maintenance areas. The 2014 State Area Designation effective in July 2014 and the federal designations as of January 30, 2015 for Riverside County, where the project is located, are presented in Table 3-2.

Table 3-2 Attainment Designations of the Project Area (Riverside County)

Pollutant	State Designation	Federal Designation
Ozone	Nonattainment	Extreme Nonattainment
PM ₁₀	Nonattainment	Attainment/Maintenance (1987 Standard)
PM _{2.5}	Nonattainment	Moderate Nonattainment (2006 Standard)
CO	Attainment	Attainment/Maintenance
NO ₂	Attainment	Attainment/Maintenance (1971 Standard) Attainment/unclassified (2010 Standard)
Pb	Attainment	Attainment
All Others	Attainment/Unclassified	Attainment/Unclassified

Source: ARB, <http://www.arb.ca.gov/regact/2013/area13/area13fro.pdf>. Accessed February 2015.
USEPA, www.epa.gov/air/oaqps/greenbk/index.html, federal designation as of January 2015.

3.2.2 Impact Assessment

This section is being prepared to verify that phasing of construction would not change the air quality impact conclusions made in Section 3.10.2, Impact Assessment, of the SEIR.

3.2.2.1 Thresholds of Significance

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?*

3.2.2.2 Methodology

The analysis provided in this impact assessment evaluates the long-term and temporary impacts associated with the phasing of construction of Segment 2 in terms of level of emissions, and the potential to cause localized CO and PM hot spots. The analysis discusses how the impacts associated

with the proposed construction phasing compares to those impacts already identified throughout Section 3.10, Air Quality, of the SEIR.

3.2.2.3 Updated Environmental Impacts

Air Quality Standards

Long-term Impacts

Although Segment 2 would be completed in two phases, and Phase 1 of Segment 2 would be either a two-lane or four-lane facility between Whitewood Road and Trois Valley Street, Segment 2 would eventually be built out as described in the Southern California Association of Governments Regional Transportation Plan (RTP) and the Federal Transportation Improvement Plan (FTIP), Project RIV011236. Because the Project is included in a conforming RTP and FTIP, it is consistent with the State Implementation Plan (SIP) for attaining and maintaining the national and state ambient air quality standards of the region. Phasing of construction would not affect the regional impact conclusion presented in the SEIR.

Localized adverse air quality impacts, especially CO hot spots, often occur at locations with traffic congestion. A CO hot spot analysis was performed in the SEIR for the intersections that would operate as part of Phase 2 (ultimate Project). The intersection at Clinton Keith Road and Antelope Road (Clinton Keith/Antelope) and Clinton Keith Road and Meadowlark Lane [Whitewood Road] (Clinton Keith/Meadowlark [Whitewood Road]) were predicted to have the worst-case LOS, delay, and traffic volume in 2030, and were included in the air dispersion modeling to determine the level of impacts. The SEIR analysis indicated that the anticipated vehicle emissions at Clinton Keith/Antelope and Clinton Keith/Meadowlark [Whitewood Road] intersections would not cause violations of the national ambient air quality standards (NAAQS) or the California ambient air quality standards (CAAQS) for CO.

To evaluate whether the intersections of Phase 2 would cause violations of the CO NAAQS and CAAQS, the updated traffic conditions of the intersection with the highest traffic volume and highest delay from the Traffic Operation Analysis (LSA, 2015) were compared to the traffic conditions of the intersections modeled in the SEIR. According to the updated traffic analysis and as shown in Table 3-3, the traffic volume and delay at SR 79/Clinton Keith Road-Benton Road in 2035 with the Phase 2 six-lane build-out would have higher traffic volumes than the intersections originally modeled in the SEIR. Therefore, a CO hot spot air dispersion modeling was performed for the SR79/Clinton Keith Road-Benton Road intersection to determine if this intersection would cause any violation to the CO NAAQS and CAAQS in 2035.

Table 3-3 Comparison of Vehicle Volume and LOS of the Worst-Case Intersections of Phase 2

Scenarios	Intersection	LOS	volume	Delay (s/vehicle)
SEIR Worst-case	Clinton Keith Road/Antelope Road	E	5940	62
SEIR Worst-case	Clinton Keith Road/Meadowlark Lane	D	7150	51
Phase 2, 6-lane, 2035	SR-79/Clinton Keith Road-Benton Road	D	8029	51

Source: Traffic Operation Analysis (LSA, 2015)

CO emissions from vehicles at the intersections were estimated by using EMFAC2011 (CARB, 2013). The estimated CO emissions were modeled using the CAL3QHC dispersion model to obtain the CO concentrations near the intersection. While the 1-hour CO concentrations were modeled based on the peak hour emission rates, the 8-hour concentrations of CO were obtained by multiplying the highest peak hour CO concentrations by a persistence factor of 0.7, as recommended in the CO Protocol. The modeled CO concentrations were combined with the background CO concentrations from the closest air quality monitoring stations, and the sums were compared to the applicable NAAQS and CAAQS.

Summaries of the predicted 1-hour and 8-hour CO concentrations for SR 79/Clinton Keith Road-Benton Road in 2035 are shown in Table 3-4. The CO modeling results demonstrated that the predicted CO concentrations at the SR 79/Clinton Keith Road-Benton Road in 2035 after the 6-lane build-out (Phase 2) will be below the NAAQS and CAAQS. Therefore, phasing Project construction would not cause or contribute to any localized CO violations during Phase 2 operations. The intersection operation after the six-lane build-out would not change the less-than-significant air quality impacts conclusion described in Section 3.10.2 of the SEIR.

Table 3-4 Maximum Predicted CO Impacts – 6-Lane at Build-out (Phase 2)

Intersection	1-hr CO Concentration (ppm)	8-hr CO Concentration (ppm)
SR-79/Clinton Keith Road-Benton Road	1.4	1.1
NAAQS/CAAQS	35/20	9.0/9.0

Notes:

Concentrations include the maximum recorded 1-hr (0.8 ppm) and 8-hr (0.7 ppm) background CO values from the Lake Elsinore monitoring station for years 2010 through 2012 as shown on the California ARB ADAM website (<http://www.arb.ca.gov/adam/>). 8-hr modeled CO impacts include a 0.7 persistence factor.

In conclusion, the long term air quality impacts of the Segment 2 phasing would remain the same as discussed in the SEIR. Responses to all of the CEQA questions as listed in Section 3.10.2, Impact Assessment, of the SEIR for operational, permanent impacts were less than significant. Phasing of construction would not change these CEQA determinations.

Interim Construction Impacts

Temporary impacts discussed in Section 3.10.2, Impact Assessment, Construction, of the SEIR, state that the maximum daily NO_x emissions would create a significant, unavoidable impact to air quality. The conclusion about NO_x emissions was based on daily activities associated with excavation and site preparation of the ultimate six-lane facility. Phase 1 includes similar grading and site preparation activities as Phase 2, which would construct the six-lane facility; therefore, the maximum daily emissions during Phase 1 would be similar to those analyzed in the SEIR. Therefore, the air quality impact conclusions regarding maximum daily NO_x emissions would not change and the mitigation measures would be implemented during Phase 1 and Phase 2 construction to reduce the emissions. Phasing construction is not anticipated to cause new adverse air quality impacts compared to those evaluated in the SEIR for the Project.

Interim Operation Impacts

As discussed above in Section 3.2.2.3, long-term Project operational emissions impacts after completion of the Segment 2 Phase 2 construction would remain the same as described in the SEIR, since that would result in the ultimate six lane facility. Phase 1 operation of Segment 2 would cause temporary air quality impacts before Phase 2 is completed. Phase 1 would have two lanes or four lanes in operation, while the Phase 2 would have 6-lanes in operation. Therefore, Phase 1 would have lower vehicle miles traveled (VMT) than Phase 2. The temporary vehicle emissions from the interim Segment 2 Phase 1 operation would be similar, or less, compared to what were analyzed in the SEIR, since the SEIR analyzed the ultimate six-lane facility. In addition, as discussed in the sections below, the interim operation of the Segment 2 Phase 1 and long-term operation of the Segment 2 Phase 2, as updated in the Traffic Operation Analysis (LSA, 2015), would not cause any new violations of CO or PM₁₀/PM_{2.5}.

CO Hot Spots: To evaluate whether the intersections of Phase 1 would cause violations of the CO NAAQS and CAAQS, the Phase 1 traffic conditions of the intersections with the highest traffic volume and highest delay from the Traffic Operation Analysis (LSA, 2015) were compared to the traffic conditions of the intersections modeled in the SEIR. As shown in Table 3-5, the operation conditions of the Phase 1 operation, including both the 2-lane and 4-lane options, would have the same or better LOS, less delay, and less traffic volume than the two intersections modeled in the

SEIR. Because the Clinton Keith/Antelope and Clinton Keith Road/Meadowlark Lane [Whitewood Road] intersections have demonstrated compliance with the NAAQS and CAAQS for CO, operation of the worst-case intersections of SR 79 /Max Gilliss Boulevard and SR 79/Clinton Keith Road-Benton Road of Phase 1 would also be expected to comply with the CO standards, resulting in insignificant localized CO impacts. Under Phase 1, the other intersections under the 2-lane and 4-lane options would operate at better LOS and less vehicle volume and delay than the SR 79 /Max Gilliss Boulevard and SR 79/Clinton Keith Road-Benton Road intersections, so the air quality impacts expected for these intersections would be even less. Therefore, Phase 1 would not cause new violations of the CO ambient air quality standards, or exacerbate current exceedances of the NAAQS and CAAQS. The interim air quality impacts of CO emissions from intersections from Phase 1 would be less than significant.

Table 3-5 Comparison of Vehicle Volume and LOS of the Worst-Case Intersections

Options	Intersection	LOS	volume	Delay (s/vehicle)
SEIR Worst-case	Clinton Keith Road/Antelope Road	E	5940	62
SEIR Worst-case	Clinton Keith Road/Meadowlark Lane	D	7150	51
Phase 1, 2-lane Option, 2018	SR-79 /Max Gilliss Boulevard, AM	D	4079	48
Phase 1, 2-lane Option, 2018	SR-79/Clinton Keith Road-Benton Road, PM	D	4493	36
Phase 1, 4-lane Option, 2018	SR-79 /Max Gilliss Boulevard, AM	D	4043	47
Phase 1, 4-lane Option, 2018	SR-79 /Max Gilliss Boulevard, PM	D	4190	36

Source: Traffic Operation Analysis (LSA, 2015)

PM₁₀/PM_{2.5} Hot Spots: To demonstrate that Phase 1 is unlikely to cause a new violation or contribute to an existing violation of the PM_{2.5} and PM₁₀ standards, the Project was evaluated according to the criteria listed in Federal Highway Administration (FHWA) and United States Environmental Protection Agency (USEPA) *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas* (FHWA and USEPA, 2013).

According to this guidance, the first step in the PM₁₀ hot spot evaluation is to determine if the Project is a project of air quality concern. 40 CFR 93.123(b)(1) specifies that projects of air quality concern are certain highway and transit projects that involve significant levels of diesel vehicle traffic, such as major highway projects and projects at congested intersections that handle significant diesel traffic (eg., increasing the annual average daily traffic (AADT) by 125,000, or 10,000 diesel vehicles), or any other project that is identified in the particulate matter with aerodynamic diameter less than 2.5 microns (PM_{2.5}) or PM₁₀ State Implementation Plan as a localized air quality concern.

There would not be a significant amount of diesel traffic on Clinton Keith Road or at any of the intersections in the study area under Phase 2 since the ultimate Clinton Keith Road six lane facility does not qualify as a project of air quality concern based on the estimated AADT for the six lane facility. Phase 1 is not expected to change the vehicle fleet mix in the Project area or increase diesel vehicle travel. Therefore, Phase 1 and Phase 2 of Segment 2 would not be a project of air quality concern, and it would not cause new violations or exacerbate current exceedances of the NAAQS and CAAQS for PM₁₀ or PM_{2.5}. In conclusion, the localized air quality impact would be insignificant.

Sensitive Receptors

The SEIR states that NO_x emissions would temporarily expose sensitive receptors, including Vista Murrieta High School and nearby residents, to this pollutant during construction. Similarly, Phase 1 construction has the potential to expose the nearby residents to the temporary construction emissions. Localized CO and PM₁₀/PM_{2.5} hot spot analysis indicated that the Project operation during Phase 1 would not cause a localized CO or PM₁₀/PM_{2.5} hot spot in the Project area. Therefore, the emissions of criteria pollutants would not cause long-term exposure to nearby receptors to substantial criteria pollutant concentrations during Phase 1 operation. The conclusion of air quality impacts to the nearby sensitive receptors would remain the same as described in the SEIR.

Objectionable Odors

Construction of Phase 1 for Segment 2 would occur in an area that is not densely populated. Therefore, objectionable odors caused by construction, such as diesel fumes from equipment, are not expected to affect a substantial number of people and would not be a significant impact. The conclusion of odor impacts of the Project would remain the same as described in the SEIR.

3.2.3 Mitigation Measures

Because the air quality impact conclusions with construction phasing would remain the same as described in the SEIR, the same mitigation measures apply. The mitigation measures listed for the Project in Section 3.10.3, Mitigation Measures, of the SEIR, would be implemented during construction of both Phase 1 and Phase 2 of Segment 2 and construction of Segment 4 to minimize the emission impacts. They are as follows:

Mitigation Measure AQ-1

The County will require the Contractor to comply with SCAQMD Rule 403 (as amended June 3, 2005) to control dust during all construction activities. Typical control measures may include stabilizing disturbed soil throughout the site or directing construction traffic over established haul roads.

Mitigation Measure AQ-2

The County will require the Contractor to maintain all construction equipment used for the site preparation, grading, and construction of the Project consistent with the manufacturer's specifications.

Mitigation Measure AQ-3

The County will require the Contractor to discontinue all site preparation, grading and construction activities during first- and second-stage smog alerts as announced by the SCAQMD.

Mitigation Measure AQ-4

During periods of high winds in excess of 40 miles per hour, The County will require the Contractor to terminate all site preparation, grading and construction activities that will disturb the ground surface.

Mitigation Measure AQ-5

The County will require the Contractor to prevent diesel trucks from idling longer than 2 minutes.

3.2.4 Level of Significance after Mitigation

The conclusions stated in Section 3.10.4 of the SEIR would not change as a result of phasing construction for Segment 2. It is anticipated that NO_x emissions during construction of Segments 2 and 4 would be significant after mitigation based on excavation and site preparation. All other air quality impacts would not be significant after mitigation.

3.3 Biological Resources

This assessment is based on information provided in the PS&E for the Project, the Supplemental Jurisdictional Delineation Reports (CH2M HILL 2013; ICF 2014), an updated Habitat Assessment (ICF 2013), and the SEIR (CH2M HILL 2006).

3.3.1 Updated Environmental Setting

The environmental setting regarding biological resources is being updated because of changes to the existing biological environment since the approval of the SEIR. Specifically, eight additional jurisdictional water features were mapped during updated wetland delineation studies performed in April 2011, August through October 2013, and January 2014, within the Study Area of Segments 2 and 4, which is described in Section 3.3.1.2, Affected Environment. Additionally, the limits of the jurisdictional water features presented in the SEIR have shifted. A total of 16 jurisdictional water features are under the jurisdiction of the United States Army Corps of Engineers (USACE), CDFW,

and the Regional Water Quality Control Board (RWQCB) within the Study Area (Figure 3-2). The biological environment throughout the remainder of the Study Area has not changed; therefore all other information included in Section 3.5.1, Biological Resources, of the SEIR still pertains to the Project. This section focuses only on biological resources within the 16 jurisdictional water features identified within Segments 2 and 4, and does not discuss impacts to biological resources throughout the entire project impact area, where jurisdictional water features do not occur.

3.3.1.1 Regulatory Setting

Waters of the United States

USACE regulates discharges of dredged or fill material into waters of the United States (WoUS) pursuant to Section 404 of the Clean Water Act (CWA). These waters include wetland and non-wetland waters that meet specific criteria. USACE jurisdiction extends to waters of the U.S. that exhibit a connection to interstate commerce. This connection may be direct; through a tributary system linking a stream channel with a traditional navigable water (TNW) used in interstate or foreign commerce; or may be indirect, through a nexus identified in the Corps regulations. The following definition of waters of the U.S. is from 33 Code of Federal Regulations (CFR) 328.3:

“The term waters of the United States means:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce...;*
- (2) All interstate waters including interstate wetlands;*
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams) ... the use, degradation or destruction of which could affect interstate or foreign commerce...;*
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition; and*
- (5) Tributaries of waters defined in paragraphs (a) (1)–(4) of this section.”*

Within non-tidal waters, in the absence of adjacent wetlands, the extent of USACE jurisdiction is defined by the Ordinary High Water Mark (OHWM). In 33 CFR 328.3, the OHWM is defined as the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, or the presence of litter and debris” (USACE 1987). Generally,

USACE considers the OHWM to be the elevation to which water flows at a 2-year frequency (i.e., 50 years out of 100 years). Typically, in this area, the OHWM is indicated by either the presence of an incised streambed with defined bank shelving or a change in vegetation type.

In *Solid Waste Agency of Northern Cook County (SWANCC) versus Army Corps of Engineers*, 531 U.S. 159 (2001), the Supreme Court upheld a decision that USACE could not regulate isolated, intrastate waters that do not bear a significant nexus to TNWs (at least in most cases). On January 15, 2003, the USEPA issued formal guidance for USACE in determining jurisdiction in light of the SWANCC ruling. In the joint memorandum, USEPA concluded that USACE field staff should not assert jurisdiction over isolated waters that are both intrastate and non-navigable, where the only basis for the assertion is the Migratory Bird Rule. Where a wetland is found to be adjacent to a navigable water or tributary to navigable water, USEPA concluded that USACE field staff should assert jurisdiction (USEPA 2003).

In 2006, the U.S. Supreme Court issued an opinion regarding the extent of USACE jurisdiction over certain waters under Section 404 of the CWA. The *Rapanos-Carabell* consolidated decisions addressed the question of jurisdiction over attenuated tributaries to WoUS, as well as wetlands adjacent to those tributaries. On June 5, 2007, the USACE and USEPA issued guidance related to the *Rapanos* decision, with clarifying guidance issued on December 2, 2008. The guidance identifies those waters over which the agencies (USACE and USEPA) will assert jurisdiction categorically and on a case-by-case basis. To summarize, USACE will continue to assert jurisdiction over the following features.

- TNWs and their adjacent wetlands.
- Non-navigable tributaries of TNWs that are relatively permanent waters (RPWs) (e.g., tributaries that typically flow year-round or have a continuous flow at least seasonally [i.e., typically 3 months]) and wetlands that directly abut such tributaries (i.e., not separated by uplands, berm, dike, or similar feature).

For non-RPWs, the agencies will determine whether a “significant nexus” exists with a TNW using the data found in an Approved Jurisdictional Determination (JD) Form. The purpose of the significant nexus evaluation is to determine whether the existing functions of a tributary affect the chemical, physical, and/or biological integrity of a downstream TNW. Tributary characteristics that are considered when evaluating whether a significant nexus exists include volume, duration, and frequency of flow; proximity to a TNW; and hydrologic and ecologic functions performed by the

tributary and all of its adjacent wetlands. Based on that information, the agencies may assert jurisdiction over the following features.

- Non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally
- Wetlands adjacent to such tributaries
- Wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary

The agencies will typically not assert jurisdiction over the following features.

- Swales or erosional features (e.g., gullies and small washes characterized by low volume and infrequent or short-duration flow)
- Ditches (including roadside ditches) excavated wholly in uplands and draining only uplands that do not carry a relatively permanent flow of water

On April 27, 2011, the USACE and USEPA issued draft guidance for determining jurisdiction under the CWA (USACE 2011). The guidance supersedes the previous guidance from 2003 regarding SWANCC (68 Federal Register 1991–1995) and 2007-2008 *Rapanos* guidance. This document reiterated the guidance issued under the *Rapanos* decision, asserting that the following waters are protected by the CWA.

- Traditional navigable waters
- Interstate waters
- Wetlands adjacent to either traditional navigable waters or interstate waters
- Non-navigable tributaries to traditional navigable waters that are relatively permanent (meaning they contain water at least seasonally)
- Wetlands that directly abut relatively permanent waters

The guidance further clarifies the criteria for defining TNWs, primarily consistent with previous guidance. In addition, a significant nexus evaluation is required for the “other waters” category of the regulations. The guidance divides these waters into two categories (those that are physically proximate to other jurisdictional waters and those that are not) and discusses how each category should be evaluated.

Finally, the guidance reiterated that certain aquatic areas are generally not considered WoUS.

- Wet areas that are not tributaries or open waters and do not meet the agencies' regulatory definition of wetlands
- Waters excluded from coverage under the CWA by existing regulations
- Waters that lack a significant nexus where one is required for a water to be protected by the CWA
- Artificially irrigated areas that would revert to upland should irrigation cease
- Artificial lakes or ponds created by excavating and/or diking dry land and used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing
- Artificial reflecting pools or swimming pools created by excavating and/or diking dry land
- Small ornamental waters created by excavating and/or diking dry land for primarily aesthetic reasons
- Water-filled depressions created incidental to construction activity
- Groundwater drained through subsurface drainage systems

Erosional features (gullies and rills), swales, and ditches that are not tributaries or wetlands

Regional Water Quality Control Board

The California State Water Resources Control Board (SWRCB) is responsible for the administration of Section 401 of the CWA. Typically, the areas subject to RWQCB jurisdiction coincide with those of USACE. RWQCB also asserts authority over waters of the State (WoS) under waste discharge requirements pursuant to the Porter-Cologne Act.

The Project site is in the Santa Margarita Hydrologic Unit. The Basin Plan includes beneficial use designations for Warm Springs Creek and French Valley Creek. The beneficial uses include the following designations: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), Industrial Process Supply (PROC), Non-Contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), and Wildlife Habitat (WILD). Contact Water Recreation (REC 1) is a potential beneficial use.

California Department of Fish and Wildlife

Section 1600 of the Fish and Game Code regulates the alteration of the bed, bank, or channel of a stream, river, or lake, including dry washes. Generally, CDFW asserts jurisdiction up to the top of bank cuts, or to the outside of any riparian vegetation associated with a watercourse. Section 1600 of the Fish and Game Code regulates the alteration of the bed, bank, or channel of a stream, river, or

lake, including dry washes. Activities that have the potential to affect jurisdictional areas can be authorized through issuance of a Streambed Alteration Agreement (SAA). The SAA specifies conditions and mitigation measures that would minimize impacts to riparian resources from proposed actions.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP was adopted June 17, 2004. This is a comprehensive, multijurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their habitats in Western Riverside County. The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973 as well as a Natural Communities Conservation Plan (NCCP) under the state NCCP Act of 2001. USFWS issued the permit (TE088609-0) for the MSHCP on June 22, 2004. The CDFW also issued NCCP Approval and Take Authorization for the MSHCP as per Section 2800, et seq., of the California Fish and Game Code. As indicated in these permits, the MSHCP provides for *take* of covered plant and wildlife species identified within the MSHCP area based on the conditions set forth in the special terms and conditions of the permit; the Implementation Agreement; and the MSHCP, including its associated volumes and the errata letter dated May 21, 2004, in that order.

The Project received an MSHCP Consistency Determination from USFWS in February 2007 (Appendix B). As part of the consistency determination, the Project prepared a Determination of Biologically Equivalent or Superior Preservation (DBESP) for riparian/riverine resources as defined in the MSHCP. The additional jurisdictional water features are considered riparian/riverine resources, therefore an updated DBESP will be required.

3.3.1.2 Affected Environment

The affected environment for the 16 jurisdictional features described in this section includes the permanent impact area (ROW and permanent easements), as well as, temporary impact areas associated with temporary construction easements required for construction of Segment 2 (both Design Option 1 and Design Option 2) and Segment 4, plus an additional 100-foot study area buffer where the potential for secondary direct effects or up/downstream indirect effects to jurisdictional resources could occur (Figure 3-2). This is referred to as the Study Area.

Natural Communities

The 16 jurisdictional water features described throughout this section contain sensitive natural communities, which include wetlands and riparian communities. Section 3.5.1.2.1 and 3.5.2.2.1 of the SEIR included discussions on riparian communities and wetlands within the Project footprint;

however, this section provides information based on the updated jurisdictional delineations, which include additional riparian and wetland areas than those originally described in the SEIR. Impacts to these types of natural communities would require permits from the permitting agencies, and are discussed further in Section 3.3.2.3, Wetlands and other Waters below. An overview is presented in this section.

Habitat types within the 16 jurisdictional areas were characterized according to Sawyer and Keeler-Wolf (1995), with modifications. Habitat types include the following:

Mulefat Series – This series occurs along streambanks with mulefat (*Baccharis salicifolia*) in pure or mixed stands with coyote bush (*B. pilularis*), willows (*Salix* spp.), California sage (*Artemisia californica*), or mugwort (*A. douglasiana*).

Arroyo Willow Series – This series is found along streamside habitats, streambanks, and areas adjacent to the wetland. It is dominated by arroyo willow (*Salix lasiolepis*) in dense stands. Additional understory species include mulefat, California sagebrush, mugwort, giant wild rye (*Leymus condensatus*), and Mexican elderberry (*Sambucus mexicana*). Canopy coverage within this series ranges from 75 to 100 percent. The tree canopy ranges from 15 to 25 feet high.

Cattail Series – This series occurs in permanently, seasonally, or irregularly flooded wetlands and is dominated by cattail (*Typha* spp.) sometimes in pure stands. Stands of nearly pure cattail, or cattail mixed with willows (*Salix* spp.) are found within the Study Area of the Project site.

Open Water – Slow Moving – This habitat type dominates portions of the wetland areas. Dominant plants may include submerged filamentous algae or other submerged plants.

Disturbed Seasonal Wetland Series – Low terraces adjacent to perennial portions of a drainage within the Study Area support non-native seasonal wetland species including brass buttons (*Cotula coronopifolia*), rabbit's foot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and other wetland and upland species. This area has moist soils and floods during high flow events.

California Annual Grassland Series – This extensive series is composed of many alien and native annual species; composition varies among stands. Species present within the Project site include ripgut brome (*Bromus rigidus*), soft chess (*B. mollis*), red brome (*B. rubens*), black and/or field mustard (*Brassica nigra*; *Hirschfeldia incana*), filaree (*Erodium* spp.), fiddleneck (*Amsinckia* sp.), and common barley (*Hordeum vulgare*). Additional upland exotic trees were present in some areas, including eucalyptus (*Eucalyptus* spp.).

Alkali Sacaton Series – Many regional descriptions include this series in an alkali meadows category. Meadows of this habitat can be dominated by this or other species, so several series handle this variety such as ashy ryegrass series, creeping ryegrass series, saltgrass series, and spikerush series. Stands of this series form a fine scale mosaic with Iodine bush (*Allenrolfea occidentalis*), Bush seepweed (*Suaeda nigra*), and California annual grassland series, and with Saltbrush series at a coarser scale. Species present within the Study Area include alkali heath (*Frankenia salina*), yerba mansa (*Anemopsis californica*), stinging nettle (*Urtica dioica*), saltcedar (*Tamarix ramosissima*), southern cattail (*Typha domingensis*), annual beard grass (*Polypogon monspeliensis*), salt grass (*Distichlis spicata*), Mexican rush (*Juncus mexicanus*), cocklebur (*Xanthium strumarium*), and curly dock (*Rumex crispus*).

MSHCP Riparian/Riverine Resources

Riparian/riverine habitats, as described in MSHCP Section 6.1.2, encompass a broader range of habitats than those strictly defined by the USACE in the Corps of Engineers Wetlands Delineation Manual (USACE 1987) and various supplements and guidance. Riparian/riverine habitats are described as “habitats dominated by trees, shrubs, persistent emergents, or emergent mosses or lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year” (RCIP 2003). This definition of riparian/riverine areas also states: “With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.”

Therefore, 15 of the 16 mapped jurisdictional water features would meet the criteria of an MSHCP riparian/riverine resource. Basin 1, located to the west of Trois Valley Street (Figure 3-2), is an artificially created water body and would not be included as an MSHCP riparian/riverine resource. Table 3-6 shows a summary of MSHCP Riparian/Riverine areas within the Study Area of Segments 2 and 4.

Table 3-6 MSHCP Riparian/Riverine Areas within the Study Area of Segments 2 and 4

Feature	MSHCP Riverine (Unvegetated Streambed) (acres)	MSHCP Riparian (acres)
Segment 2		
Drainage 1	0.178	--
Drainage 2-Warm Springs Creek	--	1.278
Drainage 3	0.041	0.436

Feature	MSHCP Riverine (Unvegetated Streambed) (acres)	MSHCP Riparian (acres)
Drainage 4*	0.013	--
Drainage 5*	0.074	--
Drainage 7	0.049	--
Drainage 8*	0.039	--
Drainage 9	0.013	0.0432
Drainage 10	0.009	--
Drainage 14*	0.021	--
Total	0.437	1.76
Segment 4		
Drainage 11	0.054	--
Drainage 12*	0.009	--
Drainage 13	<0.001	--
Drainage 15	0.179	1.178
Drainage 16-French Valley Creek*	2.027	4.384
Total	2.27	5.56

*Indicates features that include inferred areas. See Section 3.3.1.2, Wetlands and Other Waters, below, for a full description of inferred areas by feature.

Impacts regarding MSHCP riparian/riverine resources are further described in Section 3.3.2.3, Wetlands and other Waters.

As stated in Section 6.1.2 of the MSHCP, protection of riparian/riverine areas is important to conservation of the following listed species:

Amphibians

- Arroyo toad
- Mountain yellow-legged frog
- California red-legged frog

Birds

- Bald eagle
- Least Bell's vireo
- Peregrine falcon
- Southwestern willow flycatcher
- Western yellow-billed cuckoo

Fish

- Santa Ana sucker

Invertebrates – Crustaceans

- Riverside fairy shrimp
- Vernal pool fairy shrimp

Plants

- Brand's phacelia
- California Orcutt grass
- California black walnut
- Coulter's matilija poppy
- Engelmann oak
- Fish's milkwort
- Graceful tarplant
- Lemon lily
- Mojave tarplant
- Mud nama
- Ocellated Humboldt lily
- Orcutt's brodiaea
- Parish's meadowfoam
- Prostrate navarretia
- San Diego button-celery
- San Jacinto Valley crownscale
- San Miguel savory
- Santa Ana River woolly-star
- Slender-horned spine flower
- Smooth tarplant
- Spreading navarretia
- Thread-leaved brodiaea
- Vernal barley

Potential for special-status species, including the MSHCP species listed above, within the jurisdictional areas is discussed below in the section titled, Special-Status Species.

Wetlands and Other Waters

Sixteen jurisdictional features were observed and documented within the Study Area (Figure 3-2), and are referred to as Drainages 1 through 5, 7 through 16, and Basin 1 (drainage 6 was excluded, as it was located outside of the Study Area). All features within the Study Area were delineated with the understanding that a request for a Preliminary JD would be submitted for the project. As such, all features are considered USACE and RWQCB jurisdictional WoUS and subject to state jurisdiction. In addition, all features identified were determined to be subject to CDFW jurisdiction.

Jurisdictional wetlands were observed in association with three features within the Study Area and CDFW jurisdictional riparian vegetation was observed in five features within the Study Area.

For the purpose of this analysis, jurisdictional status has been inferred within portions of Drainages 4, 5, 8, 12, 14, and 16- French Valley Creek, due to a natural lack of OHWM indicators/bed and bank, a lack of OHWM indicators/bed and bank caused by human disturbance, and/or a limitation in the extent to which portions of features could be studied based upon access restrictions (Figure 3-2). These inferred areas, and the associated cause, are described for each individual feature in the proceeding sections.

One of the 16 jurisdictional features was formally delineated in April 2011 (Drainage 15), and the remaining 15 mapped resources were identified in August through October 2013, and January 2014. The supplemental jurisdictional delineation reports are provided in Appendix C (CH2M HILL 2013; ICF 2014).

The following is a detailed description of each jurisdictional water feature within the Study Area.

Drainage 1

Drainage 1 is an ephemeral, earthen tributary to Drainage 2- Warm Springs Creek. Drainage 1 originates immediately south of the Study Area and conveys flows from an undeveloped watershed in a generally east to west fashion. OHWM indicators observed within Drainage 1 include presence of bed and bank, change in average sediment texture, sediment sorting, and change in vegetation cover. An average USACE/RWQCB width of 3 feet was observed within the Study Area. CDFW unvegetated streambed widths varied from 5 to 8 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 1 within the Study Area totaled approximately 0.066 acre (1,189 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.178 acre (1,189 linear feet) of unvegetated streambed, subject to CDFW jurisdiction was observed

within Drainage 1 (Table 3-7). No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this water feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 1 within the Study Area is shown on Figures 3-3g and 3-4g.

Drainage 2 – Warm Springs Creek

Drainage 2- Warm Springs Creek is an intermittent, earthen tributary to Murrieta Creek. The portion of Drainage 2- Warm Springs Creek that occurs within the Study Area conveys flows from a largely undeveloped watershed, from north to south, and crosses beneath the existing Los Alamos Road, approximately 400 feet south of the location of the proposed Clinton Keith Road Warm Springs Creek crossing. Throughout the Study Area, Drainage 2- Warm Springs Creek, supports a mature riparian vegetation community, and includes two areas that meet the three-parameter definition of a jurisdictional wetland.

Riparian plant species associated with this feature include mule fat, Emory’s baccharis (*Baccharis salicina*), yerba mansa (*Anemopsis californica*), stinging nettle (*Urtica dioica*), Mexican rush (*Juncus mexicanus*); western ragweed (*Ambrosia psilostachya*), alkali heliotrope (*Heliotropium curassavicum*), poison hemlock (*Conium maculatum*), Goodding’s black willow (*Salix gooddingii*), and spike rush (*Eleocharis palustris*).

OHWI indicators observed within Drainage 2- Warm Springs Creek include presence of bed and bank, change in average sediment texture, drift and/or debris, benches, change in vegetation species, change in vegetation cover, and break in bank slope. USACE/RWQCB widths within the Study Area varied from 13 to 75 feet. CDFW riparian widths varied from 45 to 132 feet within the Study Area.

Table 3-7 Jurisdictional Water Features within the Study Area

Feature	Non-Wetland WoUS/WoS (acres)	Wetland WoUS/WoS (acres)	WoUS/WoS Linear Feet	CDFW Unvegetated Streambed (acres)	CDFW Riparian (acres)	CDFW Linear Feet
Drainage 1	0.066	--	1,189	0.178	--	1,189
Drainage 2-Warm Springs Creek	0.508	0.033	610	--	1.278	610
Drainage 3	0.105	--	560	0.041	0.436	560
Drainage 4*	0.005	--	112	0.013	--	112
Drainage 5*	0.025	--	387	0.074	--	355
Drainage 7	0.028	--	234	0.049	--	234

Feature	Non-Wetland WoUS/WoS (acres)	Wetland WoUS/WoS (acres)	WoUS/WoS Linear Feet	CDFW Unvegetated Streambed (acres)	CDFW Riparian (acres)	CDFW Linear Feet
Drainage 8*	0.030	--	376	0.039	--	376
Drainage 9	0.024	--	409	0.013	0.0432	267
Drainage 10	0.006	--	169	0.009	--	169
Drainage 11	0.029	--	64	0.054	--	64
Drainage 12*	0.009	--	103	0.009	--	103
Drainage 13	0.004	--	94	<0.001	--	7
Drainage 14*	0.014	--	323	0.021	--	153
Drainage 15	0.179	1.178	818	0.179	1.178	818
Drainage 16-French Valley Creek*	1.237	4.310	1,581	2.027	4.384	1,581
Basin 1	0.172	--	--	0.357	--	--
Total	2.441	5.521	7,029	3.063	7.319	6,599

*Indicates features that include inferred areas. See Section 3.3.1.2, Wetlands and Other Waters, above, for a full description of inferred areas by feature.

USACE and RWQCB jurisdictional areas associated with Drainage 2- Warm Springs Creek within the Study Area totaled approximately 0.508 acre of non-wetland WoUS/WoS and 0.033 acre of wetland WoUS/WoS (Table 3-7). Approximately 610 linear feet of WoUS/WoS associated with this feature occur within the study area (Table 3-7). Approximately 1.278 acres (610 linear feet) of CDFW riparian were observed within the study area within Drainage 2- Warm Springs Creek (Table 3-7).

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 2- Warm Springs Creek within the Study Area is shown on Figures 3-3f and 3-4f.

Drainage 3

Drainage 3 is a west to east trending ephemeral, incised earthen tributary to Drainage 2- Warm Springs Creek that parallels much of the proposed alignment. Drainage 3 largely occurs immediately to the north of the Study Area, yet enters the Study Area at two locations. Drainage 3 conveys flows from a primarily rural residential watershed to its confluence with Drainage 2- Warm Springs Creek, which is located immediately north of the proposed Clinton Keith Road Warm Springs Creek crossing.

Riparian plant species associated with this feature include mule fat, Goodding's black willow, and blue elderberry (*Sambucus nigra*).

OHWL indicators observed within Drainage 3 include presence of bed and bank, change in average sediment texture, sediment sorting, drift and/or debris, benches, change in vegetation species, change in vegetation cover, surface relief, and break in bank slope. USACE/RWQCB widths within the Study Area varied from 3 to 14 feet. CDFW unvegetated streambed widths varied from 3 to 19 feet and CDFW riparian widths varied from 10 to 65 feet within the study area.

USACE and RWQCB jurisdictional areas associated with Drainage 3 within the Study Area totaled approximately 0.105 acre of non-wetland WoUS/WoS (Table 3-7). Approximately 560 linear feet of WoUS/WoS associated with this feature occur within the study area (Table 3-7). Approximately 0.041 acre of unvegetated streambed, subject to CDFW jurisdiction, and 0.436 acre of CDFW riparian were observed within Drainage 3 (Table 3-7). Approximately 560 linear feet of CDFW jurisdictional areas associated with this feature occur within the Study Area (Table 3-7). No jurisdictional wetlands were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 3 within the Study Area is shown on Figures 3-3d and 3-4d.

Drainage 4

Drainage 4 is a small ephemeral, incised, earthen tributary to Warm Springs Creek located immediately north of the existing Los Alamos Road. Drainage 4 originates west of the Study Area immediately south of the proposed alignment. It conveys flows from an undeveloped watershed, in a generally west to east fashion.

OHWL indicators observed within Drainage 4 include presence of bed and bank, change in average sediment texture, sediment sorting, change in vegetation cover, and break in bank slope. The OHWL and bed and bank associated with Drainage 4 has been inferred for an approximately 85-foot segment located in the eastern-most portion of where this feature coincides with the Study Area, due to a natural lack of these elements. This segment is characteristic of a sheetflood zone (lacking indicators of an OHWL and bed and bank), which is often associated with discontinuous ephemeral streams, a common form of stream morphology found within the Arid West Region. An average USACE/RWQCB width of 2 feet was observed within the Study Area. An average CDFW unvegetated streambed width of 5 feet was observed within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 4 within the Study Area totaled approximately 0.005 acre (112 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.013 acre (112 linear feet) of unvegetated streambed was observed within Drainage 4 (Table 3-7).

No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 4 within the Study Area is shown on Figures 3-3f and 3-4f.

Drainage 5

Drainage 5 is an ephemeral, earthen tributary to Drainage 3. Drainage 5 enters the Study Area south of the existing Clinton Keith Road approximately 35 feet east of the existing intersection of Clinton Keith Road and Avenida Mañana, and conveys flows from a watershed consisting of rural residential and open space/undeveloped land uses. Upon leaving the Study Area, Drainage 5 conveys flows for approximately 100 feet downstream, where it reaches its confluence with Drainage 3.

OHWB indicators observed within Drainage 5 include presence of bed and bank, change in average sediment texture, sediment sorting, change in vegetation cover, and break in bank slope. The OHWB and bed and bank associated with Drainage 5 has been inferred for an approximately 140-foot segment located in the center and southern portion of this feature, due to a combination of a sheetflood zone (lacking indicators of an OHWB and bed and bank) and ongoing vehicular disturbance associated with the existing Clinton Keith Road Alignment, along with restricted physical access within the southern-most portion. An average USACE/RWQCB width of 3 feet was observed within the Study Area. CDFW unvegetated streambed widths varied from 5 to 17 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 5 within the Study Area totaled approximately 0.025 acre (387 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.074 acre (355 linear feet) of unvegetated streambed, subject to CDFW jurisdiction, was observed within Drainage 5 (Table 3-7). No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 5 within the Study Area is shown on Figures 3-3e and 3-4e.

Drainage 7

A potentially isolated earthen, ephemeral drainage was observed within approximately 20 feet of the Study Area, immediately south, near the existing intersection of Menifee Road and Los Alamos Road. This feature was noted as Drainage 6 during the August through October 2013 and January 2014 field efforts; however, as this feature does not coincide with the Study Area, it has not been further

described nor quantified and is not graphically depicted in this SEIR Addendum. As a result, this has caused a non-consecutive numbering of the features presented within this report.

Drainage 7 is an earthen, ephemeral drainage, which appears to be a naturally occurring feature that has been manipulated over time for the purpose of conveying surface runoff from the existing Clinton Keith Road alignment to Drainage 3, immediately north (downstream) of the Study Area along Menifee Road, approximately 250 feet north of the existing Clinton Keith Road.

OHWB indicators observed within Drainage 7 include presence of bed and bank, change in average sediment texture, sediment sorting, change in vegetation cover, and break in bank slope. An average USACE/RWQCB width of 5 feet was observed within the Study Area. An average CDFW unvegetated streambed width of 9 feet was observed within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 7 within the Study Area totaled approximately 0.028 acre (234 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.049 acre (234 linear feet) of unvegetated streambed was observed within Drainage 7 (Table 3-7).

No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 7 within the Study Area is shown on Figures 3-3c and 3-4c.

Drainage 8

Drainage 8 is a potentially isolated earthen, ephemeral drainage that originates immediately south of the Study Area east of the existing intersection of Clinton Keith Road and Arendt Lane. This feature flows northeast for approximately 300 feet, where it loses all evidence of a discernible OHWB and bed and bank approximately 300 feet south of Drainage 3, immediately north of the Study Area.

OHWB indicators observed within Drainage 8 include presence of bed and bank, change in average sediment texture, sediment sorting, change in vegetation cover, and break in bank slope. The OHWB and bed and bank associated with Drainage 8 has been inferred for an approximately 100-foot segment located in the center portion of this feature, due to a combination of a sheetflood zone (naturally lacking indicators of an OHWB and bed and bank) and ongoing vehicular disturbance associated with existing Clinton Keith Road. USACE/RWQCB widths within the Study Area varied from 1 to 5 feet. CDFW unvegetated streambed widths varied from 4 to 5 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 8 within the Study Area totaled approximately 0.030 acre (376 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.039 acre (376 linear feet) of unvegetated streambed was observed within Drainage 8 (Table 3-7).

No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 8 within the Study Area is shown on Figures 3-3b and 3-4b.

Drainage 9

Drainage 9 is an ephemeral tributary to Drainage 3, located immediately east of the existing intersection of Clinton Keith Road and Whitewood Road. An approximately 100-foot segment of the low flow channel, located within the southern portion of the Study Area consists of a concrete-lined channel bed, giving way to an earthen bed as it conveys flows northward toward its confluence with Drainage 3, which is located approximately 300 feet downstream of the Study Area boundary.

Within the portion of the Study Area located south of the existing Clinton Keith Road, riparian vegetation is supported on earthen banks above the concrete-lined channel bed. Plant species observed within this area include Emory's baccharis, stinging nettle, annual beard grass (*Polypogon monspeliensis*); blue elderberry, and red willow (*Salix laevigata*).

OHWI indicators observed within Drainage 9 include presence of bed and bank, change in average sediment texture, sediment sorting, drift and/or debris, water staining, change in vegetation cover, and break in bank slope. USACE/RWQCB widths within the Study Area varied from 2 to 3 feet. CDFW unvegetated streambed widths varied from 3 to 9 feet and CDFW riparian widths varied from 6 to 27 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 9 within the Study Area totaled approximately 0.024 acre (409 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.013 acre of unvegetated streambed, subject to CDFW jurisdiction, and 0.043 acre of CDFW riparian vegetation were observed within Drainage 9 (Table 3-7). Approximately 267 linear feet of CDFW jurisdictional areas associated with this feature occur within the Study Area (Table 3-7). No jurisdictional wetlands were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 9 within the Study Area is shown on Figures 3-3a and 3-4a.

Drainage 10

Drainage 10 is a small ephemeral drainage complex consisting of two, asphalt concrete-lined overside drains that convey surface runoff from the existing intersection of Clinton Keith Road and Whitewood Road into Drainage 9.

OHWI indicators observed within Drainage 10 include presence of bed and bank (as designed) and water staining. An average USACE/RWQCB width of 2 feet was observed within the Study Area. An average CDFW unvegetated streambed width of 2 feet was observed within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 10 within the Study Area totaled approximately 0.006 acre (169 linear feet) of non-wetland WoUS (Table 3-7). Approximately 0.009 acre (169 linear feet) of unvegetated streambed was observed within Drainage 10 (Table 3-7). No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 10 within the Study Area is shown on Figures 3-3a and 3-4a.

Drainage 11

Drainage 11 is an earthen, ephemeral tributary to Drainage 16- French Valley Creek, which enters the Study Area from a culvert outlet beneath SR 79, and conveys flows from a largely urbanized watershed. Surface flows are maintained for approximately 65 feet, where this feature enters the existing storm drain system, and is then discharged to Drainage 16- French Valley Creek approximately 1,000 feet to the northwest.

OHWI indicators observed within Drainage 11 include presence of bed and bank, change in average sediment texture, sediment sorting, drift and/or debris, water staining, change in vegetation cover, and break in bank slope. USACE/RWQCB widths within the Study Area varied from 9 to 30 feet.

CDFW unvegetated streambed widths varied from 9 to 79 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 11 within the Study Area totaled approximately 0.029 acre (64 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.054 acre (64 linear feet) of unvegetated streambed was observed within Drainage 11 (Table 3-7).

No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 11 within the Study Area is shown on Figures 3-3l and 3-4l.

Drainage 12

Drainage 12 is an earthen, ephemeral tributary to Drainage 16- French Valley Creek, which enters the Study Area from an existing culvert outlet beneath SR 79.

OHWB indicators observed within Drainage 12 include presence of bed and bank, change in average sediment texture, sediment sorting, drift and/or debris, water staining, and a change in vegetation species. The OHWB and bed and bank associated with Drainage 12 have been inferred for an approximately 45-foot segment located in the western-most portion of this feature within the Study Area, due to a natural lack of these elements, characteristic of a sheetflood zone. A discernable OHWB and bed and bank are re-established immediately west of the Study Area, and appear to be maintained for the remaining extent of this feature, to its confluence with Drainage 16- French Valley Creek outside of the Study Area, approximately 0.25 mile west of Briggs Road.

An average USACE/RWQCB width of 4 feet was observed within the Study Area. An average CDFW unvegetated streambed width of 4 feet was observed within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 12 within the Study Area totaled approximately 0.009 acre (103 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.009 acre (103 linear feet) of unvegetated streambed, subject to CDFW jurisdiction was observed within Drainage 12 (Table 3-7). No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 12 within the Study Area is shown on Figures 3-3m and 3-4m.

Drainage 13

Drainage 13 is a small earthen, ephemeral tributary to Drainage 16- French Valley Creek, which originates within the Study Area from concentrated surface runoff from Briggs Road, and enters the active flood plain associated with Drainage 16- French Valley Creek.

OHWB indicators observed within Drainage 13 include presence of bed and bank, change in average sediment texture, sediment sorting, water staining, and change in vegetation cover. An average USACE/RWQCB width of 2 feet was observed within the Study Area. An average CDFW unvegetated streambed width of 4 feet was observed within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 13 within the Study Area totaled approximately 0.004 acre (94 linear feet) of non-wetland WoUS/WoS (Table 3-7). Approximately 0.008 acre (7 linear feet) of unvegetated streambed was observed within Drainage 13 (Table 3-7).

No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature. Note that much of the CDFW jurisdiction associated with Drainage 13 has been incorporated into the top of bank measurements reported for Drainage 16- French Valley Creek. Therefore, the respective acreage and linear feet of USACE/RWQCB jurisdictional areas reported for this feature are much larger than that reported for CDFW.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 13 within the Study Area is shown on Figures 3-3k and 3-4k.

Drainage 14

Drainage 14 is an unvegetated, earthen, ephemeral drainage located immediately south of the existing intersection of Clinton Keith Road and Trois Valley Street, and originates from a culvert outlet, which conveys flows from Basin 1 in a northeast to southwest direction, eventually reaching Warm Springs Creek outside of the Study Area. For the purposes of this Project, Drainage 14 has been inferred as non-wetland WoUS/WoS and CDFW unvegetated streambed, as it is located entirely within a parcel for which access was denied. Conditions within Drainage 14 were observed from within the existing Clinton Keith Road ROW and aerial photographs at varying scales and from multiple dates, were reviewed. Jurisdictional widths were inferred based on observations of the culvert outlet location from within the existing Clinton Keith Road ROW, as well as at downstream portions of Drainage 14 that occur outside of the Study Area, within parcels where access has been granted.

OHWI indicators observed within Drainage 14 include presence of bed and bank and break in bank slope. An average USACE/RWQCB width of 4 feet was inferred within the Study Area. An average CDFW unvegetated streambed width of 6 feet was inferred within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 14 within the Study Area totaled approximately 0.014 acre (323 linear feet) of inferred non-wetland WoUS/WoS (Table 3-7).

Approximately 0.021 acre (153 linear feet) of unvegetated streambed, subject to CDFW jurisdiction, was inferred within Drainage 14 (Table 3-7). No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 14 within the Study Area is shown on Figures 3-3h and 3-4h.

Drainage 15

Drainage 15 is a tributary to Drainage 16- French Valley Creek, which enters the Study Area via a large reinforced concrete box culvert beneath Leon Road, immediately east of the existing intersection of Clinton Keith Road and Leon Road. Drainage 15 conveys flows from a watershed consisting of a mix of single-family residential tracts and undeveloped areas. Flows are conveyed from the Study Area southward beneath the existing Los Alamos Road to its confluence with Drainage 16- French Valley Creek, immediately west of the Study Area.

Drainage 15 was originally delineated in April 2011 by CH2M HILL (CH2M HILL 2013). Plant species observed in association with this feature at that time include annual beard grass, brass-buttons (*Cotula coronopifolia*), and curly dock (*Rumex crispus*) (CH2M HILL 2013). Based on the August through October 2013 and January 2014 field verification, the original mapping of this area remains consistent with the late 2013 and January 2014 conditions, and is depicted within the full extent of the Study Area on Figures 3-3i and 3-4i.

Additional plant species that were observed to have developed within Drainage 15 during the August through October 2013 and January 2014 field efforts include yerba mansa, stinging nettle, saltcedar (*Tamarix ramosissima*), southern cattail (*Typha domingensis*), Mexican rush, cocklebur (*Xanthium strumarium*), and arroyo willow (*Salix lasiolepis*).

OHWB indicators observed within Drainage 15 include water staining, change in vegetation species, change in vegetation cover, and break in bank slope. USACE/RWQCB widths within the Study Area varied from 7 to 184 feet. CDFW unvegetated streambed widths varied from 7 to 28 feet and CDFW riparian widths varied from 20 to 184 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 15 within the Study Area totaled approximately 0.179 acre of non-wetland WoUS/WoS and 1.178 acres of wetland WoUS/WoS (Table 3-7). Approximately 818 linear feet of WoUS/WoS associated with this feature occur within the Study Area (Table 3-7). Approximately 0.179 acre of unvegetated streambed, subject to CDFW jurisdiction, and 1.178 acres of CDFW riparian were observed within Drainage 15 (Table 3-7).

Approximately 818 linear feet of CDFW jurisdictional areas associated with this feature occur within the Study Area (Table 3-7).

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 15 within the Study Area is shown on Figures 3-3i and 3-4i.

Drainage 16 – French Valley Creek

Drainage 16- French Valley Creek is an intermittent creek, supporting alkali marsh on the associated active flood plain. French Valley Creek enters the study area approximately 300 feet east of the existing Briggs Road crossing, conveys flows from a largely urbanized watershed, and is tributary to Drainage 2 – Warm Springs Creek.

Within the Study Area, Drainage 16- French Valley Creek exists in three segments: east of Briggs Road, between Briggs Road and Porth Road, and south of Porth Road (Figures 8a and 8b; Appendix C). The segment east of Briggs Road was originally delineated in 2003 by M.J. Klinefelter GIS and Environmental Consulting Services (Klinefelter 2003). Sample plots were conducted by ICF within the portion of this segment located within the Project ROW in January of 2014, to confirm that currently existing conditions reflect the previously delineated jurisdictional boundaries. Based on the January 2014 field verification, the original mapping of this area remains consistent with the January 2014 conditions, and is depicted within the Study Area on Figures 3-3j and 3-4j.

The portion between Briggs Road and Porth Road was physically accessed and fully analyzed within the Study Area, as access was granted to this parcel. The portion south of Porth Road was delineated only within existing ROW, as a request for access to the adjoining privately owned parcel was denied. The remainder of this segment was observed from within the ROW and aerial photographs at varying scales and from multiple dates, were reviewed. A sample plot was conducted within the ROW, supporting the conclusion that the sampled area is non-wetland WoUS/WoS and CDFW unvegetated streambed.

For the purposes of this Project, resources within a small portion of the Study Area within this segment, located to the east of the existing ROW have been inferred as non-wetland WoUS/WoS and CDFW unvegetated streambed, as conditions appear to be similar to those at the sample plot location. Also, for the purpose of this Project, portions of this segment located west of the existing ROW have conservatively been inferred as potential wetland WoUS/WoS and potential CDFW riparian, as this area could not conclusively be classified without the physical access needed to conduct sample plots.

Chino silt loam, drained, saline-alkali is mapped within Drainage 16- French Valley Creek and the associated flood plain and is considered moderately alkaline by the Natural Resources Conservation Service. Where a predominance of hydrophytic vegetation and wetland hydrology indicators are present, this moderately alkaline soil is considered hydric, therefore supporting the hydric soil element of the three-parameter definition of a jurisdictional wetland. This problem area wetland type is present throughout much of Drainage 16- French Valley Creek (Figure 3-3j).

Plant species comprising the alkali marsh associated with this feature include alkali heath (*Frankenia salina*), yerba mansa, stinging nettle, saltcedar, southern cattail, annual beard grass salt grass (*Distichlis spicata*), Mexican rush, cocklebur, and curly dock.

OHWI indicators observed within Drainage 16- French Valley Creek include presence of bed and bank, mud cracks, drift and/or debris, benches, salt crust, change in vegetation species, surface rounding, and break in bank slope. USACE/RWQCB widths within the Study Area varied from 28 to 376 feet. CDFW unvegetated streambed widths varied from 10 to 51 feet and CDFW riparian widths varied from 20 to 380 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Drainage 16- French Valley Creek within the Study Area totaled approximately 1.237 acres of non-wetland WoUS/WoS and 4.310 acres of wetland WoUS/WoS (Table 3-7). Approximately 1,581 linear feet of WoUS/WoS associated with this feature occur within the Study Area (Table 3-7). Approximately 2.027 acres of unvegetated streambed, subject to CDFW jurisdiction, and 4.384 acres of CDFW riparian were observed within Drainage 16- French Valley Creek (Table 3-7). Approximately 1,581 linear feet of CDFW jurisdictional areas associated with this feature occur within the Study Area (Table 3-7).

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Drainage 16- French Valley Creek within the Study Area is shown on Figures 3-3j and 3-4j.

Basin 1

Basin 1 is a constructed basin located at the northwest corner of the existing intersection of Clinton Keith Road and Trois Valley Street, and accepts flows from the adjacent single-family residential development located to the east. Flows are conveyed toward the south via a culvert to Drainage 14.

A small concrete-lined v-ditch also occurs within this area, is tributary to this feature, and for the purpose of this report, is included as a portion of Basin 1.

OHWI indicators observed within Basin 1 include sediment sorting, drift and/or debris, benches, water staining, salt crust, and break in bank slope (as designed). USACE/RWQCB widths within the study area varied from 25 to 95 feet. CDFW unvegetated streambed widths varied from 52 to 132 feet within the Study Area.

USACE and RWQCB jurisdictional areas associated with Basin 1 within the Study Area totaled approximately 0.172 acre of non-wetland WoUS/WoS (Table 3-7). Approximately 0.357 acre of unvegetated streambed, subject to CDFW jurisdiction, was observed within Basin 1 (Table 3-7).

No jurisdictional wetlands or CDFW riparian vegetation were observed in association with this feature.

The extent of USACE, RWQCB, and CDFW jurisdiction associated with Basin 1 within the Study Area is shown on Figures 3-3h and 3-4h.

Special-Status Species

An updated habitat assessment in June 2013 included assessing the potential for MSHCP and non-MSHCP special-status species within three of the jurisdictional water feature areas where suitable habitat existed for riparian species: Drainage 2 – Warm Springs Creek (including Drainage 3), Drainage 15, and Drainage 16 – French Valley Creek (ICF 2013) [Appendix D]. The other jurisdictional water features within the Study Area did not provide suitable habitat for riparian species, and therefore were not included in the updated habitat assessment. The habitat assessment was completed about 4 to 8 weeks after the peak of vegetation growth after a winter of about half-normal rainfall. The following summarizes the findings of the habitat assessment.

MSHCP Special-Status Species

Drainage 2 – Warm Springs Creek

One MSHCP special-status species, the federally threatened coastal California gnatcatcher (*Poliophtila californica californica*) [gnatcatcher], was detected within the Study Area during the habitat assessment. The gnatcatcher was detected several times in the sage scrub on the east and west sides of Warm Springs Creek, which is consistent with previous findings discussed in Section 3.5.1.3.6 in the SEIR.

Other MSHCP special-status species that have potential to occur include: Many-stemmed Dudleya (*Dudleya multicaulis*), San Diego Ambrosia (*Ambrosia pumila*), Smooth Tarplant (*Centromadia pungens* ssp. *laevis*), Burrowing Owl (*Athene cunicularia*), and Los Angeles Pocket Mouse (LAPM) [*Perognathus longimembris brevinasus*]. These species have low potential for occurrence except for Smooth Tarplant which has moderate potential for occurrence. Smooth Tarplant was observed several hundred feet north of the Study Area, and is included as a riparian/riverine species. MSHCP special-status plants, burrowing owl and Los Angeles pocket mouse were not previously identified within the Study Area during field surveys as discussed in Sections 3.5.1.3.1 and 3.5.1.3.8 of the SEIR.

There are a number of other special-status plants with potential to occur, such as Intermediate Mariposa Lilly (*Calochortus weedii* var. *intermedius*), but are fully covered species under the MSHCP and do not require surveys or further study. Any potential impacts to these types of species would be fully mitigated by the plan.

Drainage 2 – Warm Springs Creek supports riparian/riverine vegetation in the form of southern willow scrub that has low potential to support southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*). The riparian scrub lacks the breadth, hydrology, and structure to support western yellow-billed cuckoo (*Coccyzus americanas occidentalis*). There are no vernal pool resources and no potential for fairy shrimp to be present. Southwestern willow flycatcher and least Bell's vireo were previously confirmed absent from the Study Area as discussed in Sections 3.5.1.3.3 and 3.5.1.3.4 of the SEIR.

Drainage 15

Drainage 15 was within the biological Study Area of the SEIR, but did not contain MSHCP riparian/riverine habitat or features jurisdictional to the permitting agencies at the time the SEIR was prepared. The size of the drainage area and associated MSHCP riparian/riverine habitat has increased since the SEIR was approved as a result of development of adjacent property. This area has been created into a low-lying drainage that holds water permanently at the Clinton Keith Road/Leon Road crossing. The riparian vegetation is young and is dominated by willows, cattails, and herbaceous riparian plants. A habitat assessment was prepared to determine the potential for any special-status species that may not have been analyzed in the SEIR. No MSHCP special-status species were identified during the habitat assessment within the Study Area for Drainage 15, and the potential for any special-status species was low.

Drainage 16 – French Valley Creek

One MSHCP Species, the white-tailed kite (*Elanus leucurus*), was observed within the Study Area of Drainage 16. During the habitat assessment, a white-tailed kite, a state Species of Special Concern, was observed foraging over the ruderal vegetation to the northeast of the Porth Road and French Valley Creek crossing. This is consistent with the findings presented in Section 3.5.1.2.3 of the SEIR.

The vegetation within the Study Area at Drainage 16 provides suitable habitat for smooth tarplant, least Bell's vireo, and burrowing owl. There are no vernal pool resources and no potential for fairy shrimp. The riparian vegetation is too limited in structure and breadth to support the potential for either southwestern willow flycatcher or western yellow-billed cuckoo. Least Bell's vireo was previously confirmed absent from the Study Area as discussed in Section 3.5.1.3.4 of the SEIR. MSHCP special-status plants and burrowing owl were not previously identified within the Study Area during field surveys as discussed in Sections 3.5.1.3.1 and 3.5.1.3.8 of the SEIR.

Non-MSHCP Species

Drainage 2 – Warm Springs Creek

During the habitat assessment, paniculate tarplant (a California Native Plant Society [CNPS] List 4.2 plant) was found in the grasslands on the east side of Warm Springs Creek, between the Creek and the sage scrub. No other non-MSHCP special-status species were identified within the Study Area of Warm Springs Creek; however the potential exists for many special-status plants. Special-status plants, including paniculate tarplant were not previously identified in the SEIR within the Study Area.

Drainage 15

One special-status plant, the paniculate tarplant, was confirmed present within the Study Area of Drainage 15. Potential habitat exists within the Study Area of Drainage 15 that would also provide foraging areas for several special-status bat species (Pallid Bat, California Western Mastiff Bat, Western Yellow Bat, Pocketed Free-tailed Bat, and Big Free-tailed Bat), though none were observed.

Drainage 16 – French Valley Creek

During the habitat assessment, no non-MSHCP special-status species were observed within the Study Area of Drainage 16. Potential habitat exists for paniculate tarplant and may also provide foraging areas for several special-status bat species (Pallid Bat, California Western Mastiff Bat, Western Yellow Bat, Pocketed Free-tailed Bat, and Big Free-tailed Bat).

3.3.2 Impact Assessment

3.3.2.1 Thresholds of Significance

Would the Project:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*
- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or 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?*

3.3.2.2 Methodology

Impacts to biological resources within the Study Area for the 16 jurisdictional water feature areas were evaluated based on the results of the Supplemental JD Reports (Appendix C) and the Habitat Assessment (Appendix D) to provide updated responses to the CEQA questions above.

Permanent and temporary impacts were quantified for wetlands and other waters and MSHCP riparian/riverine resources within the Study Area, and are presented below in Section 3.3.2.3. Permanent, direct impact calculations included areas graded and proposed for road development that would be cleared and permanently displaced as a result of construction within the ROW and permanent easement areas. Permanent, direct impacts would occur to 15 jurisdictional water features as a result of grading, roadway fill, bridge and culvert columns, rock slope protection, or detention basins.

Permanent, indirect impacts were quantified for three jurisdictional water features under CDFW jurisdiction: Drainage 2 – Warm Springs Creek, Drainage 15, and Drainage 16 – French Valley Creek. Drainages 2 and 16 are located in areas with proposed bridges where shading effects could result in permanent indirect impacts to riparian vegetation. Additionally, Drainage 15 is located in an area with a proposed soft-bottom culvert, where the same type of shading effects could permanently and indirectly impact riparian vegetation. While shading from bridges is considered an impact under CEQA, and potentially under Section 1600 for this analysis, it is not considered an impact under Section 404 or 401 of the CWA.

Temporary impact calculations included areas required for construction access and other construction-related activities.

3.3.2.3 Updated Environmental Impacts

Natural Communities

Impacts to sensitive natural communities for the entire Project were previously analyzed in Section 3.5.2.2.1 of the SEIR. Since the Project footprint has not changed, the only changes in impacts to sensitive natural communities would be associated with the new wetland area (Drainage 15) and any shifts in wetlands and riparian communities associated with jurisdictional water features. Details are presented below in the section titled, Wetlands and Other Waters. Aside from these changes, no other sensitive natural communities would be impacted within the 16 jurisdictional water features above and beyond those already identified in Section 3.5.2.2.1 of the SEIR.

Potential indirect impacts on wetlands and riparian communities within the Study Area may result from construction, including soil erosion, dust contamination, and introduction or increase in the numbers of non-native, weedy plant species in native plant communities. To minimize the risk from these impacts, construction best management practices (BMPs) would be implemented as described in Section 3.3.3, Mitigation Measures.

In addition, compliance with the MSHCP would include implementation of a number of measures, including Fuel Management (MSHCP Section 6.4), Guidelines Pertaining to the Urban Wildlands Interface (MSHCP Section 6.1.4), Construction Guidelines (MSHCP Section 7.5.3), and Standard Best Management Practices (MSHCP Section 7.5.3). With implementation of these measures, impacts from construction activities due to soil erosion, dust contamination, and exotic species invasion within the Study Area would be less than significant.

Wetlands and Other Waters

Impacts to wetlands and other waters for the entire Project were previously analyzed in Section 3.5.2.2.1 of the SEIR. Since the Project footprint has not changed, the changes in impacts to wetlands and other waters would be associated with the recently created wetland area near Leon Road/Clinton Keith Rd (Drainage 15), any newly identified jurisdictional areas that occurred as a result of adjacent construction and associated changes in topography (Drainages 4, 8 through 10, Drainage 14, and Basin 1), and any shifts in wetlands and riparian communities associated with jurisdictional water features.

The Project has been split into two portions (west and east) based on coordination with the permitting agencies. The west portion limits include Segment 1 and Segment 2, and the east portion limits include Segment 3 and Segment 4. As stated above in Section 1.0, Segments 1 and 3 have been

constructed. This section presents changes in impacts to wetlands and other waters within Segment 2 and Segment 4.

Segment 2

Permanent impacts to WoUS within Segment 2 have decreased since the approval of the SEIR based on shifts in the Ordinary High Water Mark (OHWM). However, temporary impacts to WoUS have increased where new drainages have formed as a result of changes in topography as a result of adjacent construction. Additionally, temporary impacts to WoUS (including wetlands) within Segment 2 increased because access to the jurisdictional area under the proposed Warm Springs Creek bridge would be needed in order to construct the bridge. In the SEIR, this area was proposed to be avoided during construction; however, during final design, it was determined that avoiding the entire creek bed would not be feasible based on standard bridge construction methods. Segment 2 would now permanently impact 0.15 acres of non-wetland WoUS, instead of 0.31 acres as shown in the SEIR, and temporarily impact 0.17 acre of non-wetland WoUS and 0.028 acre of wetland WoUS, instead of 0.01 acres of non-wetland WoUS, as stated in the SEIR. Table 3-8 presents a comparison between previous WoUS impacts within Segment 2 presented in the SEIR and current impacts presented in this SEIR Addendum. Refer to Figure 3-3a through h, Impacts to Water of the U.S., which depict current impacts to WoUS within Segment 2.

**Table 3-8 Clinton Keith Road Extension Project Jurisdictional WoUS
Comparison for Segment 2**

<u>2006 Jurisdictional Drainage</u>	<u>2014 Jurisdictional Drainage</u>	<u>2006 Impacts WoUS/WoS* (permanent/temporary) [acres]</u>	<u>2014 Impacts WoUs/WoS* (permanent/temporary) [acres]</u>
Not Present	Drainage 8	N/A	0.024/0.006
Not Present	Drainage 9	N/A	0.009/0.001
Not Present	Drainage 10	N/A	0.003/0.003
Crossing A	Drainage 7	0.13/0.0	0.015/0.014
Crossing A'2	Drainage 3	0.0/0.0	0.0/0.0
Crossing B	Drainage 5	0.03/0.0	0.023/0.003
Crossing C (Warm Springs)	Drainage 2	0.0/0.01	0.0/0.137 non wetlands 0.0/0.028 wetlands

2006 Jurisdictional Drainage	2014 Jurisdictional Drainage	2006 Impacts WoUS/WoS* (permanent/temporary) [acres]	2014 Impacts WoUs/WoS* (permanent/temporary) [acres]
Tributary 1	Drainage 3	0.0/0.0	0.0/0.0
Tributary 2	Drainage 1	0.15/0.0	0.065/0.002
Tributary 3	Not Present	0.0/0.0	N/A
Not Present	Drainage 4	N/A	0.0/0.001
Not Present	Basin 1	N/A	0.004/0.001
Not Present	Drainage 14	N/A	0.010/0.004
		Total Impacts: 0.31/0.01 non-wetlands; 0.0/0.0 wetlands	Total Impacts: 0.15/0.17 non-wetlands; 0.0/0.028 wetlands

*All impacts represent non-wetland WoUS, unless otherwise noted

Permanent impacts to CDFW non-riparian waters within Segment 2 have slightly increased from 0.31 acres to 0.35 acres due to adjacent construction where new drainages have formed as a result of changes in topography; permanent impacts to CDFW riparian waters within Segment 2 have also slightly increased from 0.30 to 0.35 acres due to the growth of riparian vegetation since the time the original jurisdictional delineation was performed. The majority of the permanent impacts to CDFW riparian areas (0.30 acres) would occur within Drainage 2 - Warm Springs Creek as a result of shading effects, where several mature willow trees are present, which was previously included in the SEIR. The other drainages where riparian vegetation would be permanently impacted are Drainage 3 and Drainage 9 (Figure 3-4a and 3-4d). The riparian vegetation within Drainage 3 and 9 did not expand into the Project impact area when the SEIR was prepared. It has since grown into the Project area, and is therefore now included in the riparian impact calculation. Temporary impacts to CDFW jurisdictional waters have also increased from 0.0 acres of CDFW non-riparian waters, as shown in the SEIR, to 0.067 acres of CDFW non-riparian as presented in this SEIR Addendum. Temporary impacts to CDFW riparian waters have increased from 0.01 acres as presented in the SEIR, to 0.18 acres as presented in this SEIR Addendum. The temporary impacts have increased as a result of adjacent construction, where new drainages have formed due to changes in topography. Table 3-9 presents a comparison between previous impacts to CDFW waters within Segment 2 presented in the SEIR and current impacts presented in this SEIR Addendum. Refer to Figure 3-4a through h, Impacts to CDFW Jurisdictional Water Features, which depict current impacts to CDFW waters within Segment 2.