



Appendix A

AIR QUALITY/GREENHOUSE GAS DATA

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**Parenthetical CALEEMOD Assumptions
For: San Sevaine Trail
Date: June 2016**

CONSTRUCTION

Site Preparation (2016)

- 27 days.

Equipment:

Quantity	Type	Hours of Daily Operation
1	Rubber Tired Loader	8
2	Tractors/Loaders/Backhoes	8

Grading (2016)

- 3,565 cubic yards of import.
- 7,130 cubic yards of export.
- 54 days.

Equipment:

Quantity	Type	Hours of Daily Operation
2	Excavators	8
1	Rubber Tired Dozer	8
1	Tractor/Loader/Backhoe	8

Paving (2016 – 2017)

- 10 days.

Equipment:

Quantity	Type	Hours of Daily Operation
2	Cement and Mortar Mixers	6
1	Paver	8
2	Rollers	6
1	Tractor/Loader/Backhoe	8
2	Paving Equipment	6

Trail Installation (2017)

- 34 days.

Equipment:

Quantity	Type	Hours of Daily Operation
1	Air Compressor	8
3	Forklifts	8
1	Generator Set	8
3	Tractors/Loaders/Backhoes	7
1	Welder	8

Proposed Project

- Trail Project
- Construction run only.

San Sevaine Trail - Construction
San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	200.00	User Defined Unit	4.60	200,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction only run.

Land Use - Trail project, construction only, no trip generating land use

Construction Phase - trail construction = 6 months

Off-road Equipment - equipment

Off-road Equipment -

Off-road Equipment - equipment

Grading - approx 3,565 cy grading and 7,130 cy of excavation

Construction Off-road Equipment Mitigation - per Rule 403

Off-road Equipment - equipment

Trips and VMT - grading hauling is cut and fill on site.

Table Name	Column Name	Default Value	New Value
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tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	8.00	54.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	NumDays	5.00	27.00
tblConstructionPhase	NumDays	230.00	34.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	MaterialExported	0.00	7,130.00
tblGrading	MaterialImported	0.00	3,565.00
tblLandUse	LandUseSquareFeet	0.00	200,000.00
tblLandUse	LotAcreage	0.00	4.60
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	1.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.1063	1.1718	0.9360	1.2700e-003	0.2593	0.0568	0.3160	0.1378	0.0522	0.1900	0.0000	117.1088	117.1088	0.0251	0.0000	117.6364
2017	0.0636	0.4718	0.4773	7.9000e-004	0.0196	0.0320	0.0515	5.2700e-003	0.0303	0.0356	0.0000	66.8040	66.8040	0.0100	0.0000	67.0150
Total	0.1699	1.6436	1.4134	2.0600e-003	0.2788	0.0887	0.3676	0.1431	0.0826	0.2256	0.0000	183.9128	183.9128	0.0352	0.0000	184.6514

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.1063	1.1718	0.9360	1.2700e-003	0.1165	0.0568	0.1732	0.0605	0.0522	0.1127	0.0000	117.1087	117.1087	0.0251	0.0000	117.6363
2017	0.0636	0.4718	0.4773	7.9000e-004	0.0169	0.0320	0.0489	4.6200e-003	0.0303	0.0349	0.0000	66.8040	66.8040	0.0100	0.0000	67.0149
Total	0.1699	1.6436	1.4134	2.0600e-003	0.1334	0.0887	0.2221	0.0651	0.0826	0.1476	0.0000	183.9127	183.9127	0.0352	0.0000	184.6512

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.16	0.00	39.57	54.50	0.00	34.56	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2016	10/7/2016	5	27	
2	Grading	Grading	10/8/2016	12/22/2016	5	54	
3	Paving	Paving	12/23/2016	1/5/2017	5	10	
4	Trail Installation	Building Construction	1/6/2017	2/22/2017	5	34	

Acres of Grading (Site Preparation Phase): 2

Acres of Grading (Grading Phase): 2

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trail Installation	Cranes	0	7.00	226	0.29
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Trail Installation	Forklifts	3	8.00	89	0.20
Trail Installation	Generator Sets	1	8.00	84	0.74
Trail Installation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Trail Installation	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	162	0.38
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	6.00	80	0.38
Trail Installation	Air Compressors	1	8.00	78	0.48
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Grading	Graders	0	8.00	174	0.41
Paving	Paving Equipment	2	6.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trail Installation	9	84.00	33.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	891.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	446.00	14.70	6.90	1.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0828	0.0000	0.0828	0.0449	0.0000	0.0449	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0259	0.2751	0.2067	2.0000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	19.2374	19.2374	5.8000e-003	0.0000	19.3593
Total	0.0259	0.2751	0.2067	2.0000e-004	0.0828	0.0155	0.0982	0.0449	0.0142	0.0591	0.0000	19.2374	19.2374	5.8000e-003	0.0000	19.3593

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-003	0.1297	0.0989	3.3000e-004	7.6300e-003	1.9100e-003	9.5400e-003	2.0900e-003	1.7600e-003	3.8500e-003	0.0000	29.8360	29.8360	2.2000e-004	0.0000	29.8405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	6.3000e-004	6.6000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0583	1.0583	6.0000e-005	0.0000	1.0595
Total	8.4200e-003	0.1303	0.1055	3.4000e-004	8.8100e-003	1.9200e-003	0.0107	2.4000e-003	1.7700e-003	4.1700e-003	0.0000	30.8943	30.8943	2.8000e-004	0.0000	30.9000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0354	0.0000	0.0354	0.0192	0.0000	0.0192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0259	0.2751	0.2067	2.0000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	19.2374	19.2374	5.8000e-003	0.0000	19.3593
Total	0.0259	0.2751	0.2067	2.0000e-004	0.0354	0.0155	0.0509	0.0192	0.0142	0.0334	0.0000	19.2374	19.2374	5.8000e-003	0.0000	19.3593

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-003	0.1297	0.0989	3.3000e-004	6.7100e-003	1.9100e-003	8.6200e-003	1.8700e-003	1.7600e-003	3.6300e-003	0.0000	29.8360	29.8360	2.2000e-004	0.0000	29.8405
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	6.3000e-004	6.6000e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	1.0583	1.0583	6.0000e-005	0.0000	1.0595
Total	8.4200e-003	0.1303	0.1055	3.4000e-004	7.7300e-003	1.9200e-003	9.6500e-003	2.1400e-003	1.7700e-003	3.9100e-003	0.0000	30.8943	30.8943	2.8000e-004	0.0000	30.9000

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1639	0.0000	0.1639	0.0895	0.0000	0.0895	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0636	0.7017	0.5334	6.1000e-004		0.0360	0.0360		0.0331	0.0331	0.0000	57.4861	57.4861	0.0173	0.0000	57.8502
Total	0.0636	0.7017	0.5334	6.1000e-004	0.1639	0.0360	0.1998	0.0895	0.0331	0.1226	0.0000	57.4861	57.4861	0.0173	0.0000	57.8502

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6900e-003	7.6800e-003	0.0326	1.0000e-005	2.0000e-004	6.0000e-005	2.5000e-004	5.0000e-005	5.0000e-005	1.1000e-004	0.0000	1.0803	1.0803	2.0000e-005	0.0000	1.0806

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5700e-003	0.0165	4.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.6458	2.6458	1.4000e-004	0.0000	2.6488
Total	2.7300e-003	9.2500e-003	0.0491	5.0000e-005	3.1600e-003	8.0000e-005	3.2300e-003	8.4000e-004	7.0000e-005	9.2000e-004	0.0000	3.7260	3.7260	1.6000e-004	0.0000	3.7294

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0701	0.0000	0.0701	0.0383	0.0000	0.0383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0636	0.7017	0.5334	6.1000e-004		0.0360	0.0360		0.0331	0.0331	0.0000	57.4860	57.4860	0.0173	0.0000	57.8501
Total	0.0636	0.7017	0.5334	6.1000e-004	0.0701	0.0360	0.1060	0.0383	0.0331	0.0714	0.0000	57.4860	57.4860	0.0173	0.0000	57.8501

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6900e-003	7.6800e-003	0.0326	1.0000e-005	1.7000e-004	6.0000e-005	2.3000e-004	5.0000e-005	5.0000e-005	1.0000e-004	0.0000	1.0803	1.0803	2.0000e-005	0.0000	1.0806
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	1.5700e-003	0.0165	4.0000e-005	2.5500e-003	2.0000e-005	2.5700e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.6458	2.6458	1.4000e-004	0.0000	2.6488
Total	2.7300e-003	9.2500e-003	0.0491	5.0000e-005	2.7200e-003	8.0000e-005	2.8000e-003	7.4000e-004	7.0000e-005	8.1000e-004	0.0000	3.7260	3.7260	1.6000e-004	0.0000	3.7294

3.4 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3900e-003	0.0550	0.0377	6.0000e-005		3.3200e-003	3.3200e-003		3.0600e-003	3.0600e-003	0.0000	5.1770	5.1770	1.5200e-003	0.0000	5.2089
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.3900e-003	0.0550	0.0377	6.0000e-005		3.3200e-003	3.3200e-003		3.0600e-003	3.0600e-003	0.0000	5.1770	5.1770	1.5200e-003	0.0000	5.2089

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	3.5000e-004	3.6700e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5880	0.5880	3.0000e-005	0.0000	0.5886
Total	2.3000e-004	3.5000e-004	3.6700e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5880	0.5880	3.0000e-005	0.0000	0.5886

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3900e-003	0.0550	0.0377	6.0000e-005		3.3200e-003	3.3200e-003		3.0600e-003	3.0600e-003	0.0000	5.1770	5.1770	1.5200e-003	0.0000	5.2089
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.3900e-003	0.0550	0.0377	6.0000e-005		3.3200e-003	3.3200e-003		3.0600e-003	3.0600e-003	0.0000	5.1770	5.1770	1.5200e-003	0.0000	5.2089

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	3.5000e-004	3.6700e-003	1.0000e-005	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.5880	0.5880	3.0000e-005	0.0000	0.5886
Total	2.3000e-004	3.5000e-004	3.6700e-003	1.0000e-005	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.5880	0.5880	3.0000e-005	0.0000	0.5886

3.4 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3100e-003	0.0336	0.0250	4.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	3.3998	3.3998	1.0100e-003	0.0000	3.4211
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.3100e-003	0.0336	0.0250	4.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	3.3998	3.3998	1.0100e-003	0.0000	3.4211

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.1000e-004	2.1900e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3766	0.3766	2.0000e-005	0.0000	0.3770
Total	1.4000e-004	2.1000e-004	2.1900e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3766	0.3766	2.0000e-005	0.0000	0.3770

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3100e-003	0.0336	0.0250	4.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	3.3998	3.3998	1.0100e-003	0.0000	3.4211
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.3100e-003	0.0336	0.0250	4.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	3.3998	3.3998	1.0100e-003	0.0000	3.4211

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.1000e-004	2.1900e-003	1.0000e-005	3.8000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3766	0.3766	2.0000e-005	0.0000	0.3770
Total	1.4000e-004	2.1000e-004	2.1900e-003	1.0000e-005	3.8000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3766	0.3766	2.0000e-005	0.0000	0.3770

3.5 Trail Installation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0506	0.3840	0.3095	4.4000e-004		0.0291	0.0291		0.0277	0.0277	0.0000	38.7094	38.7094	8.2400e-003	0.0000	38.8825
Total	0.0506	0.3840	0.3095	4.4000e-004		0.0291	0.0291		0.0277	0.0277	0.0000	38.7094	38.7094	8.2400e-003	0.0000	38.8825

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6400e-003	0.0466	0.0625	1.2000e-004	3.4700e-003	7.3000e-004	4.2000e-003	9.9000e-004	6.7000e-004	1.6600e-003	0.0000	10.8757	10.8757	8.0000e-005	0.0000	10.8773
Worker	4.8600e-003	7.4300e-003	0.0782	1.9000e-004	0.0157	1.1000e-004	0.0158	4.1600e-003	1.1000e-004	4.2600e-003	0.0000	13.4427	13.4427	6.9000e-004	0.0000	13.4571
Total	9.5000e-003	0.0540	0.1407	3.1000e-004	0.0191	8.4000e-004	0.0200	5.1500e-003	7.8000e-004	5.9200e-003	0.0000	24.3183	24.3183	7.7000e-004	0.0000	24.3344

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0506	0.3840	0.3095	4.4000e-004		0.0291	0.0291		0.0277	0.0277	0.0000	38.7093	38.7093	8.2400e-003	0.0000	38.8824
Total	0.0506	0.3840	0.3095	4.4000e-004		0.0291	0.0291		0.0277	0.0277	0.0000	38.7093	38.7093	8.2400e-003	0.0000	38.8824

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6400e-003	0.0466	0.0625	1.2000e-004	3.0700e-003	7.3000e-004	3.7900e-003	8.9000e-004	6.7000e-004	1.5600e-003	0.0000	10.8757	10.8757	8.0000e-005	0.0000	10.8773
Worker	4.8600e-003	7.4300e-003	0.0782	1.9000e-004	0.0135	1.1000e-004	0.0136	3.6300e-003	1.1000e-004	3.7300e-003	0.0000	13.4427	13.4427	6.9000e-004	0.0000	13.4571
Total	9.5000e-003	0.0540	0.1407	3.1000e-004	0.0166	8.4000e-004	0.0174	4.5200e-003	7.8000e-004	5.2900e-003	0.0000	24.3183	24.3183	7.7000e-004	0.0000	24.3344

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Recreational	0.00	0.00	0.00		

Total	0.00	0.00	0.00		
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4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.471808	0.065740	0.172776	0.155900	0.055970	0.009039	0.016651	0.041094	0.001122	0.001334	0.004921	0.000712	0.002932

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000

Total		0.0000	0.0000	0.0000	0.0000
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Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9547	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2500e-003
Unmitigated	0.9547	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2318					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2500e-003
Total	0.9547	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2500e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Consumer Products	0.7227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2500e-003
Architectural Coating	0.2318					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.9547	2.0000e-005	2.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9600e-003	4.9600e-003	1.0000e-005	0.0000	5.2500e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

San Sevaine Trail - Construction

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	200.00	User Defined Unit	4.60	200,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction only run.

Land Use - Trail project, construction only, no trip generating land use

Construction Phase - trail construction = 6 months

Off-road Equipment - equipment

Off-road Equipment -

Off-road Equipment - equipment

Grading - approx 3,565 cy grading and 7,130 cy of excavation

Construction Off-road Equipment Mitigation - per Rule 403

Off-road Equipment - equipment

Trips and VMT - grading hauling is cut and fill on site.

Table Name	Column Name	Default Value	New Value
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tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	8.00	54.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	NumDays	5.00	27.00
tblConstructionPhase	NumDays	230.00	34.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	MaterialExported	0.00	7,130.00
tblGrading	MaterialImported	0.00	3,565.00
tblLandUse	LandUseSquareFeet	0.00	200,000.00
tblLandUse	LotAcreage	0.00	4.60
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2016	2.5451	29.8851	22.9470	0.0403	6.7947	1.3351	8.0838	3.5043	1.2283	4.6903	0.0000	4,088.6925	4,088.6925	0.7144	0.0000	4,103.6948
2017	3.5536	25.6976	26.2314	0.0437	1.1463	1.7619	2.9082	0.3082	1.6737	1.9819	0.0000	4,070.0988	4,070.0988	0.5844	0.0000	4,082.3712
Total	6.0987	55.5827	49.1784	0.0840	7.9410	3.0970	10.9920	3.8126	2.9020	6.6722	0.0000	8,158.7912	8,158.7912	1.2988	0.0000	8,186.0661

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.5451	29.8851	22.9470	0.0403	3.2028	1.3351	4.4919	1.5816	1.2283	2.7676	0.0000	4,088.6925	4,088.6925	0.7144	0.0000	4,103.6948
2017	3.5536	25.6976	26.2314	0.0437	0.9916	1.7619	2.7535	0.2702	1.6737	1.9439	0.0000	4,070.0988	4,070.0988	0.5844	0.0000	4,082.3712
Total	6.0987	55.5827	49.1784	0.0840	4.1944	3.0970	7.2454	1.8518	2.9020	4.7115	0.0000	8,158.7912	8,158.7912	1.2988	0.0000	8,186.0661

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	47.18	0.00	34.09	51.43	0.00	29.39	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2016	10/7/2016	5	27	
2	Grading	Grading	10/8/2016	12/22/2016	5	54	
3	Paving	Paving	12/23/2016	1/5/2017	5	10	
4	Trail Installation	Building Construction	1/6/2017	2/22/2017	5	34	

Acres of Grading (Site Preparation Phase): 2

Acres of Grading (Grading Phase): 2

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trail Installation	Cranes	0	7.00	226	0.29
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Trail Installation	Forklifts	3	8.00	89	0.20
Trail Installation	Generator Sets	1	8.00	84	0.74
Trail Installation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Trail Installation	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	162	0.38
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	6.00	80	0.38
Trail Installation	Air Compressors	1	8.00	78	0.48
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Grading	Graders	0	8.00	174	0.41
Paving	Paving Equipment	2	6.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trail Installation	9	84.00	33.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	891.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	446.00	14.70	6.90	1.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1305	0.0000	6.1305	3.3232	0.0000	3.3232			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549		1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	6.1305	1.1466	7.2772	3.3232	1.0549	4.3781		1,570.7866	1,570.7866	0.4738		1,580.7365

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5934	9.4596	7.1655	0.0242	0.5748	0.1418	0.7166	0.1574	0.1305	0.2878		2,432.8068	2,432.8068	0.0177		2,433.1789
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0447	0.4713	1.0200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		85.0990	85.0990	4.6400e-003		85.1965
Total	0.6257	9.5043	7.6368	0.0252	0.6642	0.1425	0.8067	0.1811	0.1311	0.3122		2,517.9059	2,517.9059	0.0224		2,518.3754

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6208	0.0000	2.6208	1.4207	0.0000	1.4207			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	2.6208	1.1466	3.7674	1.4207	1.0549	2.4756	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5934	9.4596	7.1655	0.0242	0.5050	0.1418	0.6468	0.1403	0.1305	0.2707		2,432.8068	2,432.8068	0.0177		2,433.1789
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0447	0.4713	1.0200e-003	0.0770	6.6000e-004	0.0777	0.0207	6.1000e-004	0.0213		85.0990	85.0990	4.6400e-003		85.1965
Total	0.6257	9.5043	7.6368	0.0252	0.5820	0.1425	0.7245	0.1609	0.1311	0.2920		2,517.9059	2,517.9059	0.0224		2,518.3754

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0688	0.0000	6.0688	3.3156	0.0000	3.3156			0.0000			0.0000
Off-Road	2.3552	25.9874	19.7544	0.0226		1.3321	1.3321		1.2255	1.2255		2,346.9455	2,346.9455	0.7079		2,361.8119
Total	2.3552	25.9874	19.7544	0.0226	6.0688	1.3321	7.4009	3.3156	1.2255	4.5411		2,346.9455	2,346.9455	0.7079		2,361.8119

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0629	0.2782	1.1690	4.5000e-004	7.3600e-003	2.2400e-003	9.6000e-003	2.0300e-003	2.0600e-003	4.0900e-003		43.2575	43.2575	6.8000e-004		43.2717
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0559	0.5891	1.2800e-003	0.1118	8.3000e-004	0.1126	0.0296	7.6000e-004	0.0304		106.3738	106.3738	5.8000e-003		106.4956
Total	0.1033	0.3341	1.7581	1.7300e-003	0.1191	3.0700e-003	0.1222	0.0317	2.8200e-003	0.0345		149.6313	149.6313	6.4800e-003		149.7673

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5944	0.0000	2.5944	1.4174	0.0000	1.4174			0.0000			0.0000
Off-Road	2.3552	25.9874	19.7544	0.0226		1.3321	1.3321		1.2255	1.2255	0.0000	2,346.9455	2,346.9455	0.7079		2,361.8119
Total	2.3552	25.9874	19.7544	0.0226	2.5944	1.3321	3.9265	1.4174	1.2255	2.6429	0.0000	2,346.9455	2,346.9455	0.7079		2,361.8119

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0629	0.2782	1.1690	4.5000e-004	6.4800e-003	2.2400e-003	8.7300e-003	1.8100e-003	2.0600e-003	3.8700e-003		43.2575	43.2575	6.8000e-004		43.2717
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0559	0.5891	1.2800e-003	0.0962	8.3000e-004	0.0971	0.0258	7.6000e-004	0.0266		106.3738	106.3738	5.8000e-003		106.4956
Total	0.1033	0.3341	1.7581	1.7300e-003	0.1027	3.0700e-003	0.1058	0.0276	2.8200e-003	0.0305		149.6313	149.6313	6.4800e-003		149.7673

3.4 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588		1,913.9557

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.1117	1.1783	2.5600e-003	0.2236	1.6600e-003	0.2252	0.0593	1.5200e-003	0.0608		212.7476	212.7476	0.0116		212.9913
Total	0.0808	0.1117	1.1783	2.5600e-003	0.2236	1.6600e-003	0.2252	0.0593	1.5200e-003	0.0608		212.7476	212.7476	0.0116		212.9913

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.2212	1,902.2212	0.5588		1,913.9557

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.1117	1.1783	2.5600e-003	0.1925	1.6600e-003	0.1941	0.0517	1.5200e-003	0.0532		212.7476	212.7476	0.0116		212.9913
Total	0.0808	0.1117	1.1783	2.5600e-003	0.1925	1.6600e-003	0.1941	0.0517	1.5200e-003	0.0532		212.7476	212.7476	0.0116		212.9913

3.4 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0716	0.1001	1.0551	2.5600e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		204.3730	204.3730	0.0106		204.5964
Total	0.0716	0.1001	1.0551	2.5600e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		204.3730	204.3730	0.0106		204.5964

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0716	0.1001	1.0551	2.5600e-003	0.1925	1.6000e-003	0.1941	0.0517	1.4700e-003	0.0531		204.3730	204.3730	0.0106		204.5964
Total	0.0716	0.1001	1.0551	2.5600e-003	0.1925	1.6000e-003	0.1941	0.0517	1.4700e-003	0.0531		204.3730	204.3730	0.0106		204.5964

3.5 Trail Installation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280		2,509.9861	2,509.9861	0.5346		2,521.2120
Total	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280		2,509.9861	2,509.9861	0.5346		2,521.2120

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2746	2.6897	3.5917	7.1100e-003	0.2073	0.0430	0.2503	0.0592	0.0395	0.0987		701.7460	701.7460	5.1600e-003		701.8544
Worker	0.3005	0.4203	4.4316	0.0107	0.9389	6.7100e-003	0.9456	0.2490	6.1900e-003	0.2552		858.3667	858.3667	0.0447		859.3049
Total	0.5752	3.1100	8.0233	0.0179	1.1463	0.0497	1.1959	0.3082	0.0457	0.3539		1,560.1127	1,560.1127	0.0498		1,561.1593

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280	0.0000	2,509.9861	2,509.9861	0.5346		2,521.2120
Total	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280	0.0000	2,509.9861	2,509.9861	0.5346		2,521.2120

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2746	2.6897	3.5917	7.1100e-003	0.1833	0.0430	0.2262	0.0533	0.0395	0.0928		701.7460	701.7460	5.1600e-003		701.8544
Worker	0.3005	0.4203	4.4316	0.0107	0.8083	6.7100e-003	0.8150	0.2170	6.1900e-003	0.2231		858.3667	858.3667	0.0447		859.3049
Total	0.5752	3.1100	8.0233	0.0179	0.9916	0.0497	1.0413	0.2702	0.0457	0.3159		1,560.1127	1,560.1127	0.0498		1,561.1593

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Recreational	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.471808	0.065740	0.172776	0.155900	0.055970	0.009039	0.016651	0.041094	0.001122	0.001334	0.004921	0.000712	0.002932

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Unmitigated	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.9600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0100e-003	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Total	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.9600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0100e-003	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Architectural Coating	1.2699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

San Sevaine Trail - Construction
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	200.00	User Defined Unit	4.60	200,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction only run.

Land Use - Trail project, construction only, no trip generating land use

Construction Phase - trail construction = 6 months

Off-road Equipment - equipment

Off-road Equipment -

Off-road Equipment - equipment

Grading - approx 3,565 cy grading and 7,130 cy of excavation

Construction Off-road Equipment Mitigation - per Rule 403

Off-road Equipment - equipment

Trips and VMT - grading hauling is cut and fill on site.

Table Name	Column Name	Default Value	New Value
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tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstructionPhase	NumDays	8.00	54.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	NumDays	5.00	27.00
tblConstructionPhase	NumDays	230.00	34.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	MaterialExported	0.00	7,130.00
tblGrading	MaterialImported	0.00	3,565.00
tblLandUse	LandUseSquareFeet	0.00	200,000.00
tblLandUse	LotAcreage	0.00	4.60
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.5252	29.5221	22.3309	0.0404	6.7947	1.3350	8.0835	3.5043	1.2282	4.6900	0.0000	4,102.8468	4,102.8468	0.7143	0.0000	4,117.8480
2017	3.5579	25.6021	26.5122	0.0448	1.1463	1.7615	2.9078	0.3082	1.6733	1.9815	0.0000	4,160.1433	4,160.1433	0.5843	0.0000	4,172.4125
Total	6.0831	55.1242	48.8431	0.0852	7.9410	3.0965	10.9913	3.8126	2.9016	6.6715	0.0000	8,262.9901	8,262.9901	1.2986	0.0000	8,290.2604

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.5252	29.5221	22.3309	0.0404	3.2028	1.3350	4.4916	1.5816	1.2282	2.7673	0.0000	4,102.8468	4,102.8468	0.7143	0.0000	4,117.8480
2017	3.5579	25.6021	26.5122	0.0448	0.9916	1.7615	2.7531	0.2702	1.6733	1.9436	0.0000	4,160.1433	4,160.1433	0.5843	0.0000	4,172.4125
Total	6.0831	55.1242	48.8431	0.0852	4.1944	3.0965	7.2446	1.8518	2.9016	4.7108	0.0000	8,262.9901	8,262.9901	1.2986	0.0000	8,290.2604

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	47.18	0.00	34.09	51.43	0.00	29.39	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2016	10/7/2016	5	27	
2	Grading	Grading	10/8/2016	12/22/2016	5	54	
3	Paving	Paving	12/23/2016	1/5/2017	5	10	
4	Trail Installation	Building Construction	1/6/2017	2/22/2017	5	34	

Acres of Grading (Site Preparation Phase): 2

Acres of Grading (Grading Phase): 2

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trail Installation	Cranes	0	7.00	226	0.29
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Trail Installation	Forklifts	3	8.00	89	0.20
Trail Installation	Generator Sets	1	8.00	84	0.74
Trail Installation	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Trail Installation	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	162	0.38
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	6.00	80	0.38
Trail Installation	Air Compressors	1	8.00	78	0.48
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Grading	Graders	0	8.00	174	0.41
Paving	Paving Equipment	2	6.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trail Installation	9	84.00	33.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	891.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	446.00	14.70	6.90	1.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1305	0.0000	6.1305	3.3232	0.0000	3.3232			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549		1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	6.1305	1.1466	7.2772	3.3232	1.0549	4.3781		1,570.7866	1,570.7866	0.4738		1,580.7365

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5714	9.0995	6.4696	0.0242	0.5748	0.1415	0.7163	0.1574	0.1301	0.2875		2,438.6380	2,438.6380	0.0175		2,439.0052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0344	0.0418	0.5511	1.1200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		93.4222	93.4222	4.6400e-003		93.5197
Total	0.6058	9.1413	7.0207	0.0253	0.6642	0.1421	0.8064	0.1811	0.1308	0.3119		2,532.0602	2,532.0602	0.0221		2,532.5248

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6208	0.0000	2.6208	1.4207	0.0000	1.4207			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	2.6208	1.1466	3.7674	1.4207	1.0549	2.4756	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5714	9.0995	6.4696	0.0242	0.5050	0.1415	0.6465	0.1403	0.1301	0.2704		2,438.6380	2,438.6380	0.0175		2,439.0052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0344	0.0418	0.5511	1.1200e-003	0.0770	6.6000e-004	0.0777	0.0207	6.1000e-004	0.0213		93.4222	93.4222	4.6400e-003		93.5197
Total	0.6058	9.1413	7.0207	0.0253	0.5820	0.1421	0.7241	0.1609	0.1308	0.2917		2,532.0602	2,532.0602	0.0221		2,532.5248

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0688	0.0000	6.0688	3.3156	0.0000	3.3156			0.0000			0.0000
Off-Road	2.3552	25.9874	19.7544	0.0226		1.3321	1.3321		1.2255	1.2255		2,346.9455	2,346.9455	0.7079		2,361.8119
Total	2.3552	25.9874	19.7544	0.0226	6.0688	1.3321	7.4009	3.3156	1.2255	4.5411		2,346.9455	2,346.9455	0.7079		2,361.8119

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0573	0.2775	0.9898	4.6000e-004	7.3600e-003	2.1600e-003	9.5200e-003	2.0300e-003	1.9800e-003	4.0100e-003		44.7169	44.7169	6.2000e-004		44.7299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0430	0.0523	0.6888	1.4100e-003	0.1118	8.3000e-004	0.1126	0.0296	7.6000e-004	0.0304		116.7778	116.7778	5.8000e-003		116.8996
Total	0.1003	0.3298	1.6786	1.8700e-003	0.1191	2.9900e-003	0.1221	0.0317	2.7400e-003	0.0344		161.4947	161.4947	6.4200e-003		161.6295

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5944	0.0000	2.5944	1.4174	0.0000	1.4174			0.0000			0.0000
Off-Road	2.3552	25.9874	19.7544	0.0226		1.3321	1.3321		1.2255	1.2255	0.0000	2,346.9455	2,346.9455	0.7079		2,361.8119
Total	2.3552	25.9874	19.7544	0.0226	2.5944	1.3321	3.9265	1.4174	1.2255	2.6429	0.0000	2,346.9455	2,346.9455	0.7079		2,361.8119

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0573	0.2775	0.9898	4.6000e-004	6.4800e-003	2.1600e-003	8.6400e-003	1.8100e-003	1.9800e-003	3.8000e-003		44.7169	44.7169	6.2000e-004		44.7299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0430	0.0523	0.6888	1.4100e-003	0.0962	8.3000e-004	0.0971	0.0258	7.6000e-004	0.0266		116.7778	116.7778	5.8000e-003		116.8996
Total	0.1003	0.3298	1.6786	1.8700e-003	0.1027	2.9900e-003	0.1057	0.0276	2.7400e-003	0.0304		161.4947	161.4947	6.4200e-003		161.6295

3.4 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588		1,913.9557

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0860	0.1046	1.3777	2.8100e-003	0.2236	1.6600e-003	0.2252	0.0593	1.5200e-003	0.0608		233.5556	233.5556	0.0116		233.7992
Total	0.0860	0.1046	1.3777	2.8100e-003	0.2236	1.6600e-003	0.2252	0.0593	1.5200e-003	0.0608		233.5556	233.5556	0.0116		233.7992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.2212	1,902.2212	0.5588		1,913.9557

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0860	0.1046	1.3777	2.8100e-003	0.1925	1.6600e-003	0.1941	0.0517	1.5200e-003	0.0532		233.5556	233.5556	0.0116		233.7992
Total	0.0860	0.1046	1.3777	2.8100e-003	0.1925	1.6600e-003	0.1941	0.0517	1.5200e-003	0.0532		233.5556	233.5556	0.0116		233.7992

3.4 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0764	0.0937	1.2375	2.8100e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		224.3953	224.3953	0.0106		224.6187
Total	0.0764	0.0937	1.2375	2.8100e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		224.3953	224.3953	0.0106		224.6187

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056		0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0764	0.0937	1.2375	2.8100e-003	0.1925	1.6000e-003	0.1941	0.0517	1.4700e-003	0.0531		224.3953	224.3953	0.0106		224.6187
Total	0.0764	0.0937	1.2375	2.8100e-003	0.1925	1.6000e-003	0.1941	0.0517	1.4700e-003	0.0531		224.3953	224.3953	0.0106		224.6187

3.5 Trail Installation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280		2,509.9861	2,509.9861	0.5346		2,521.2120
Total	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280		2,509.9861	2,509.9861	0.5346		2,521.2120

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2583	2.6207	3.1066	7.1600e-003	0.2073	0.0426	0.2499	0.0592	0.0391	0.0983		707.6968	707.6968	5.0100e-003		707.8020
Worker	0.3211	0.3937	5.1975	0.0118	0.9389	6.7100e-003	0.9456	0.2490	6.1900e-003	0.2552		942.4603	942.4603	0.0447		943.3985
Total	0.5794	3.0144	8.3041	0.0190	1.1463	0.0493	1.1955	0.3082	0.0453	0.3535		1,650.1571	1,650.1571	0.0497		1,651.2005

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280	0.0000	2,509.9861	2,509.9861	0.5346		2,521.2120
Total	2.9785	22.5877	18.2081	0.0258		1.7122	1.7122		1.6280	1.6280	0.0000	2,509.9861	2,509.9861	0.5346		2,521.2120

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2583	2.6207	3.1066	7.1600e-003	0.1833	0.0426	0.2258	0.0533	0.0391	0.0924		707.6968	707.6968	5.0100e-003		707.8020
Worker	0.3211	0.3937	5.1975	0.0118	0.8083	6.7100e-003	0.8150	0.2170	6.1900e-003	0.2231		942.4603	942.4603	0.0447		943.3985
Total	0.5794	3.0144	8.3041	0.0190	0.9916	0.0493	1.0408	0.2702	0.0453	0.3156		1,650.1571	1,650.1571	0.0497		1,651.2005

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Recreational	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.471808	0.065740	0.172776	0.155900	0.055970	0.009039	0.016651	0.041094	0.001122	0.001334	0.004921	0.000712	0.002932

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Unmitigated	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.9600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0100e-003	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Total	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.9600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0100e-003	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Architectural Coating	1.2699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	5.2319	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

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Appendix B

HABITAT ASSESSMENT

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November 16, 2018

JN 153429

CITY OF FONTANA

Contact: *Rina Leung*
8353 Sierra Avenue
Fontana, California 92335

SUBJECT: Habitat Assessment for the San Sevaine Trail Phase 1, Segment 2 Project located in the City of Fontana, San Bernardino County, California

Dear Ms. Leung:

Michael Baker International (Michael Baker) conducted a habitat assessment for the San Sevaine Trail Phase 1, Segment 2 Project (project site or site) located in the City of Fontana, San Bernardino County, California. Michael Baker biologists Ashley M. Spencer and Thomas C. Millington inventoried and evaluated the condition of the habitat within the project site on June 6, 2016.

The habitat assessment was conducted to characterize existing site conditions and to assess the probability of occurrence of special-status¹ plant and wildlife species that could pose a constraint to project implementation. This report provides an in-depth assessment of the suitability of the on-site habitat to support San Bernardino kangaroo rat (*Dipodomys merriami parvus*), burrowing owl (*Athene cunicularia*), and coastal California gnatcatcher (*Poliophtila californica californica*), as well as several other special-status plant and wildlife species identified by the California Natural Diversity Data Base (CNDDDB) and other electronic databases as potentially occurring in the vicinity of the project site.

Project Location

The project site is generally located west of Interstate 215 and north of Interstate 10 in the City of Fontana, San Bernardino County, California (refer to Exhibit 1, *Regional Vicinity*). The project site is depicted on the Cucamonga Peak and Guasti quadrangles of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Sections 27 and 34 of Township 1 north, Range 6 west (refer to Exhibit 2, *Site Vicinity*). Specifically, the project site is located north of the Pacific Electric Bike Trail, south of Banyan Street, and southwest of where State Route 210 and Interstate 15 intersect (refer to Exhibit 3, *Project Site*).

Project Description

The proposed Project consists of the expansion of the existing Class I San Sevaine Trail, Segment 2, by adding a new 1.25-mile trail segment within the cities of Fontana and Rancho Cucamonga. The Project would involve converting an existing maintenance road, which currently runs parallel to the East Etiwanda

¹ As used in this report, "special-status" refers to plant and wildlife species that are federally or State listed, proposed, or candidates; plant species that have been designated a California Native Plant Society (CNPS) Rare Plant Rank; and wildlife species that are designated by the California Department of Fish and Wildlife (CDFW) as fully protected, species of special concern, or watch list species.

Creek Channel, into a paved trail, and filling the gaps in the new linear path. The new trail segment would provide a direct connection to the existing 21-mile Pacific Electric Inland Empire Trail at the Project's southern terminus, approximately 0.25 miles south of Victoria Street. The Pacific Electric Inland Empire Trail, in turn, provides connectivity to the 30-mile Santa Ana River Trail. This regional trail connection is a key component of the proposed Project, as it is anticipated to enhance non-motorized access in the area and encourage increased trail use for both recreation and transportation purposes.

As described in the *San Sevaine Trail Connectivity Master Plan* prepared by the City in December 2015, the San Sevaine Trail is the only north-south Class I bike path in the Inland Empire. The San Sevaine Trail is a fragmented, incomplete trail system, and there is currently only one complete trail segment (1.4 miles). The trail in its entirety is planned to be 11 miles long at buildout, extending from Wilson Avenue in Rancho Cucamonga and Duncan Canyon Road in Fontana, south to the power line easement at Country Village Golf Course in Jurupa Valley. The East Etiwanda Creek Channel right-of-way, owned by the San Bernardino County Flood Control District, is a defining feature of the area. This channel corridor maintenance road will provide the primary spine for the San Sevaine Trail Connectivity Network through San Bernardino County, and the trail network will be comprised of three separate segments: North, Central, and South segments. The proposed Project is part of the North segment. Development will be located within a disturbed dirt and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel.

Proposed Improvements

Implementation of the proposed Project would involve the construction of a 1.25-mile-long new asphalt trail for use by bicyclists and pedestrians within the East Etiwanda Channel right-of-way. The trail alignment would run parallel to the existing flood control channel as it would utilize the existing flood control maintenance road that currently runs parallel to the flood control channel. The new segment of the San Sevaine Trail is planned to be a continuous 12-foot-wide asphalt path with 4-foot decomposed granite shoulders, and would include four granite block benches, LED-lighted bollards, directional and interpretive trail signage, a chain link fence, potable water connection, and striping and pavement legend to alert users of the bike lane.

The proposed trail would be completely separate from major roadways and would be classified as a Class I bicycle and pedestrian path. However, the trail alignment would cross two freeway underpass structures (Interstate 210 and Interstate 15) and one major roadway (Victoria Street), as described below.

State Route 210 and Interstate 15

The existing flat surface on the west side of the East Etiwanda Channel would be paved to cross under the Interstate 15 abutment wall. In addition, under bridge clearances on both the south and northbound Interstate 15 undercrossing along the channel would require excavation and construction of retaining walls. This work would be coordinated with Caltrans District 8, including the procurement of encroachment permits.

Victoria Street

A signalized mid-block crossing would be installed in order to connect south across Victoria Street to the east bank of the East Etiwanda Channel. This would include two options; one option would follow the trail along the west side of the channel and the other option would follow the trail along the east side of the

channel south, in order to connect with the existing Pacific Electric Inland Empire Trail. In order to increase trail user safety, a road diet may also be a component of the proposed crossing design at Victoria Street, which would involve a potential roadway lane width reduction or re-channelization and installation of a pedestrian safety island.

Construction would potentially begin in 2016, would continue for approximately six months, and would include site preparation, asphalt paving, landscaping, and installation of lighted bollards, signage, benches, and fences. Construction would involve the use of various types of construction equipment including tractors/loaders/backhoes, forklifts, welders, a paver, rollers, and small scale equipment such as air compressors, trenchers, mixers, and saws. Equipment would be stored on-site when not in use in a designated staging area. Operation of the Project would commence in 2017.

Methodology

A literature review and records search was conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site (survey area). In addition to the literature review, a general habitat assessment or field survey of the project site was conducted. The field survey provided information on the existing conditions on the project site and assess the potential for special-status biological resources to occur.

Literature Review

Prior to conducting the field survey, an updated literature review and records search was conducted for special-status biological resources potentially occurring within the survey area. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the survey area were determined through a query of the CDFW QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDDB Rarefind 5, the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, the U.S. Fish and Wildlife Service (USFWS) species listings, and the National Marine Fisheries Service (NMFS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred on the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey;
- City of Fontana General Plan;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- CDFW 2012 Staff Report on Burrowing Owl Mitigation.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project site. Additional recorded occurrences of those species found on or near the project site were derived from database queries. The CNDDDB database was used, in conjunction with ArcGIS software, to locate the occurrence records and determine the distance from the project site.

Habitat Assessment/Site Investigation

Michael Baker biologists Ashley M. Spencer and Thomas C. Millington inventoried and evaluated the condition of the habitat within the project site on June 6, 2016. Plant communities were identified on aerial photographs and visually inspected along the boundary of the project site to document their extent. The plant communities were evaluated for their potential to provide suitable habitat for special-status plant and wildlife species as well as corridors and linkages that may support the movement of wildlife through the area. Special attention was given to any undeveloped, natural areas, which have a higher potential to support special-status plant and wildlife species.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field survey were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the survey and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

Existing Site Conditions

On-site surface elevations range from approximately 1,324 to 1,465 feet above mean sea level and generally slopes to the south. According to the Custom Soil Resource Report for Southwestern San Bernardino County, the survey area is underlain by Soboba stony loamy sand, 2 to 9 percent slopes (SpC), Tujunga gravelly loamy sand, 0 to 9 percent slopes (TvC), Soboba gravelly loamy sand, 0 to 9 percent slopes (SoC), and Psamments, Fluvents and Frequently flooded soils (Ps) (refer to Exhibit 4, *Soils*). The proposed trail alignment will be installed within the existing flood control maintenance road that currently runs parallel to the flood control channel that has been heavily disturbed from installation of the flood control channel and routine maintenance activities. Soils within the proposed trail alignment have been mechanically disturbed and compacted.

The proposed trail alignment will be installed within a disturbed dirt and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel. The areas immediately surrounding the maintenance road consist largely of undeveloped native habitat areas, two freeways (State Route 210 and Interstate 15), the East Etiwanda Creek Channel, and two urbanized residential areas. The flood control channel (East Etiwanda Creek) has been channelized into an approximately 25-foot-wide concrete-lined box channel. A chain-link fence borders the flood control channel. These disturbances created from the channelization of East Etiwanda Creek and routine maintenance activities have greatly disturbed, if not eliminated, the natural plant communities that once occurred on the project alignment. Refer to Attachment B for photographs taken throughout the survey area.

Residential neighborhoods are found to the north, south, east, and west of the survey area. In addition, several community facilities border the survey area that include the Etiwanda Creek Community and Dog Park which is located 0.5 mile west of the Project's northerly limits; a skating rink located 0.65 mile southwest of the Project's southerly limits; and four public high schools within a 2-mile radius of the project site. In addition, the Victoria Street Park and Ride is located immediately east of the southern portion of the Project.

Vegetation

Five (5) plant communities were observed within the boundaries of the survey area during the habitat assessment: buckwheat scrub, Riversidian sage scrub, mature Riversidian alluvial fan sage scrub (RAFSS), disturbed mature RAFSS, and intermediate RAFSS (refer to Exhibit 5, *Vegetation*). In addition, the project site contains land cover types that would be classified as disturbed, developed, an un-vegetated basin bottom, and landscaped. These communities are described in further detail below.

Buckwheat Scrub

The buckwheat scrub plant community can be found within the northern, central and southern portions of the survey area lining the maintenance roads. These areas have previously been disturbed and have revegetated with a monoculture of California buckwheat (*Eriogonum fasciculatum*). Other low-growing plant species including California croton (*Croton californicus*), deerweed (*Acmispon glaber*), and common sunflower (*Helianthus annuus*) also occur in low density.

Riversidian Sage Scrub

The Riversidian sage scrub plant community occurs on the northern and southern portions of the survey area. This plant community has been subject to anthropogenic disturbances, but supports a variety of plant species. Plant species occurring within this community include deerweed, black sagebrush (*Artemisia arbuscula*), California sagebrush, California buckwheat, brittlebush (*Encelia farinosa*), white sage (*Salvia apiana*), chia sage (*Salvia columbariae*), and non-native grasses.

Mature RAFSS

The mature RAFSS plant community can be found in the northern portion of the survey area to the east of the East Etiwanda Creek Channel. This disturbed mature RAFSS plant community has been effectively cut-off from the historic fluvial flow patterns and scouring regimes of Lytle Creek and flows exiting the San Gabriel Mountains due to the construction of the surrounding developments and channelization of flood control structures. These activities have eliminated the fluvial processes to this area which are needed to maintain openness of the RAFSS plant community in order to provide suitable habitat for sensitive plant and wildlife species associated with the RAFSS plant communities (i.e., San Bernardino kangaroo rat, Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), slender-horned spineflower (*Dodecahema leptoceras*)). Flooding events that characterize this plant community have not occurred in the general vicinity since the construction of Interstate 15, resulting in a change in soil and alluvial vegetation to mature into a dense plant community that no longer support these species.

This plant community within the survey area is dominated by chamise (*Adenostoma fasciculatum*), mountain mahogany (*Cercocarpus betuloides*), scalebroom (*Lepidospartum squamatum*), chaparral yucca

(*Hesperoyucca whipplei*), hollyleaf redberry (*Rhamnus ilicifolia*), and Mexican elderberry (*Sambucus nigra*). Low growing plant species found within this community include deerweed, black sagebrush, California sagebrush, California cholla (*Cylindropuntia californica*), scarlet larkspur (*Delphinium cardinal*), and sapphire woollystar (*Eriastrum saphirinum*).

Disturbed Mature RAFSS

The disturbed mature RAFSS plant community can be found in the southern portion of the survey area and consists of a remnant mature RAFSS plant community that is dominated by non-native plant species and grasses. Plant species occurring within this plant community include chamise, mountain mahogany, Mexican elderberry, yerba santa (*Eriodictyon californicum*), California buckwheat, red gum eucalyptus (*Eucalyptus camaldulensis*), short-pod mustard (*Hirschfeldia incana*), and tree tobacco (*Nicotiana glauca*). Non-native grasses within this plant community include red brome (*Bromus madritensis* ssp. *rubens*) and Mediterranean grass (*Schismus barbatus*).

Intermediate RAFSS

The intermediate RAFSS plant community occurs within the northern portion of the survey area to the west of the East Etiwanda Creek Channel. Intermediate RAFSS habitat forms a few years following a flood event and is characterized as having more diverse vegetation. Dominate plant species found within this plant community include chamise, yerba santa, white sage, and California croton. Other low growing plant species found within this community include black sagebrush, showy penstemon (*Opuntia littoralis*), common phacelia (*Phacelia distans*), and chia sage.

Disturbed

Disturbed areas on-site include unimproved dirt access roads, the areas parallel to the maintenance roads, construction zones, and the areas subjected to weed abatement activities. Disturbed areas consist of highly compacted soils that no longer support a native plant community. Plant species observed within the disturbed areas include short-podded mustard, tree tobacco, Russian thistle (*Salsola tragus*), and non-native grasses. The proposed trial alignment will be installed within the existing maintenance road.

Developed

Developed areas within the survey area generally consist of paved, impervious surfaces. This includes paved roadways, commercial buildings, residential housing, State Route 210, Interstate 15, the concrete lined East Etiwanda Creek Channel, and maintenance roads.

Un-vegetated Basin Bottom

The un-vegetated basin bottom is located within a basin found in the central portion of the survey area just north of Interstate 15 and west of the East Etiwanda Creek Channel. This basin was not storing water at the time of this habitat assessment and the un-vegetated basin bottom consisted of sand and gravel.

Landscaped

Landscaped vegetation primarily consists of manicured lawns and rows of ornamental trees separating State Route 210 and Interstate 15 from the other plant communities found within the survey area. Plant species

observed in these areas include trailing acacia (*Acacia redolens*), California buckwheat, Fremont cottonwood (*Populus fremontii*), and non-native grasses.

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predations. This section provides a discussion of those wildlife species that were observed or expected to occur within the survey area. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

Fish

No fish or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of fish were observed within the proposed trail alignment. East Etiwanda Creek Channel does not support perennial water flows and is concrete lined which does not support the native habitats favored by fish known to occur in the general vicinity of the project. In addition, the channel was dry at the time of the habitat assessment and most likely does not support standing water for long periods of time that would be sufficient to support populations of fish. . The water detention basins found on the southern portion of the survey area have the potential to provide suitable habitat for exotic, introduced fish species; however, the water detention basin was dry at the time of the 2016 site investigation. Therefore, no fish are expected to occur and are presumed absent from the survey area.

Amphibians

No amphibians or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of amphibians were observed within the proposed trial alignment. East Etiwanda Creek Channel does not support perennial water flows and is concrete lined which does not support the habitats favored by amphibians known to occur in the general vicinity of the project. In addition, the channel was dry at the time of the habitat assessment and most likely does not support standing water for long periods of time that would be sufficient to support populations of amphibians. The water detention basins found on the southern portion of the survey area has the potential to provide suitable habitat for amphibians; however, the water detention basin was dry at the time of the 2016 site investigation. Therefore, no amphibians are expected to occur and are presumed absent from the survey area.

Reptiles

Although the proposed trial alignment has been heavily disturbed, it has the potential to support a variety of reptilian species acclimated to human presence and disturbance. Reptilian species detected during the habitat assessment included Great Basin fence lizard (*Sceloporus occidentalis longipes*), Western side-blotched lizard (*Uta stansburiana elegans*), and red racer (*Coluber flagellum piceus*). Additionally, the undeveloped areas within the survey area provide suitable habitat for a variety of reptilian species known to occur in the area. Reptilian species expected to occur within the boundaries of the survey area include San Diego alligator lizard (*Elgaria multicarinata webbii*), San Diego gopher snake (*Pituophis catenifer annectens*), and southern pacific rattlesnake (*Crotalus oreganus helleri*).

Birds

The native plant communities within the survey area provide suitable foraging and cover habitat for a variety of resident and migrant bird species. Bird species detected during the field survey included California towhee (*Melospiza crissalis*), black phoebe (*Sayornis nigricans*), Bewick's wren (*Thryomanes bewickii*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaidura macroura*), house finch (*Carpodacus mexicanus*), barn swallow (*Hirundo rustica*), Costa's hummingbird (*Calypte costae*), Anna's hummingbird (*Calypte anna*), killdeer (*Charadrius vociferus*), American kestrel (*Falco sparverius*), bushtit (*Psaltiriparus minimus*), and northern mockingbird (*Mimus polyglottos*), cliff swallow (*Petrochelidon pyrrhonota*), northern rough-winged swallow (*Stelgidopteryx serripennis*), and California thrasher (*Toxostoma redivivum*). It should also be noted that one CDFW Watch List species was observed foraging in the southern portion of the project site during the field survey: Cooper's hawk (*Accipiter cooperii*). One USFWS federally threatened species was also observed foraging within the mature RAFSS plant community within the northern portion of the project site: coastal California gnatcatcher (*Poliophtila californica californica*).

Mammals

Although the proposed trial alignment has been heavily disturbed, it has the potential to support a variety of mammalian species acclimated to human presence and disturbance. However, most mammal species are nocturnal and are difficult to observe during a diurnal field survey. Cottontail rabbit (*Sylvilagus audubonii*) and California ground squirrel (*Otospermophilus beecheyi*) were the only mammalian species observed during the field survey. Additionally, the undeveloped areas within the survey area provide suitable habitat for a variety of mammalian species known to occur in the area. Common mammalian species that are expected to occur include coyote (*Canis latrans*), raccoon (*Procyon lotor*), deer mouse (*Peromyscus* sp.), and striped skunk (*Mephitis mephitis*).

Nesting Birds

No active nests or birds displaying nesting behavior were observed during the field survey. However, the plant communities within the survey area provide suitable foraging and nesting habitat for a variety of year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. Further, the eucalyptus trees found within the southern portion of the survey area have the potential to provide suitable nesting opportunities for raptor species (i.e., red-tailed hawk). Although heavily disturbed, the proposed trial alignment has the potential to support birds that nest on open ground, such as killdeer.

Migratory Corridors and Linkages

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species, but inadequate for others. Wildlife corridors are significant features for dispersal, seasonal

migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The survey area has not been identified as occurring within a Wildlife Corridor or Linkage by the City of Fontana General Plan. However, the northern and southern portions of the survey area are relatively undeveloped and consists of natural habitats which has the potential to support wildlife movement through the area in search of food, shelter, or nesting habitat. Although heavily disturbed, and constrained by development, the proposed trail alignment has the potential to provide movement opportunities for wildlife to travel north to the San Gabriel Mountains and North Etiwanda Preserve, and northeast towards the Lytle Creek Wash.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (Corps) Regulatory Branch regulates discharge of dredge or fill materials into “waters of the United States” pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Water Quality Control Board (Regional Board) regulates discharges to surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities under Fish and Wildlife Code Sections 1600 *et seq.*

One (1) intermittent drainage feature, East Etiwanda Creek Channel, runs parallel to the proposed trail alignment. Flows that enter this concrete-lined flood control channel continue southwest through surrounding residential development to the Santa Ana River. As such, the on-site drainage feature exhibits a surface hydrologic connection to downstream waters of the U.S. and falls under the regulatory authority of the Corps, Regional Board, and CDFW.

However, based on the projects conceptual design plan, the proposed project will not impact the channel and no storm drains will tie into the channel. Development of the proposed trail will be limited to the disturbed dirt areas and partially paved flood control maintenance roads that parallel the East Etiwanda Creek Channel. Therefore, no impacts to jurisdictional waters will occur as a result of the proposed project. If any impacts to this drainage feature occur, the following regulatory permits will be required: Corps CWA Section 404 Nationwide Permit, Regional Board CWA Section 401 Water Quality Certification, and CDFW Section 1602 Streambed Alteration Agreement.

Special-Status Biological Resources

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Cucamonga Peak, Devore, Guasti, and Fontana USGS 7.5-minute quadrangles. A search of published records of these species was conducted within these quadrangles using the CNDDB Rarefind 5 online software and CNDDB Quickview Tool in BIOS. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species. In addition, species lists from both USFWS and NMFS were generated pursuant to Section 7(a)(2) of the Federal Endangered Species Act; refer to Attachments D and E, respectively.

The literature search identified forty-five (45) special-status plant species, sixty-four (64) special-status wildlife species, and five (5) special-status habitats as having the potential to occur within the Cucamonga Peak, Devore, Guasti, and Fontana quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species and communities determined to have the potential to occur within the general site vicinity based on the record search are presented in Attachment C, *Potentially Occurring Special-Status Biological Resources*. Attachment C provides a detailed analysis regarding the potential occurrence of special-status plant and wildlife species within the project site.

Special-Status Plants

Forty-five (45) special-status plant species have been recorded in the CNDDDB and CNPS in the Cucamonga Peak, Devore, Guasti, and Fontana USGS 7.5-minute quadrangles (refer to Attachment C). Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined native plant communities within the survey area have a low potential to support Catalina mariposa-lily (*Calochortus catalinae*), Plummer's mariposa-lily (*Calochortus plummerae*), Santa Ana River woollystar, and mesa horkelia (*Horkelia cuneate* var. *puberula*). All remaining special-status plants are presumed absent. However, development of the bike trail is proposed to occur within the disturbed dirt areas and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel. This area has been subject to a variety of anthropogenic disturbances including vehicle use and on-going weed abatement activities. These disturbances have greatly disturbed, if not eliminated, the natural plant communities that once occurred within the proposed project footprint. Special-status plant species are not expected to occur within the proposed tail alignment and are presumed to be absent from the proposed project footprint.

Special-Status Wildlife

Sixty-four (64) special-status wildlife species have been reported in the Cucamonga Peak, Devore, Rancho Cucamonga, and Fontana USGS 7.5-minute quadrangles (refer to Attachment C). Cooper's hawk, coastal California gnatcatcher, and Coast's hummingbird were the only special-status wildlife species observed during the field survey. Other special-status wildlife species that have a high potential to occur within the native plant communities within the survey area include Allen's hummingbird (*Selasphorus sasin*). Based on habitat requirements for specific special-status wildlife species and the availability and quality of habitats needed by each species, it was determined that the native plant communities within the survey area have a moderate potential to support great egret (*Ardea alba*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*), Bell's sage sparrow (*Artemisiospiza belli belli*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), lark sparrow (*Chondestes grammacus*), northern harrier (*Circus cyaneus*), San Bernardino kangaroo rat (), loggerhead shrike (*Lanius ludovicianus*), San Diego black-tailed jackrabbit (*Lepus californicus bennetti*), Los Angeles pocket mouse (*Perognathus longimembris pacificus*), and coast horned lizard (*Phrynosoma blainvillii*). All remaining special-status wildlife species either have a low potential to occur on the project site or are presumed to be absent from the project site based on habitat requirements, availability and quality of habitat needed by each species, and known distributions. The potential occurrence of San Bernardino kangaroo rat, burrowing owl and coastal California gnatcatcher within the project site is described in further detail below.

San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat is one of three subspecies of the Merriam's kangaroo rat (*Dipodomys merriami*) and is federally listed as endangered. The species has a restricted southern California distribution, being confined to certain inland valley scrub communities, particularly alluvial scrub communities on gravelly and sandy soils adjoining rivers, streams, and drainages within Riverside and San Bernardino County. San Bernardino kangaroo rat habitat has been historically altered as a result of flood control efforts and the increased use of river resources, including surface mining operations, off-road vehicle use, roadway and housing development. Overall habitat loss is estimated at 96 percent. These alterations to San Bernardino kangaroo rat habitat listed above led to an emergency listing as endangered in 1998 (USFWS, 1998a), followed by a Final Rule issuance in that same year (USFWS, 1998b). The San Bernardino kangaroo rat is described as being confined to primary and secondary alluvial fan scrub habitats, with sandy soils deposited by fluvial (water) rather than Aeolian (wind) processes (USFWS 1998). Burrows are dug in loose soil, usually near or beneath shrubs. The species has also been found in highly disturbed areas adjacent to otherwise suitable habitat.

The project site is situated on an area known as the Etiwanda Alluvial Fan. In 2008, USFWS stated that the Etiwanda Alluvial Fan was likely occupied by a small remnant population of San Bernardino kangaroo rat, but flood control structures and urban development have disrupted the natural flood regime of the Etiwanda Alluvial Fan and resulted in poor quality habitat. Further, the USFWS concluded that areas on the Etiwanda Alluvial Fan occupied by San Bernardino kangaroo rat do not contain the primary constituent elements in the appropriate quantity and spatial arrangement necessary to sustain a core population. The northern and southern portions of the survey area are vegetated with a RAFSS plant community. This plant community has the potential to provide shelter and has greater than 50 percent canopy cover with patches of suitable soils for burrowing and foraging. However, areas surrounding the survey area primarily consist of single-family residential land uses and many of the natural alluvial fans and drainage courses that once occurred within these areas have been channelized into concrete-lined channels for flood control purposes. As a result, the survey area has been disconnected from the natural fluvial processes associated with Day Canyon Wash, East Etiwanda Canyon Wash, and San Sevaine Canyon Wash. Therefore, it was determined that San Bernardino kangaroo rat has a moderate potential to occur within the undeveloped portions of the survey area.

However, development of the bike trail is proposed to occur within the disturbed dirt areas and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel. This area has been subject to a variety of anthropogenic disturbances including vehicle use and on-going weed abatement activities. These disturbances have greatly disturbed, if not eliminated, the natural plant communities that once occurred within the proposed project footprint. San Bernardino kangaroo rat is not expected to occur within the proposed project footprint and is presumed absent from the trail alignment.

Burrowing Owl

Burrowing owl is currently designated as a California Species of Special Concern. The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with level to gently-sloping areas characterized by open vegetation and bare ground. The western burrowing owl (*A.c. hypugaea*), which occurs throughout the

western United States including California, rarely digs its own burrows and is instead dependent upon the presence of burrowing mammals (i.e., ground squirrels, coyotes, and badgers [*Taxidea taxus*]) whose burrows are often used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to forage as well as watch for predators. In California, the burrowing owl breeding season extends from the beginning of February through the end of August.

It was determined during that habitat assessment that burrowing owl has a low potential to occur. The southern portion of survey area is dominated by low-growing open vegetation and has the potential to provide suitable foraging and nesting habitat for burrowing owls. The burrows found on-site were generally on the smaller end of being able to be used by this species. Further, despite a systematic search of open habitat and the small burrows on the project site, no burrowing owls or recent sign (pellets, feathers, castings, or white wash) was observed during the habitat assessment. Burrowing owls are presumed absent from the project site and focused surveys are not recommended. A pre-construction burrowing owl clearance survey would be required to ensure burrowing owl remain absent from the project site.

Coastal California Gnatcatcher

The coastal California gnatcatcher is a federally threatened species with restricted habitat requirements: it is an obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 984 feet elevation in coastal regions and below 1,640 feet inland. It ranges from Ventura County south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. The coastal California gnatcatcher prefers habitat with more low-growing vegetation where it breeds between mid-February and the end of August, with peak activity from mid-March to mid-May. Although California gnatcatcher is known to occur within San Bernardino County, the species has a limited distribution.

California gnatcatcher was observed foraging within the mature RAFSS plant community, within the survey area, which provides suitable foraging and nesting habitat for this species. However, development of the bike trail is proposed to occur within the disturbed dirt areas and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel. This area has been subject to a variety of anthropogenic disturbances including vehicle use and on-going weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred within this portion of the proposed trail alignment. As long as development remains outside of the native plant communities surrounding the proposed bike trail area, it is presumed impacts to coastal California gnatcatcher will not occur. Focused surveys for California gnatcatcher are not recommended. If coastal California gnatcatcher are observed nesting in the native habitats adjacent to the proposed trail alignment during a pre-construction nesting bird clearance survey, stringent avoidance and minimization measures will be implemented to ensure no impacts to coastal California gnatcatcher will occur (i.e., 500 foot no work buffer, noise barriers, biological monitoring).

Special-Status Plant Communities

According to the CNDDDB, five (5) special-status plant communities have been reported in the Cucamonga Peak, Devore, Guasti, and Fontana USGS 7.5-minute quadrangles: California Walnut Woodland, Coast and Valley Freshwater Marsh, RAFSS, Southern Riparian Forest, and Southern Sycamore Alder Riparian Woodland (refer to Attachment C). One of these special-status plant communities occur within the project site: RAFSS. Development of the bike trail is proposed to occur within the disturbed dirt areas and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel, outside of the RAFSS plant community. Based on current design plans, the RAFSS plant community is presumed to not be impacted by development of the bike trail.

Critical Habitat

Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. In the event that a project may result in take or adverse modification to a species' designated Critical Habitat, a project proponent may be required to engage in suitable mitigation. However, consultation for impacts to Critical Habitat is only required when a project has a federal nexus. This may include projects that occur on federal lands, require federal permits (e.g., CWA Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be consult with the USFWS.

In 2002, the USFWS designated four (4) Critical Habitat units for San Bernardino kangaroo rat. Portions of the survey area fall within the boundaries of Unit 4, which is associated with the Etiwanda Alluvial Fan and Wash (Exhibit 6, *Critical Habitat*). Since there is no federal nexus (i.e., CWA Section 404 permit, federal funding, etc.), the presence of Critical Habitat will not trigger a consultation with the USFWS under Section 7 of the federal Endangered Species Act. However, if final design results in impacts to East Etiwanda Creek and a Corps CWA Section 404 permit is required, a Section 7 consultation with the USFWS will be required to determine if a loss or adverse modification to Critical Habitat will occur.

Conclusion and Recommendations

The proposed trail alignment is located within a disturbed dirt and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel. The areas immediately surrounding the maintenance road consist largely of undeveloped native habitat areas, two freeways (Interstate 210 and Interstate 15), the East Etiwanda Creek Channel, and two residential developments. Five (5) plant communities were observed within the survey area during the habitat assessment: buckwheat scrub, Riversidian sage scrub, mature RAFSS, disturbed mature RAFSS, and intermediate RAFSS. In addition, the project site contains land cover types that would be classified as disturbed, developed, an un-vegetated basin bottom, and landscaped.

Development of the bike trail is proposed to occur within the disturbed dirt areas and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel. This area has been subject to a variety of anthropogenic disturbances including vehicle use and on-going weed abatement activities. These

disturbances have greatly disturbed, if not eliminated, the natural plant communities that once occurred within the proposed project footprint. Special-status plant and wildlife species are not expected to occur within the proposed tail alignment and are presumed to be absent from the proposed project footprint.

One (1) intermittent drainage feature, East Etiwanda Creek Channel, runs parallel to the project site. However, based on the projects conceptual design plan, the proposed project will not impact the channel and no storm drains will tie into the creek. Development of the bike trail is proposed to occur within the disturbed dirt areas and partially paved flood control maintenance road that parallels the East Etiwanda Creek Channel. Therefore, no impacts to jurisdictional waters will occur as a result of the proposed project.

Although it was determined that burrowing owl has a low potential to occur, the southern portion of survey area is dominated by low-growing open vegetation and has the potential to provide suitable foraging and nesting habitat for burrowing owls. Therefore, it is recommended that a pre-construction clearance survey be conducted prior the start of any ground disturbing or vegetation removal activities to ensure that impacts to burrowing owls will not occur. In accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation, two (2) pre-construction clearance surveys should be conducted 14 – 30 days and 24 hours prior to any ground disturbing or vegetation removal activities.

In order to ensure compliance with the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, it is recommended that construction activities and/or the removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. Generally, the nesting season extends from January 1 through August 31, but can vary slightly from year to year based upon seasonal weather conditions. If ground disturbing or vegetation removal activities cannot occur outside of the nesting season, a pre-construction nesting bird clearance survey will be required to ensure that impacts to nesting birds will not occur. The clearance survey can be conducted in conjunction with the burrowing owl clearance survey and should occur no more than three days prior to the start of any ground disturbing activities.

Federal Endangered Species Act Consultation Determination

A USFWS IPaC species list for the proposed project was generated on October 24, 2018. It is determined that, pursuant to Section 7(a)(2) of the Federal Endangered Species Act, the proposed project would result in “No Effect” to the following federally-listed threatened or endangered species:

- San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)
- California Condor (*Gymnogyps californianus*)
- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Southwestern Willow Flycatcher (*Empidonax traillii extimus*)
- Mountain Yellow-legged Frog (*Rana muscosa*)
- Delhi Sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*)
- Braunton's Milk-vetch (*Astragalus brauntonii*)
- San Diego Ambrosia (*Ambrosia pumila*)

In addition to the above-listed species, federally-designated critical habitat is identified for one species for this project: San Bernardino kangaroo rat. Since there is no federal nexus for the proposed project, the presence of Critical Habitat does not trigger a consultation with the USFWS under Section 7 of the Federal Endangered Species Act, and the project will result in No Effect to USFWS-designated critical habitat.

Essential Fish Habitat Consultation Summary

A National Marine Fisheries Service (NMFS) species list was generated on October 24, 2018. No NMFS species were identified as having the potential to occur within the project area. Therefore, the project will not affect aquatic resources and will not impact NMFS-protected resources.

Please do not hesitate to contact me at (949) 472-3454 or ashley.spencer@mbakerintl.com or Tom Millington at (949) 855-5777 or tommillington@mbakerintl.com should you have any questions or require further information.

Sincerely,

Ashley Spencer
Biologist
Natural Resources

Thomas Millington
Senior Biologist
Natural Resources

Attachments:

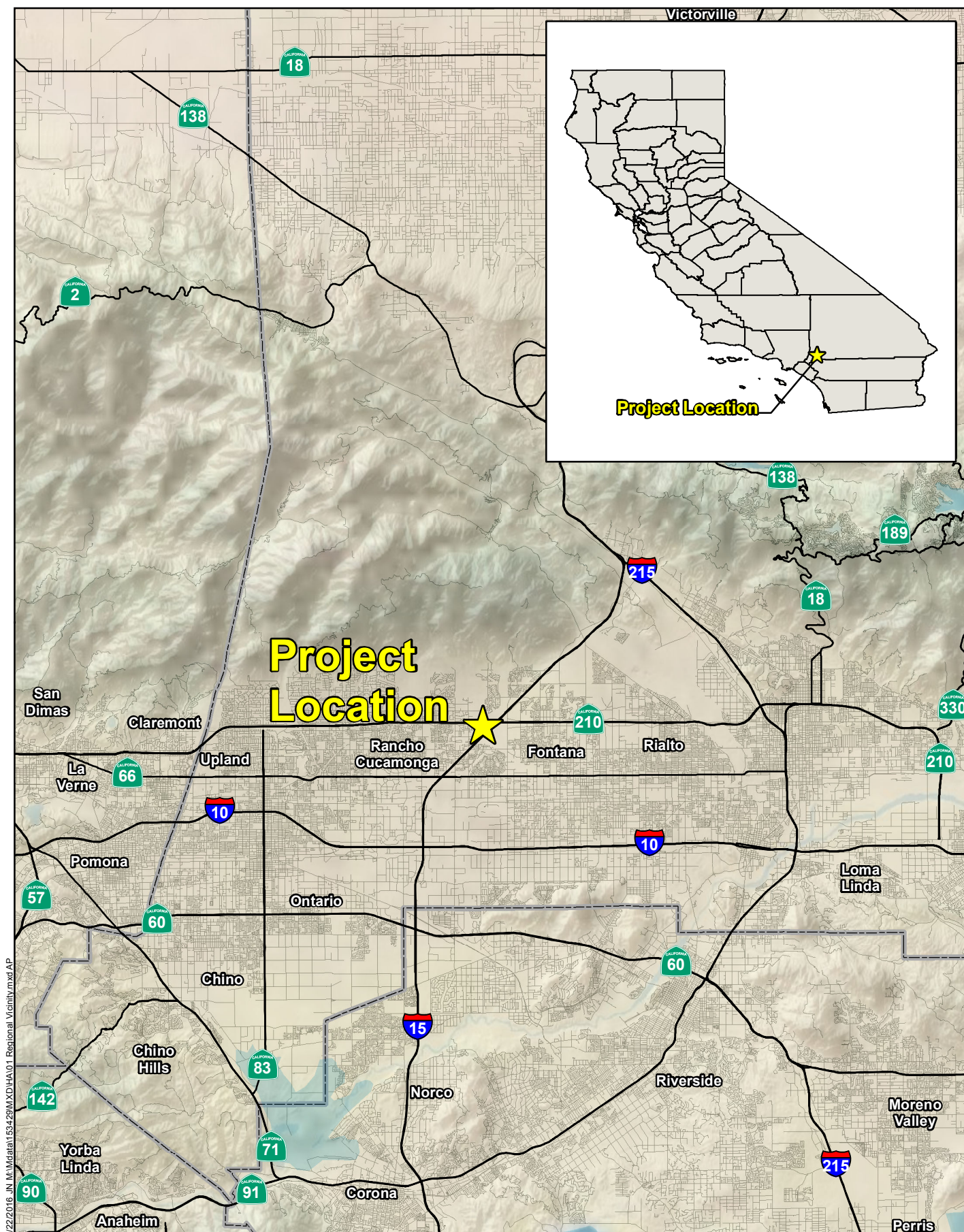
- A. *Project Exhibits*
- B. *Site Photographs*
- C. *Potentially Occurring Special-Status Biological Resources*
- D. *USFWS IPaC Species List*
- E. *NMFS Species List*
- F. *Flora and Fauna Compendium*

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Attachment A

Project Exhibits

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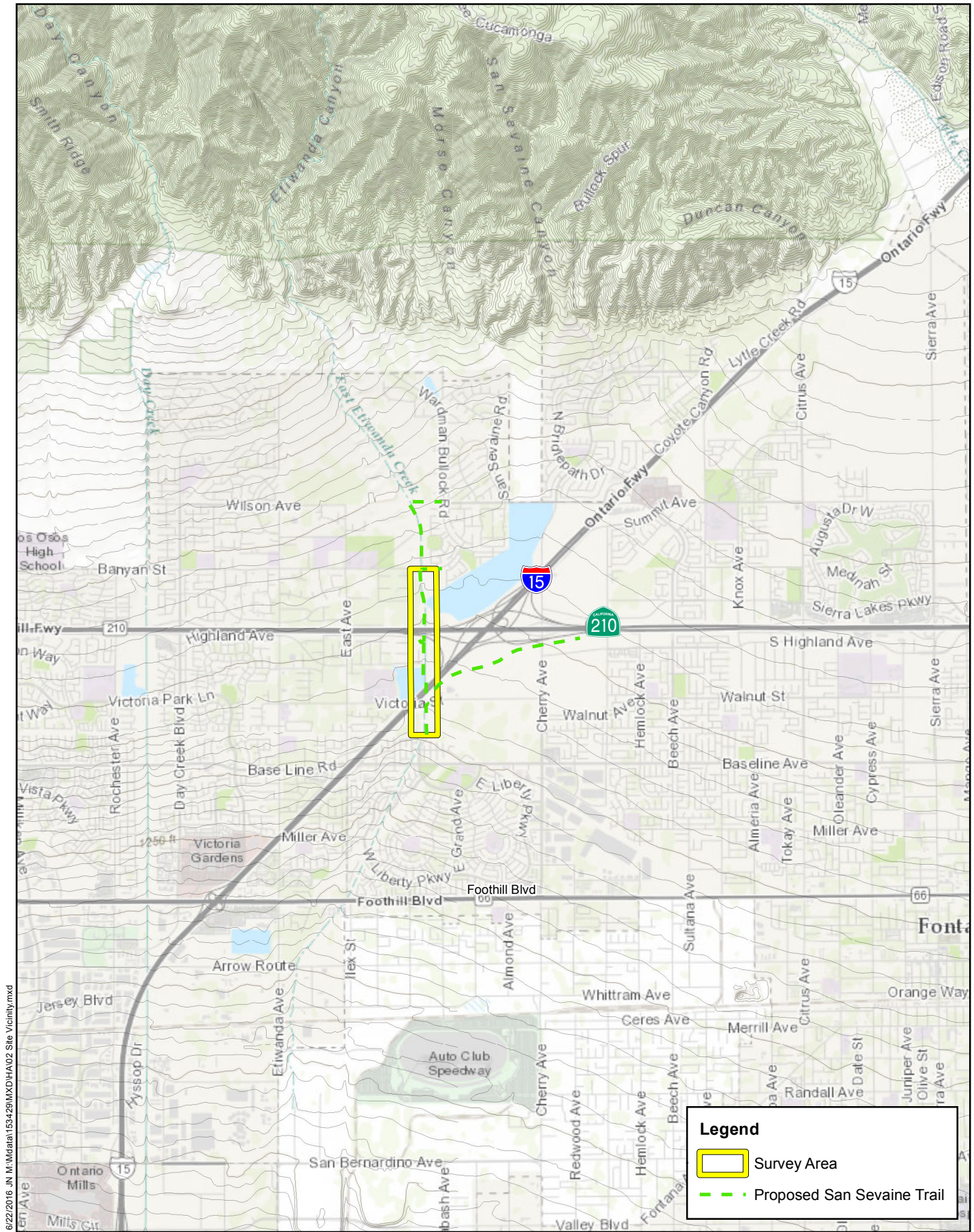


SAN SEVAINE TRAIL PHASE 1, SEGEMENT 2 PROJECT
HABITAT ASSESSMENT

Regional Vicinity

Exhibit 1

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SAN SEVAINE TRAIL PHASE 1, SEGMENT 2 PROJECT
HABITAT ASSESSMENT

Project Site

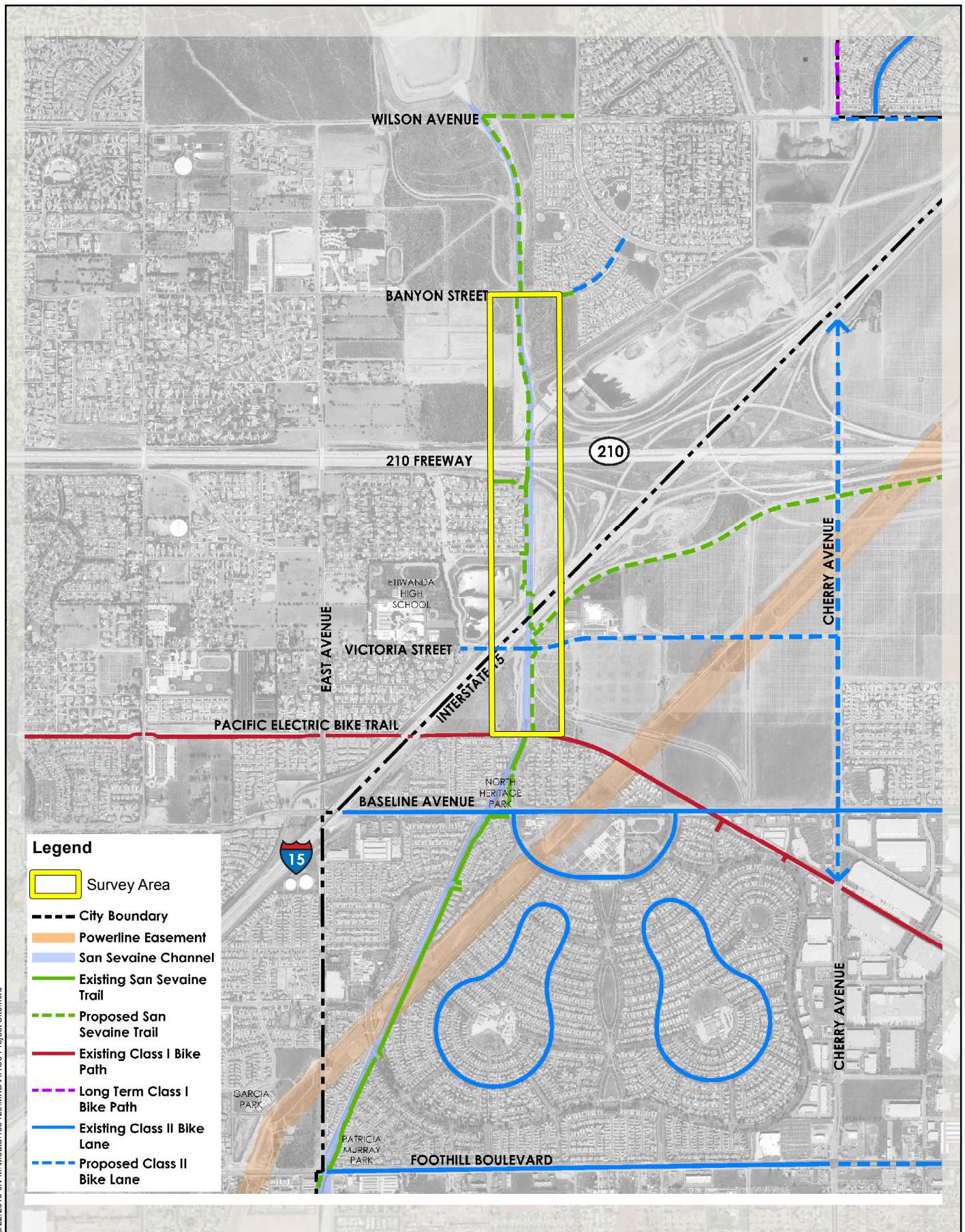
Michael Baker
INTERNATIONAL



Source: San Bernardino County, RRM Design Group, ESRI World Imagery, Quads: Cucamonga Peak and Devore

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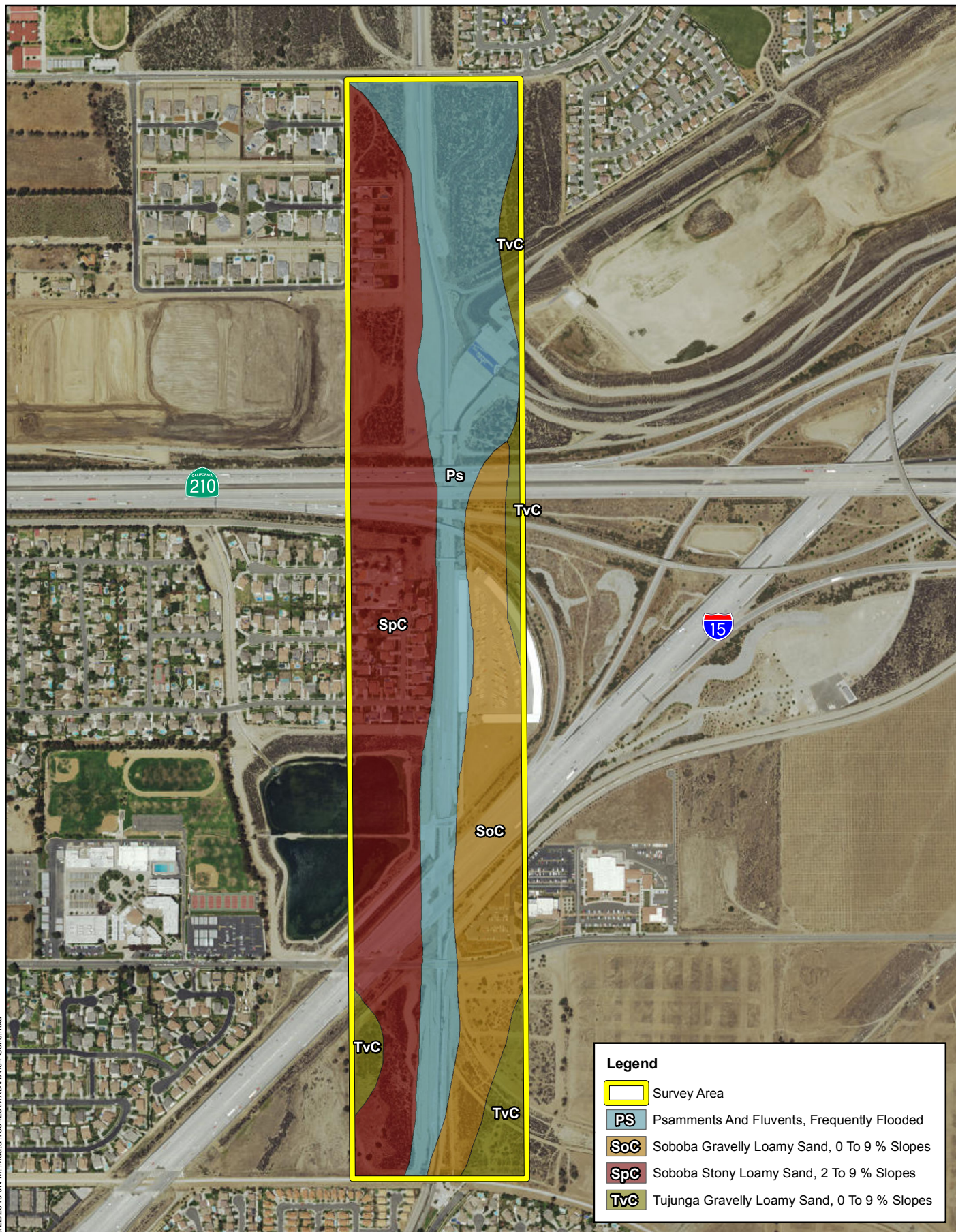


SAN SEVAIRE TRAIL PHASE 1, SEGMENT 2 PROJECT
HABITAT ASSESSMENT



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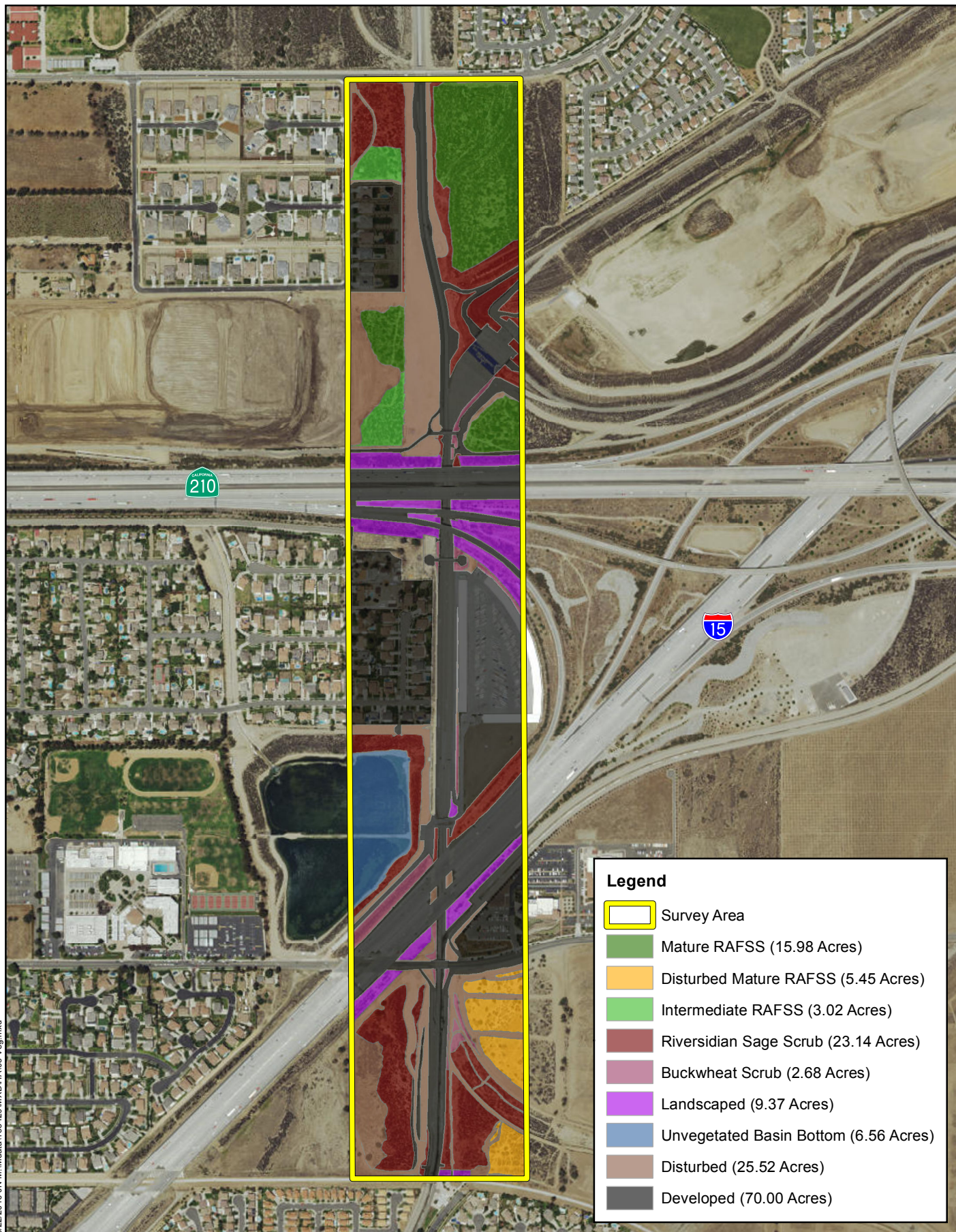


SAN SEVAINE TRAIL PHASE 1, SEGMENT 2 PROJECT
HABITAT ASSESSMENT



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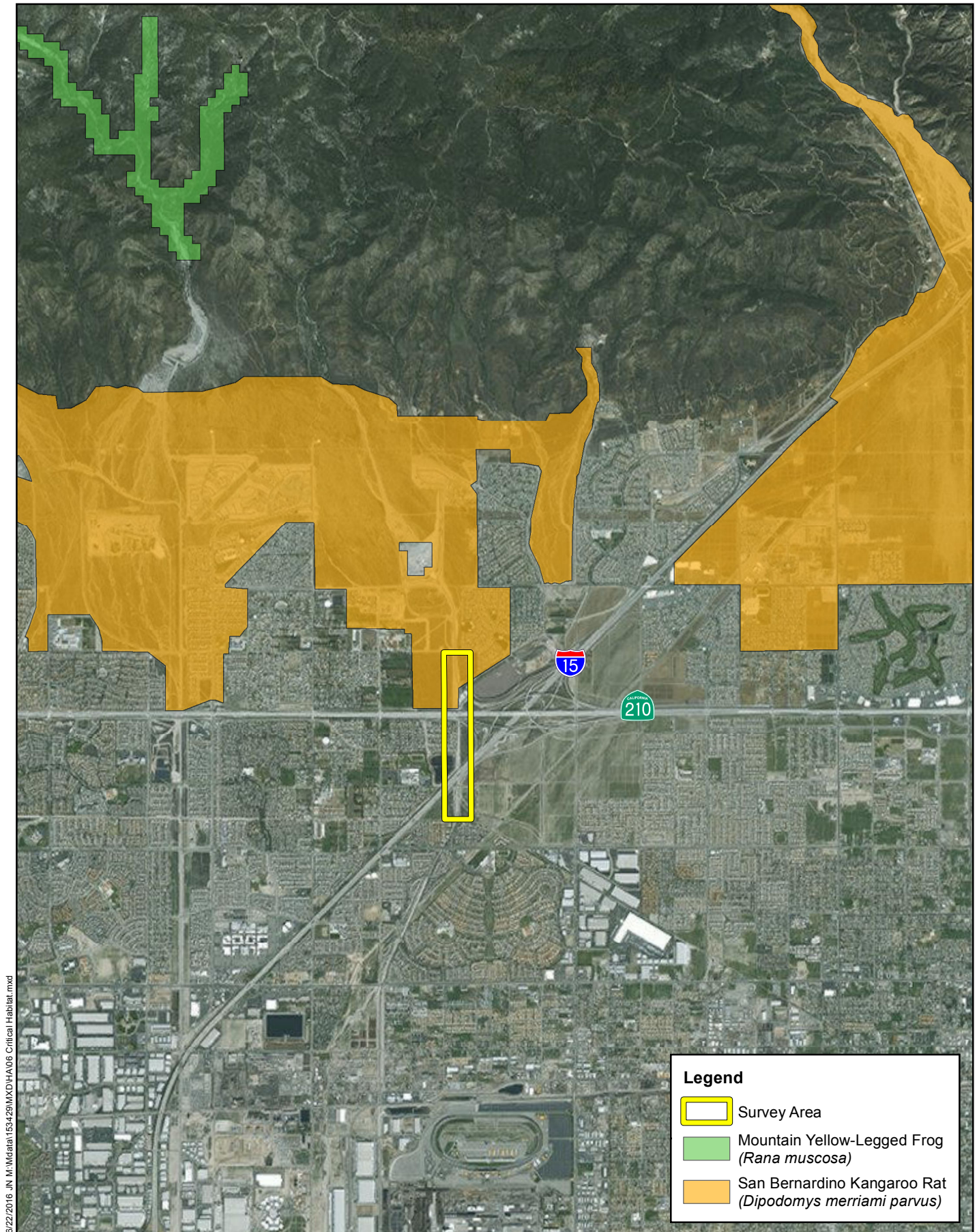
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SAN SEVAINE TRAIL PHASE 1, SEGMENT 2 PROJECT
HABITAT ASSESSMENT



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SAN SEVAIN TRAIL PHASE 1, SEGMENT 2 PROJECT
HABITAT ASSESSMENT

Critical Habitat

Exhibit 6



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Attachment B

Site Photographs

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Photograph 1: Looking south across the Riverside sage scrub plant community located on the northern portion of the survey area.



Photograph 2: Looking north at the Riverside sage scrub plant community and the maintenance road where the bike trail is proposed to be developed.



Photograph 3: Looking southwest across the northern portion of the survey area.



Photograph 4: Looking south across a maintenance road located within the northern portion of the survey area.



Photograph 5: Looking southeast at the East Etiwanda Creek Channel which runs parallel to the proposed bike trail.



Photograph 6: Standing within the central portion of the survey area looking west at the maintenance road where the bike trail is proposed to be developed.



Photograph 7: Standing within the southern portion of the survey area looking south at the maintenance road where the bike trail is proposed to be developed.



Photograph 8: Looking southeast across the disturbed mature RAFSS plant community found in the central portion of the survey area.



Photograph 9: View of the area proposed as a park and ride access point found in the southern portion of the survey area.



Photograph 10: Standing within the southern portion of the survey area looking south at the East Etiwanda Creek Channel.

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Attachment C

Potentially Occurring Special-Status Biological Resources

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Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
SPECIAL-STATUS WILDLIFE SPECIES				
<i>Accipiter cooperii</i> Cooper's hawk	Fed: None CA: WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Yes	Present. There is suitable foraging habitat within the northern and southern portions of the survey area. However, the project site does not provide suitable nesting habitat. This species is adapted to urban environments and occurs commonly. The proposed trial alignment does not provide suitable habitat.
<i>Accipiter striatus</i> sharp-shinned hawk	Fed: None CA: WL	Occurs in mixed or coniferous forests, open deciduous woodlands, thickets, and edges. Usually nests in groves of coniferous trees in mixed woods, sometimes in dense deciduous trees or in pure coniferous forest with brush or clearings nearby.	No	Presumed absent. No suitable habitat is present on site.
<i>Agelaius tricolor</i> tricolored blackbird	Fed: None CA: SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [<i>Schoenoplectus</i> sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	No	Presumed absent. No suitable habitat is present on site.
<i>Anniella pulchra pulchra</i> silvery legless lizard	Fed: None CA: SSC	Occurs primarily in areas with sandy or loose loamy soils under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, oaks, or cottonwoods that grow on stream terraces. Often found under or in the close vicinity of logs, rocks, old boards, and the compacted debris of woodrat nests.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Aquila chrysaetos</i> golden eagle	Fed: None CA: FP;WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	Presumed absent. Although there is marginal foraging habitat on-site, there is no suitable nesting habitat on or within the vicinity of the project site.
<i>Ardea alba</i> great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	Moderate. Portions of the survey area provide suitable foraging habitat, in particular the water detention basins. The proposed trial alignment does not provide suitable habitat.
<i>Ardea herodias</i> great blue heron	Fed: None CA: None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills.	No	Moderate. Portions of the survey area provide suitable foraging habitat, in particular the water detention basins. The proposed trial alignment does not provide suitable habitat.
<i>Arizona elegans occidentalis</i> California glossy snake	Fed: None CA: None	Found in arid scrub, rocky washes, and chaparral habitats. Is nocturnal and burrows underground in the daytime.	No	Presumed absent. No suitable habitat is present on site.
<i>Artemisiospiza belli belli</i> Bell's sage sparrow	Fed: None CA: WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	Moderate. There is suitable foraging habitat surrounding the northern portion of the survey area. The proposed trial alignment does not provide suitable habitat.
<i>Asio otus</i> long-eared owl	Fed: None CA: SSC	Requires riparian or other thickets with small, densely canopied trees for roosting and nesting. Also occurs in dense conifer stands at higher elevations.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	Fed: None CA: None	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage such as chaparral, woodland, and riparian areas.	No	Moderate. There is suitable habitat within the undeveloped portions of the survey area. The proposed trial alignment does not provide suitable habitat.
<i>Athene cunicularia</i> burrowing owl	Fed: None CA: SSC	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	Low. There is marginal habitat within survey area.
<i>Baeolophus inornatus</i> oak titmouse	Fed: None CA: None	Prefers oak trees, open pine or mixed oak-pine forest. Most entirely restricted to dry slopes in California, though it ranges north to Oregon and south to Baja California.	No	Presumed absent. No suitable habitat is present on site.
<i>Batrachoseps gabrieli</i> San Gabriel slender salamander	Fed: None CA: None	Known in the San Gabriel Mountains and the Mt. Baldy area of Los Angeles County and the western end of the San Bernardino Mountains in San Bernardino Co. Elevation ranges from 1,200 to 5,085 feet. Occurs on talus slopes surrounded by a variety of conifer and montane hardwood species, including bigcone spruce, pine, white fir, incense cedar, canyon live oak, black oak, and California laurel.	No	Presumed absent. No suitable habitat is present on site.
<i>Bombus crotchii</i> crotch bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	Presumed absent. No suitable habitat is present on site.
<i>Calypte costae</i> Costa's hummingbird	Fed: None CA: None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	Yes	Present: This species was observed foraging within the survey area during the 2016 field site investigation. The proposed trial alignment does not provide suitable habitat.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	Low: There is marginal habitat on the northern portion of the survey area. The proposed trial alignment does not provide suitable habitat.
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	Fed: None CA: SSC	Common resident of sandy herbaceous areas, usually in association with rocks or coarse gravel in southwestern California. Occurs mainly in arid coastal and desert border areas. Habitats include coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland.	No	Low: There is marginal habitat on the northern and southern portions of the survey area. The proposed trial alignment does not provide suitable habitat.
<i>Charina trivirgata</i> rosy boa	Fed: None CA: None	Ranges from southern California and western Arizona in the United states, southward to Baja California and western Sonora in Mexico. Species often inhabits rocky areas in coastal sage scrub, chaparral, and desert environments.	No	Presumed absent. No suitable habitat is present on site.
<i>Chondestes grammacus</i> lark sparrow	Fed: None CA: None	A common to fairly common resident in lowlands and foothills throughout much of California. Breeds only locally in southern deserts, but is somewhat more widespread in winter. Frequents sparse valley foothill hardwood, valley foothill hardwood-conifer, open mixed chaparral and similar brushy habitats, and grasslands with scattered trees or shrubs.	No	Moderate. There is suitable foraging habitat within the northern and southern portions of the project site. The proposed trial alignment does not provide suitable habitat.
<i>Circus cyaneus</i> northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	Moderate: There is suitable foraging habitat within and adjacent to the survey area. However, there is no suitable nesting habitat onsite. The proposed trial alignment does not provide suitable habitat.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	Low. There is marginal habitat surrounding the northern and southern portions of the project site. The proposed trial alignment does not provide suitable habitat.
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	Fed: END CA: SSC	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	No	Moderate: The RAFSS habitat within the northern portion of the survey area has the potential to provide suitable habitat. The project site is located within Critical Habitat Unit 4 – Etiwanda Alluvial Fan and Wash. The proposed trial alignment does not provide suitable habitat.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	Fed: END CA: THR	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	No	Presumed absent. No suitable habitat is present on site.
<i>Egretta thula</i> snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	Moderate. Portions of the survey area provide suitable foraging habitat, in particular the water detention basins. The proposed trial alignment does not provide suitable habitat.
<i>Elanus leucurus</i> white-tailed kite	Fed: None CA: FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole.	No	Low: Although there is marginal foraging habitat on-site, there is no suitable nesting habitat on or within the vicinity of the project site. The proposed trial alignment does not provide suitable habitat.

Table C-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Empidonax traillii</i> willow flycatcher	Fed: None CA: END	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 feet) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	Presumed absent. No suitable habitat is present on site.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	Fed: END CA: END	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	Presumed absent. No suitable habitat is present on site.
<i>Eremophila alpestris actia</i> California horned lark	Fed: None CA: WL	Prefers riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods or smaller spring fed or boggy areas with willows or alders. Nests in hollow ground often next to grass tuft or clod of earth or manure.	No	Low. The project site and the surrounding area provide suitable foraging habitat. The proposed trial alignment does not provide suitable habitat.
<i>Eumops perotis californicus</i> western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least three meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	Presumed absent. No suitable habitat is present on site.
<i>Falco mexicanus</i> prairie falcon	Fed: None CA: WL	Prairie falcons commonly occur in arid and semiarid shrubland and grassland community types. They are also occasionally found in open parklands within coniferous forests. Occupy open treeless terrain including prairies, deserts, riverine escarpments, canyons, foothills, and mountains in relatively arid western regions.	No	Low: Although there is marginal foraging habitat on-site, there is no suitable nesting habitat on or within the vicinity of the project site. The proposed trial alignment does not provide suitable habitat.
<i>Icteria virens</i> yellow-breasted chat	Fed: None CA: SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Lampropeltis zonata (parvirubra)</i> California mountain kingsnake (San Bernardino population)	Fed: None CA: SSC	Found in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, Manzanita, and coastal sage scrub. Wooded areas near a stream with rock outcrops, talus or rotting logs that are exposed to the sun.	No	Presumed absent. No suitable habitat is present on site.
<i>Lanius ludovicianus</i> loggerhead shrike	Fed: None CA: SSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	No	Moderate: There is suitable habitat within the survey area. The proposed trial alignment does not provide suitable habitat.
<i>Larus californicus</i> California gull	Fed: None CA: WL	Require isolated islands in rivers, reservoirs and natural lakes for nesting, where predations pressures from terrestrial mammals are diminished. Uses both fresh and saline aquatic habitats at variable elevations and degrees of aridity for nesting and for opportunistic foraging.	No	Presumed absent. No suitable habitat is present on site. This species may fly over the site.
<i>Lasiurus xanthinus</i> western yellow bat	Fed: None CA: SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	Presumed absent. No suitable habitat is present on site.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	Fed: None CA: SSC	Found in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	No	Moderate. The northern and southern portions of the survey area provides suitable foraging habitat. The proposed trial alignment does not provide suitable habitat.
<i>Microtus californicus mohavensis</i> Mohave river vole	Fed: None CA: SSC	Found in moist habitats including meadows, freshwater marshes and irrigated pastures in the vicinity of the Mojave River. Suitable habitat it associated with ponds and irrigation canals along with the Mojave River proper. Alfalfa fields may also provide habitat.	No	Presumed absent. No suitable habitat is present on site.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	No	Presumed absent. No suitable habitat is present on site.
<i>Nycticorax nycticorax</i> black-crowned night heron	Fed: None CA: None	Common in wetlands across North America, including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, and wet agricultural fields. They require aquatic habitat for foraging and terrestrial vegetation for cover.	No	Low. Portions of the survey area provide suitable foraging habitat, in particular the water detention basins. The proposed trial alignment does not provide suitable habitat.

Table C-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	Fed: None CA: SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Prefers rocky desert areas with high cliffs or rock outcrops/crevices for roosting.	No	Presumed absent. No suitable habitat is present on site.
<i>Ovis canadensis nelson</i> desert bighorn sheep	Fed: None CA: FP	Require a variety of habitat characteristics related to topography, visibility, forage quality and quantity, and water availability (USFWS 2000). Prefer areas on or near mountainous terrain that are visually open, as well as steep and rocky. Alluvial fans and washed in flatter terrain is also used for foraging, water, and connectivity between mountainous areas. Tend to avoid dense vegetation and higher elevations that support chaparral.	No	Presumed absent. No suitable habitat is present on site.
<i>Pandion haliaetus</i> osprey	Fed: None CA: WL	Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. Uses large trees, snags, and dead-topped trees in open forest habitats for cover and nesting. Requires open, clear waters for foraging and uses rivers, lakes, reservoirs, bays, estuaries, and surf zones.	No	Low. Portions of the survey area provide marginal foraging habitat, in particular the water detention basins. The proposed trial alignment does not provide suitable habitat.
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	Fed: None CA: END	Restricted to southern California saltmarsh, grasslands, and meadow habitats, especially those dominated by pickleweed (<i>Salicornia</i> spp.).	No	Presumed absent. No suitable habitat is present on site.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	Fed: None CA: SSC	Resides in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	No	Moderate: There is suitable habitat within the northern and southern portions of the survey area. The proposed trial alignment does not provide suitable habitat.
<i>Perognathus longimembris pacificus</i> Pacific pocket mouse	Fed: END CA: SSC	Occurs on loose sandy soils that support sparse coastal sage scrub, grassland, and ruderal habitats.	No	Presumed absent. No suitable habitat is present on site.
<i>Phalacrocorax auritus</i> double-crested cormorant	Fed: None CA: WL	Prefers water less than 30 feet deep with rocky or gravel bottom. Rests in daytime and roosts overnight beside water on offshore rocks, islands, cliffs, dead branches of trees, wharfs, jetties, or even transmission lines.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Phrynosoma blainvillii</i> coast horned lizard	Fed: None CA: SSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	Moderate: There is marginal habitat within the northern and southern portions of the survey area. The proposed trial alignment does not provide suitable habitat.
<i>Picoides nuttallii</i> Nuttall's woodpecker	Fed: None CA: None	A common, permanent resident of low-elevation riparian deciduous and oak habitats. Occurs in the Central Valley, Transverse and Peninsular Ranges, in the Coast Ranges north to Sonoma Co. and rarely to Humboldt Co., and in lower portions of the Cascade Range and Sierra Nevada. Tree cavities and foliage provide cover.	No	Presumed absent. No suitable habitat is present on site.
<i>Polioptila californica californica</i> coastal California gnatcatcher	Fed: THR CA: SSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It prefers habitat with more low-growing vegetation.	Yes	Present: This species was observed foraging within the survey area during the 2016 field survey.
<i>Rana draytonii</i> California red-legged frog	Fed: THR CA: SSC	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and stream sides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Occurs along the coast ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges.	No	Presumed absent. No suitable habitat is present on site.
<i>Rana muscosa</i> southern mountain yellow-legged frog	Fed: END CA: END ; SSC	Prefers high-altitude mountain streams, typically those with boulders in them. Always found in the water, on rocks, or within a foot or two of the water's edge.	No	Presumed absent. No suitable habitat is present on site.
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower-loving fly	Fed: END CA: None	DSF habitat is limited to areas that include Delhi fine sand, an aeolian (wind-deposited) soil type. The highest density of DSF have been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.	No	Presumed absent. No suitable habitat is present on site.
<i>Rhinichthys osculus ssp. 3</i> Santa Ana speckled dace	Fed: None CA: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers, usually in areas with shallow cobble and gravel riffles. Requires permanent water flow with summer water temperatures between 17 and 20° Celsius.	No	Presumed absent. No suitable habitat is present on site.
<i>Salvadora hexalepis virgulata</i> coast patch-nosed snake	Fed: None CA: SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Requires friable soils for burrowing.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Selasphorus sasin</i> Allen's hummingbird	Fed: None CA: None	Breeders are most common in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats, but also are common in closed-cone pine cypress, urban, and redwood habitats. Occurs in a variety of woodland and scrub habitats as a migrant.	No	High. The survey area provides suitable foraging habitat. The proposed trial alignment does not provide suitable habitat.
<i>Setophaga petechia</i> yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	Presumed absent. No suitable habitat is present on site.
<i>Spea hammondi</i> western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	No	Presumed absent. No suitable habitat is present on site.
<i>Spizella atrogularis</i> black-chinned sparrow	Fed: None CA: None	Breeds locally and uncommonly in foothills bordering Central Valley and commonly on arid mountain sloped of southern CA. Occurs mostly on sloping ground in mixed chaparral, chamise-redshank chaparral, sagebrush, and similar brushy habitats.	No	Presumed absent. No suitable habitat is present on site.
<i>Spizella breweri</i> Brewer's sparrow	Fed: None CA: None	Breeds on sagebrush flats and other open scrubby areas. Winters from just south of the breeding range in south-western USA to central Mexico.	No	Presumed absent. No suitable habitat is present on site.
<i>Strix occidentalis occidentalis</i> California spotted owl	Fed: None CA: SSC	Primarily associated with oak and oak-conifer habitats and uses dense, multi-layered canopy cover for roost seclusion. Requires mature forest with permanent water and suitable nesting trees and snags.	No	Presumed absent. No suitable habitat is present on site.
<i>Thamnophis hammondi</i> two-striped garter snake	Fed: None CA: SSC	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Vireo bellii pusillus</i> least Bell's vireo	Fed: None CA: SSC	Primarily occupy riverine/riparian habitat that typically features dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mulefat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	No	Presumed absent. No suitable habitat is present on site.
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	Fed: None CA: SSC	Occurs in freshwater emergent wetlands, and moist, open areas along croplands and mud flats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by tules, cattails, or other similar plant species along the border of lakes and ponds.	No	Presumed absent. No suitable habitat is present on site.
SPECIAL-STATUS PLANT SPECIES				
<i>Ambrosia monogyra</i> singlewhorl burrobush	Fed: None CA: None CNPS: 2B.2	Found in sandy soils within chaparral and Sonoran desert scrub habitat. Found at elevations ranging from 33 to 1,640 feet. Blooming period is from August to November.	No	Presumed absent. No suitable habitat is present on site.
<i>Arctostaphylos glandulosa ssp. gabrielensis</i> San Gabriel manzanita	Fed: None CA: None CNPS: 1B.2	Habitat includes rocky chaparral. Found at elevations ranging from 1,952 to 4,921 feet. Blooming period is March.	No	Presumed absent. No suitable habitat is present on site.
<i>Asplenium vespertinum</i> western spleenwort	Fed: None CA: None CNPS: 4.2	Occurs on rocky soils in chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 590 to 3,280 feet. Blooming period is from February to June.	No	Presumed absent. No suitable habitat is present on site.
<i>Berberis nevinii</i> Nevin's barberry	Fed: END CA: END CNPS: 1B.1	Found in sandy or gravelly soils within chaparral, cismontane woodland, coastal scrub, and riparian scrub habitats. Found at elevations ranging from 230 to 2,707 feet. Blooming period is from February to June.	No	Presumed absent. No suitable habitat is present on site.
<i>Calochortus catalinae</i> Catalina mariposa-lily	Fed: None CA: None CNPS: 4.2	Grows in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from February to June.	No	Low: There is marginal habitat within the northern and southern portions of the survey area.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	Fed: None CA: None CNPS: 4.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. Found at elevations ranging from 459 to 6,299 feet. Blooming period is from May to July.	No	Low: There is marginal habitat within the northern and southern portions of the survey area.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	Fed: None CA: None CNPS: 1B.2	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	No	Presumed absent. No suitable habitat is present on site.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> white-bracted spineflower	Fed: None CA: None CNPS: 1B.2	Found in sandy or gravelly soils within coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodland habitats. Found at elevations ranging from 984 to 3,937 feet. Blooming period is from April to June.	No	Presumed absent. No suitable habitat is present on site.
<i>Cladium californicum</i> California saw-grass	Fed: None CA: None CNPS: 2B.2	Grows in alkaline or freshwater marshes and swamps. Also meadows and seeps. Found at elevations ranging from 197 to 2,838 feet. Blooming period is from June to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Claytonia lanceolata</i> var. <i>peirsonii</i> Peirson's spring beauty	Fed: None CA: None CNPS: 3.1	Habitats include subalpine coniferous forest and upper montane coniferous forest. Found at elevations ranging from 4,954 to 9,005 feet. Blooming period is from March to June.	No	Presumed absent. No suitable habitat is present on site.
<i>Deinandra paniculata</i> paniculate tarplant	Fed: None CA: None CNPS: 4.2	Occurs in coastal scrub, vernal pools, valley and foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	No	Presumed absent. No suitable habitat is present on site.
<i>Dodecahema leptoceras</i> slender-horned spineflower	Fed: END CA: END CNPS: 1B.1	Found in sandy soils within chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 656 to 2,493 feet. Blooming period is from April to June.	No	Presumed absent. No suitable habitat is present on site.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	Fed: END CA: END CNPS: 1B.1	Grows in sandy or gravelly soils within chaparral and coastal scrub habitat. Found at elevations ranging from 299 to 2,001 feet. Blooming period is from April to September.	No	Low: There is marginal habitat within the northern portion of the survey area.
<i>Eriogonum microthecum</i> var. <i>alpinum</i> northern limestone buckwheat	Fed: None CA: None CNPS: 4.3	Associated with alpine dwarf scrub and great basin scrub. Found at elevations ranging from 8,202 to 10,862 feet. Blooming period is from July to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Eriogonum microthecum</i> var. <i>johnstonii</i> Johnston's buckwheat	Fed: None CA: None CNPS: 1B.3	Grows in rocky soils within subalpine coniferous forest and upper montane coniferous forest. Found at elevations ranging from 6,000 to 9,600 feet. Blooming period is from July to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Eriogonum umbellatum</i> var. <i>minus</i> alpine sulphur-flowered buckwheat	Fed: None CA: None CNPS: 4.3	Occurs in gravelly soils within subalpine coniferous forest and upper montane coniferous forests. Found at elevations ranging from 5,906 to 10,066 feet. Blooming period is from June to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Eriophyllum lanatum</i> var. <i>obovatum</i> southern Sierra woolly sunflower	Fed: None CA: None CNPS: 4.3	Found in sandy loam soils within lower and upper montane coniferous forests. Found at elevations ranging from 3,655 to 8,202 feet. Blooming period is from June to July.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Fritillaria pinetorum</i> pine fritillary	Fed: None CA: None CNPS: 4.3	Associated with granitic and metamorphic soils within chaparral, lower montane coniferous forest, upper montane coniferous forest, subalpine coniferous forest, pinyon and juniper woodland. Found at elevations ranging from 5,692 to 10,826 feet. Blooming period is from May to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Galium angustifolium ssp. gabrielense</i> San Antonio Canyon bedstraw	Fed: None CA: None CNPS: 4.3	Grows in granitic, sandy or rocky soils within chaparral and lower montane coniferous forests. Found at elevations ranging from 3,937 to 8,694 feet. Blooming period is from April to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Galium jepsonii</i> Jepson's bedstraw	Fed: None CA: None CNPS: 4.3	Found in granitic, rocky or gravelly soils within lower montane coniferous forest and upper montane coniferous forest habitats. Found at elevations ranging from 5,052 to 8,202 feet. Blooming period is from July to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Galium johnstonii</i> Johnston's bedstraw	Fed: None CA: None CNPS: 4.3	Preferred habitats include chaparral, riparian woodland, lower montane coniferous forest, pinyon and juniper woodland. Found at elevations ranging from 4,003 to 7,546 feet. Blooming period is from June to July.	No	Presumed absent. No suitable habitat is present on site.
<i>Heuchera caespitosa</i> urn-flowered alumroot	Fed: None CA: None CNPS: 4.3	Grows in rocky soils within cismontane woodland, lower montane coniferous forest, riparian forest, and upper montane coniferous forest. Found at elevations ranging from 3,789 to 8,694 feet. Blooming period is from May to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Horkelia cuneata var. puberula</i> mesa horkelia	Fed: None CA: None CNPS: 1B.1	Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Found at elevations ranging from 230 to 2,657 feet. Blooming period is from February to September.	No	Low: There is marginal habitat within the northern and southern portions of the survey area.
<i>Juglans californica</i> southern California black walnut	Fed: None CA: None CNPS: 4.2	Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Juncus duranii</i> Duran's rush	Fed: None CA: None CNPS: 4.3	Habitats include lower and upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 5,801 to 9,199 feet. Blooming period is from July to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Lepechinia fragrans</i> fragrant pitcher sage	Fed: None CA: None CNPS: 4.2	Occurs in chaparral habitat. Found at elevations ranging from 66 to 4,298 feet. Blooming period is from March to October.	No	Presumed absent. No suitable habitat is present on site.
<i>Lilium humboldtii ssp. ocellatum</i> ocellated humboldt lily	Fed: None CA: None CNPS: 4.2	Found in openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats. Found at elevations ranging from 98 to 5,906 feet in elevation. Blooming period is from March to August.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Lilium parryi</i> lemon lily	Fed: None CA: None CNPS: 1B.2	Prefers lower montane coniferous forest, riparian forests, upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 4,003 to 9,006 feet. Blooming period is from July to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Linanthus concinnus</i> San Gabriel linanthus	Fed: None CA: None CNPS: 1B.2	Occurs in rocky, openings within chaparral, lower montane and upper montane coniferous forests. Found at elevations ranging from 4,987 to 9,186 feet. Blooming period is from April to July.	No	Presumed absent. No suitable habitat is present on site.
<i>Lycium parishii</i> Parish's desert-thorn	Fed: None CA: None CNPS: 2B.3	Habitats include coastal scrub and Sonoran desert scrub. Found at elevations ranging from 443 to 3,281 feet. Blooming period is from March to April.	No	Presumed absent. No suitable habitat is present on site.
<i>Monardella australis</i> ssp. <i>jokerstii</i> Jokerst's monardella	Fed: None CA: None CNPS: 1B.1	Habitat includes chaparral and lower montane coniferous forest. Found on steep or talus slopes between breccia, secondary alluvial benches along drainages and washes. Found at elevations ranging from 4,429 to 5,741 feet. Blooming period is from July to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Monardella saxicola</i> rock monardella	Fed: None CA: None CNPS: 4.2	Found in rocky, usually serpentinite soils within closed-cone coniferous forest, chaparral, and lower montane coniferous forest habitats. Found at elevations ranging from 1,640 to 5,906 feet. Blooming period is from June to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Muhlenbergia californica</i> California muhly	Fed: None CA: None CNPS: 4.3	Found in chaparral, coastal scrub, lower montane coniferous forest, meadows and seeps. Found at elevations ranging from 328 to 6,562 feet. Blooming period is from June to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Navarretia prostrate</i> prostrate vernal pool navarretia	Fed: None CA: None CNPS: 1B.1	Grows in coastal scrub, vernal pools, meadows and seeps, valley and foothill grassland habitats. Found at elevations ranging from 10 to 3,970 feet. Blooming period is from April to July.	No	Presumed absent. No suitable habitat is present on site.
<i>Opuntia basilaris</i> var. <i>brachyclada</i> short-joint beavertail	Fed: None CA: None CNPS: 1B.2	Habitats include chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodlands. Found at elevations ranging from 1,394 to 5,906 feet. Blooming period is from April to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Oreonana vestita</i> woolly mountain-parsley	Fed: None CA: None CNPS: 1B.3	Associated with gravel and talus soils within lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest. Found at elevations ranging from 5,299 to 11,483 feet. Blooming period is from March to September.	No	Presumed absent. No suitable habitat is present on site.
<i>Phacelia mohavensis</i> Mojave phacelia	Fed: None CA: None CNPS: 4.3	Occurs in sandy or gravelly soils within cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland. Found at elevations ranging from 4,593 to 8,202 feet. Blooming period is from April to August.	No	Presumed absent. No suitable habitat is present on site.

Table C-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Phacelia stellaris</i> Brand's star phacelia	Fed: None CA: None CNPS: 1B.1	Found in coastal dunes and coastal scrub habitats. Found at elevations ranging from 3 to 1,312 feet. Blooming period is from March to June.	No	Presumed absent. No suitable habitat is present on site.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	Fed: None CA: None CNPS: 1B.2	Grows in freshwater marshes and swamps. Found at elevations ranging from 0 to 2,132 feet. Blooming period is from May to November.	No	Presumed absent. No suitable habitat is present on site.
<i>Senecio aphanactis</i> chaparral ragwort	Fed: None CA: None CNPS: 2B.2	Occurs in alkaline soils within chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 49 to 2,625 feet. Blooming period is from January to May.	No	Presumed absent. No suitable habitat is present on site.
<i>Senecio astephanus</i> San Gabriel ragwort	Fed: None CA: None CNPS: 4.3	Found on rocky slopes within coastal bluff scrub and chaparral habitats. Found at elevations ranging from 1,312 to 4,921 feet. Blooming period is from May to July.	No	Presumed absent. No suitable habitat is present on site.
<i>Sphenopholis obtusata</i> prairie wedge grass	Fed: None CA: None CNPS: 2B.2	Grows in mesic soils within cismontane woodland, meadows and seeps. Found at elevations ranging from 984 to 6,562 feet. Blooming period is from April to July.	No	Presumed absent. No suitable habitat is present on site.
<i>Streptanthus bernardinus</i> Laguna Mountains jewelflower	Fed: None CA: None CNPS: 4.3	Associated with chaparral and lower montane coniferous forest. Found at elevations ranging from 2,198 to 8,202 feet. Blooming period is from May to August.	No	Presumed absent. No suitable habitat is present on site.
<i>Symphotrichum defoliatum</i> San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Grows in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic). Can be found growing near ditches, streams, and springs within these habitats. Found at elevations ranging from 7 to 6,693 feet. Blooming period is from July to November.	No	Presumed absent. No suitable habitat is present on site.
<i>Viola pinetorum</i> var. <i>grisea</i> grey-leaved violet	Fed: None CA: None CNPS: 1B.3	Associated with upper montane coniferous forest, subalpine coniferous forest, meadows and seeps. Found at elevations ranging from 4,921 to 11,155 feet. Blooming period is from April to July.	No	Presumed absent. No suitable habitat is present on site.
SPECIAL-STATUS PLANT COMMUNITES				
California Walnut Woodland	CDFW Sensitive Habitat	Occurs on valley slopes and in valley bottoms, as well as around rocky outcrops. This habitat usually occurs in areas with relatively moist, fine soils. It can intergrade with coast live oak woodland and coast live oak forest in more mesic areas. The canopy is relatively open and is dominated by California walnut with a grassy understory.	No	Absent

Table C-1: Potentially Occurring Special-Status Biological Resources

<i>Scientific Name</i> Common Name	Status	Habitat	Observed Onsite	Potential to Occur
Coastal and Valley Freshwater Marsh	CDFW Sensitive Habitat	Found along the coast and in coastal valleys near river mouths and around the margins of lakes and springs. Site lacks significant current and is permanently flooded by fresh water. Prolonged saturation permits accumulations of deep, peaty soils.	No	Absent
Riversidian Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Occur within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring, but remain relatively dry through the remainder of the year. Is restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or scrub due to the limited water resources and scouring by occasional floods.	Present	Present. RAFSS habitat can be found in the northern portion of the survey area.
Southern Riparian Forest	CDFW Sensitive Habitat	Typically a younger successional stage of riparian forest, due to disturbance or more frequent flooding. Plant species include willow species, elderberry, oak species, sycamore, cottonwood, and smaller shrubs.	No	Absent
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows also are often present. Poison-oak, mugwort, elderberry and wild raspberry may be present in the understory.	No	Absent

U.S. Fish and Wildlife Service (USFWS) - Federal

END- Federal Endangered

THR- Federal Threatened

California Department of Fish and Wildlife (CDFW) - California

END- California Endangered

SSC- California Species of Concern

WL- Watch List

FP- California Fully Protected

California Native Plant Society (CNPS)**California Rare Plant Rank**

1B Plants Rare, Threatened, or Endangered in California and Elsewhere

2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere

4 Plants of Limited Distribution – A Watch List

Threat Ranks

0.1- Seriously threatened in California

0.2- Moderately threatened in California

0.3- Not very threatened in California

Attachment D

USFWS IPaC Species List

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
<http://www.fws.gov/carlsbad/>



In Reply Refer To:

October 24, 2018

Consultation Code: 08ECAR00-2019-SLI-0122

Event Code: 08ECAR00-2019-E-00299

Project Name: San Sevaine Trail, Segment 2

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2019-SLI-0122

Event Code: 08ECAR00-2019-E-00299

Project Name: San Sevaine Trail, Segment 2

Project Type: TRANSPORTATION

Project Description: Implementation of the proposed Project would involve the construction of a 1.25-mile-long new asphalt trail for use by bicyclists and pedestrians within the San Sevaine flood control channel right-of-way. The trail alignment would run parallel to the existing flood control channel, as it would utilize the existing flood control maintenance road that currently runs parallel to the flood control channel. The new segment of the San Sevaine Trail is planned to be a continuous 12-foot-wide asphalt path with 4-foot decomposed granite shoulders, and would include four granite block benches, LED-lighted bollards, directional and interpretive trail signage, a chain link fence, potable water connection, and striping and pavement legend to alert users of the bike lane.

The proposed trail would be completely separate from major roadways and would be classified as a Class I bicycle and pedestrian path. However, the trail alignment would cross two freeway underpass structures (I-210 and I-15) and one major roadway (Victoria Street), as described below.

I-210 and I-15: The existing flat surface on the west side of the San Sevaine channel would be paved to cross under the I-15 abutment wall. In addition, under bridge clearances on both the south and northbound I-15 undercrossing along the channel would require excavation and construction of retaining walls. This work would be coordinated with Caltrans District 8, including the procurement of encroachment permits.

Victoria Street: A signalized mid-block crossing would be installed in order to connect south across Victoria Street to the east bank of the San Sevaine channel. This would include two options; one option would follow the trail along the west side of the channel and the other option would follow the trail along the east side of the channel south, in order to connect with the existing Pacific Electric Inland Empire Trail. In order to increase trail user safety, a road diet may also be a component of the proposed crossing design at Victoria Street, which would involve a potential roadway lane width reduction or re-channelization and installation of a pedestrian safety island.

Construction would potentially begin in the fall of 2019, would continue for approximately six months, and would include site preparation, asphalt paving, landscaping, and installation of lighted bollards, signage, benches, and fences. Construction would involve the use of various types of construction equipment including tractors/loaders/backhoes, forklifts, welders, a paver, rollers, and small-scale equipment such as air compressors, trenchers, mixers, and saws. Equipment would be stored onsite when not in use in designated staging areas along the trail alignment. Operation of the Project would commence in 2020.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/34.13394283955447N117.504308502258W>



Counties: San Bernardino, CA

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2060	Endangered

Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
Mountain Yellow-legged Frog <i>Rana muscosa</i> Population: Southern California DPS There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8037	Endangered

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly <i>Rhaphiomidas terminatus abdominalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1540	Endangered

Flowering Plants

NAME	STATUS
Branton's Milk-vetch <i>Astragalus brauntonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5674	Endangered
San Diego Ambrosia <i>Ambrosia pumila</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i> https://ecos.fws.gov/ecp/species/2060#crithab	Final

Attachment E

NMFS Species List

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Table E-1: NMFS Species List*

Quad Names: Cucamonga Peak, Devore, Guasti, and Fontana
 Quad Numbers: 34117-B5, 34117-B4, 34117-A5, and 34117-A4

ESA Anadromous Fish	
SONCC Coho ESU (T)	
CCC Coho ESU (E)	
CC Chinook Salmon ESU (T)	
CVSR Chinook Salmon ESU (T)	
SRWR Chinook Salmon ESU (E)	
NC Steelhead DPS (T)	
CCC Steelhead DPS (T)	
SCCC Steelhead DPS (T)	
SC Steelhead DPS (E)	
CCV Steelhead DPS (T)	
Eulachon (T)	
sDPS Green Sturgeon (T)	
ESA Anadromous Fish Critical Habitat	
SONCC Coho Critical Habitat	
CCC Coho Critical Habitat	
CC Chinook Salmon Critical Habitat	
CVSR Chinook Salmon Critical Habitat	
SRWR Chinook Salmon Critical Habitat	
NC Steelhead Critical Habitat	
CCC Steelhead Critical Habitat	
SCCC Steelhead Critical Habitat	
SC Steelhead Critical Habitat	
CCV Steelhead Critical Habitat	
Eulachon Critical Habitat	
sDPS Green Sturgeon Critical Habitat	
ESA Marine Invertebrates	
Range Black Abalone (E)	
Range White Abalone (E)	
ESA Marine Invertebrates Critical Habitat	
Black Abalone Critical Habitat	
ESA Sea Turtles	
East Pacific Green Sea Turtle (T)	
Olive Ridley Sea Turtle (T/E)	
Leatherback Sea Turtle (E)	
North Pacific Loggerhead Sea Turtle (E)	
ESA Whales	
Blue Whale (E)	
Fin Whale (E)	
Humpback Whale (E)	
Southern Resident Killer Whale (E)	
North Pacific Right Whale (E)	
Sei Whale (E)	
Sperm Whale (E)	

Table E-1: NMFS Species List*

Quad Names: Cucamonga Peak, Devore, Guasti, and Fontana
 Quad Numbers: 34117-B5, 34117-B4, 34117-A5, and 34117-A4

ESA Pinnipeds	
Guadalupe Fur Seal (T)	
Steller Sea Lion Critical Habitat	
Essential Fish Habitat	
Coho EFH	
Chinook Salmon EFH	
Groundfish EFH	
Coastal Pelagics EFH	
Highly Migratory Species EFH	
MMPA Species	
MMPA Cetaceans	
MMPA Pinnipeds	
*NMFS Species List downloaded from the NOAA Fisheries – West Coast Region Website via the following link: http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html	

Attachment F

Flora and Fauna Compendium

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Table F – 1: Plant Species

Scientific Name	Common Name
<i>Acacia redolens</i>	trailing acacia
<i>Acmispon glaber</i>	deerweed
<i>Adenostoma fasciculatum</i>	chamise
<i>Artemisia arbuscula</i>	black sagebrush
<i>Artemisia californica</i>	California sagebrush
<i>Astragalus pomenensis</i>	Pomona milkvetch
<i>Baccharis salicifolia</i>	mulefat
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	red brome
<i>Camissonia</i> sp*	suncup
<i>Cercocarpus betuloides</i>	mountain mahogany
<i>Chenopodium californicum</i>	pigweed
<i>Croton californicus</i>	California croton
<i>Croton setiger</i>	doveweed
<i>Cylindropuntia californica</i>	California cholla
<i>Datura stramonium</i>	jimsonweed
<i>Delphinium cardinal</i>	scarlet larkspur
<i>Ehrendorferia chrysantha</i>	golden eardrops
<i>Encelia farinosa</i>	brittlebush
<i>Erigeron bonariensis</i>	flax-leaved horseweed
<i>Eriodictyon californicum</i>	yerba santa
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Erodium</i> sp.*	red-stemmed filaree
<i>Eriastrum sapphirinum</i>	sapphire woollystar
<i>Eucalyptus camaldulensis</i> *	red gum eucalyptus
<i>Helianthus annuus</i>	common sunflower
<i>Hesperoyucca whipplei</i>	chaparral yucca
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Hirschfeldia incana</i> *	short-pod mustard
<i>Lepidospartum squamatum</i>	scalebroom
<i>Nicotiana glauca</i> *	tree tobacco
<i>Opuntia littoralis</i>	coastal pricklypear
<i>Penstemon spectabilis</i>	showy penstemon
<i>Phacelia distans</i>	common phacelia
<i>Platanus racemose</i>	Western sycamore
<i>Populus fremontii</i>	Fremont cottonwood
<i>Rhamnus crocea</i>	spiny red berry
<i>Rhamnus ilicifolia</i>	hollyleaf red berry
<i>Rhus aromatica</i>	basket bush
<i>Ricinus communis</i> *	castorbean
<i>Salsola tragus</i> *	Russian thistle
<i>Salvia apiana</i>	white sage
<i>Salvia columbariae</i>	chia sage
<i>Sambucus nigra</i>	Mexican elderberry
<i>Schismus barbatus</i> *	Mediterranean grass
<i>Toxicodendron diversilobum</i>	poison oak
<i>Washingtonia robusta</i> *	Mexican fan palm

*Non-native/invasive

Table F – 2: Wildlife Species

Scientific Name	Common Name
Aves	Birds
<i>Accipiter cooperii</i>	Cooper's hawk
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Calypte costae</i>	Costa's hummingbird
<i>Charadrius vociferus</i>	killdeer
<i>Corvus brachyrhynchos</i>	American crow
<i>Falco sparverius</i>	American kestrel
<i>Haemorhous mexicanus</i>	house finch
<i>Hirundo rustica</i>	barn swallow
<i>Melospiza crissalis</i>	California towhee
<i>Mimus polyglottos</i>	northern mockingbird
<i>Petrochelidon pyrrhonota</i>	American cliff swallow
<i>Poliophtila californica californica</i>	California gnatcatcher
<i>Psaltiriparus minimus</i>	bushtit
<i>Sayornis nigricans</i>	black phoebe
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Toxostoma redivivum</i>	California thrasher
<i>Zenaida macroura</i>	mourning dove
Reptilia	Reptiles
<i>Coluber flagellum piceus</i>	red racer
<i>Sceloporus occidentalis longipes</i>	Great Basin fence lizard
<i>Uta stansburiana elegans</i>	western side-blotched lizard
Mammalia	Mammals
<i>Otospermophilus beecheyi</i>	California ground squirrel
<i>Sylvilagus audubonii</i>	cottontail rabbit



Appendix C

CULTURAL RECORDS SEARCH

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June 2, 2016

Kari Cano
Michael Baker International
3536 Concours Street, Suite 100
Ontario, California 91764

Subject: Cultural Resources Records Search for the San Sevaine Project, Fontana and Rancho Cucamonga, San Bernardino County, California (BCR Consulting Project No. MBI1607)

Dear Kari:

BCR Consulting LLC (BCR Consulting) was retained by Michael Baker International to complete a cultural resources records search for the San Sevaine Project in Fontana and Rancho Cucamonga, San Bernardino County, California. The purpose of this study was to identify prehistoric or historic-period resources within one mile of the project site.

Cultural Resources Records Search

BCR Consulting Principal Investigator/Archaeologist David Brunzell conducted the cultural resources records search at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on May 31, 2016. The records search included a review of all recorded historic and prehistoric archaeological sites, as well as recorded built environment resources within one mile of the project site. The research also reviewed known cultural resource reports completed in the vicinity.

The research revealed that 37 cultural resource studies have taken place resulting in nine cultural resources (36 historic-period, and one prehistoric) recorded within one mile of the project site. The project site has never been subject to a cultural resources assessment, and no cultural resources have been recorded within its boundaries. Aerial photos from the U.S. Department of Agriculture were also reviewed during the research. This research indicates that the project alignment between the southern terminus and Victoria Street was paved and channelized after 1980. This research has also indicated that the project alignment to the north of Victoria Street was channelized and paved between 1966 and 1980. The records search results are summarized in Table A.

Table A. Records Search Results (One-Mile Radius)

USGS 7.5 Min. Quad	Cultural Resources	Cultural Resource Reports*
<i>Guasti (1981), Devore (1996), and Cucamonga Peak (1996), California</i>	P-36-7661, 10296, 10297, 13027, 13746, 16446, 16489, 16490, 60257	SB-106-1501, 1506, 1532, 1582, 2041, 2043, 2413, 2527, 2621, 2795, 2796, 2851, 3050, 3455, 3456, 3468, 3585, 3774, 3777, 4145, 4206, 4216, 4367, 4409, 5734, 5997, 5999, 6000, 6060, 6174, 6327, 6787, 6986, 7310, 7312, 7401, 7869

Summary and Recommendations

The project site has not been subject to previous cultural resources assessment. Since the entire project site is paved, there is no potential to discover prehistoric cultural resources. However, although the southern portion of the project alignment (south of Victoria Street) was constructed after 1980, the portion north of Victoria Street was channelized between 1966 and 1980. As a result, the northern portion of the alignment may be historic in age (i.e. older than 45 years). If City records indicate that this portion of the project was constructed less than 45 years ago, no additional cultural resources work or monitoring will be recommended. However, if City records indicate that this portion of the project alignment is greater than 45 years old, it should be subject to recordation and evaluation by a cultural resource professional that meets the U.S. Secretary of the Interior Professional Qualification Standards for Archaeology. Furthermore, if any cultural resources are discovered during project activities, ground disturbance should stop and a qualified archaeologist should be contacted to record and evaluate the find.

If human remains are encountered during activities associated with the proposed project, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

Please contact me by phone at 909/525-7078 or e-mail at david.brunzell@yahoo.com with any questions or comments.

Sincerely,



David Brunzell, M.A./RPA
Principal Investigator/Archaeologist



Appendix D

HAZARDOUS MATERIALS MEMORANDUM

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MEMORANDUM

To: Kari Cano
From: Kristen Bogue
Date: June 7, 2016
Project: San Sevaine Trail, Segment 2 – Hazardous Materials Analysis to Support Environmental Documentation

This Technical Memorandum was prepared in an effort to preliminarily identify the potential existence of hazardous materials/wastes within the boundaries of the proposed San Sevaine Trail, Segment 2 (Project). This scope of work included a visual site inspection of the Project site, conducted on June 1, 2016, in concert with research of available federal, tribal, state, and local regulatory databases to verify if listed regulatory sites or hazardous wastes have been reported within or near the boundaries of the Project site.

Project Location: The Project site is located within the cities of Fontana and Rancho Cucamonga in southwestern San Bernardino County, California (Sections 25, 26, and 30, Township 1 North [T.1N], Range 6 West [R.6W], San Bernardino Base and Meridian [SBBM]). The Project limits are from the Pacific Electric Inland Empire Trail in the City of Fontana to Banyan Street in the City of Rancho Cucamonga. Of the total 1.25-mile Project alignment length, approximately 0.30 miles are within Fontana's city limits and approximately 0.95 miles are within Rancho Cucamonga's city limits.

Regulatory Database Searches

As part of this analysis, Michael Baker reviewed available database records maintained by the California Environmental Protection Agency (CalEPA) (Cortese Database), the State Water Resources Control Board (SWRCB) (GeoTracker Database), and the Department of Toxic Substances Control (DTSC) (EnviroStor Database). The following is a summary of the records searches conducted.

Cortese Database

Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) to compile and update a regulatory sites listing (per the criteria of the Section). The State Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code. Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations (CCR), to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

The Project site is not listed pursuant to Government Code Section 65962.5.¹

GeoTracker Database

GeoTracker was developed pursuant to a mandate by the California State Legislature to investigate the feasibility of establishing a statewide Geographic Information System (GIS) for leaking underground fuel tank (LUFT) sites. Michael Baker makes no claims as to the completeness or accuracy of GeoTracker; our review of GeoTracker's findings can only be as current as their listings and may not represent all known or potential hazardous waste or contaminated sites.

The Project site is not listed via the GeoTracker Database.² Further, no adjoining or adjacent sites of concern were noted within a one mile radius.

EnviroStor Database

Sites reported under the DTSC's Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites that require further investigation (based on current/historic uses or other known site information). The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

The Project site is not listed via the EnviroStor Database.³ Further, no adjoining or adjacent sites of concern were noted within a one mile radius.

Site Visit

Michael Baker performed a visual observation of readily accessible areas of the Project site and immediately adjoining properties on June 1, 2016. Access to the Project site was not available, Michael Baker viewed all areas of the Project site from public thoroughfares.

The Project site consists of the existing San Sevaine flood control channel. Specifically, the Project site is comprised of the flood control channel, paved access roads, and disturbed vegetation on both sides of the channel/access roads. Michael Baker did not observe any manholes, fill pipes, vent piles, fuel pumps, or any areas of abnormal staining during the June 1, 2016 visual site inspection. No evidence suggesting the current or past use of on-site underground storage tanks (USTs), aboveground storage tanks (ASTs), and/or manholes or hazardous material storage was noted within the boundaries of the Project site during the June 1, 2016 site visit. No evidence of spills, solid waste disposal, overhead powerlines, wells, pits/ponds/lagoons, or structures were noted on the Project site during the June 1, 2016 site visit. Michael Baker did not observe any evidence to suggest the release of hazardous materials within the boundaries of the Project site during the June 1, 2016 site visit.

Off-site properties observed during the June 1, 2016 site visit included the San Sevaine flood control channel to the north, vacant land, transportation uses (State Route 210 [SR-210] and

¹ California Environmental Protection Agency, Cortese Database, <http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm>, accessed on June 6, 2016.

² State Water Resources Control Board, GeoTracker Database, <http://geotracker.waterboards.ca.gov/>, accessed on June 6, 2016.

³ Department of Toxic Substances Control, EnviroStor Database, <http://www.envirostor.dtsc.ca.gov/public/>, accessed on June 6, 2016.

Interstation 15 [I-15]), and a self-storage facility to the east, I-15 to the south, and residential uses and vacant land to the west. Sewer manholes, water pumps and other water infrastructure, as well as dry utilities (street lights, etc.) were noted at off-site properties during the June 1, 2016 site visit. No chemical storage tanks or evidence of chemical storage tanks were noted at adjacent properties during the June 1, 2016 site visit. During a preliminary observation of surrounding properties on June 1, 2016, no visible or physical evidence was observed to suggest that a surface release of petroleum based material has recently occurred.

Conclusions Relative to CEQA

Routine Transport, Use, or Disposal of Hazardous Materials

Implementation of the proposed trail would not result in the routine transport, use, or disposal of hazardous materials during operations of the proposed Project. Limited amounts of some hazardous materials could be used in the short-term construction of the Project, including standard construction materials (e.g., paints and solvents), vehicle fuel, and other hazardous materials. The routine transportation, use, and disposal of these materials would be required to adhere to State and local standards and regulations for handling, storage, and disposal of hazardous substances. With compliance with the existing State and local procedures that are intended to minimize potential health risks associated with their use or the accidental release of such substances, impacts associated with the handling, storage, and transport of these hazardous materials during construction would be less than significant.

Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials

During Project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

Further, based on the site visit conducted on June 1, 2016, and the regulatory databases reviewed as part of this Memorandum, the proposed grading activities are not anticipated to encounter contaminated soils or groundwater. No impacts are anticipated in this regard.

Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste Within 0.25 Mile of an Existing or Proposed School

The nearest school (Etiwanda High School) is located approximately 1,000 feet to the west of the Project site. However, construction activities and proposed operations of the trail are not anticipated to involve the handling of hazardous materials or hazardous emissions. Thus, no impacts are anticipated to result in this regard.

Associated with a Site Listed Under Government Code Section 65962.5

Based on the Cortese Database search conducted as part of this Memorandum, the Project site is not reported on a list maintained pursuant to Government Code Section 65962.5. No impacts would result in this regard.

Conclusion

Thus, based on the analysis presented in this Memorandum, implementation of the proposed Project would result in less than significant impacts pertaining to hazardous materials and no further mitigation is necessary.

Should you have any questions with respect to the review of the subject letter, please do not hesitate contact me at 949/855-5747 or kbogue@mbakerintl.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Kristen Bogue", with a long horizontal flourish extending to the right.

Kristen Bogue
Environmental Professional
Planning/Environmental Services

Attachments:

- A. Regulatory Database Search Results

ATTACHMENTS

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ATTACHMENT A
Regulatory Database Search Results

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REGION	FACILITY	FACILITY NAME	AGENCY NAME	PLACE TY	PLACE SUBTYPE	FAC AGt # OF /	PLACE ADDRESS	PLACE CITY
8	210419	Brine Facility Fontana-Closing	Aluman Inc	Facility		Indt Priv	1 N.E. of Santa Ana & Beach	Fontana
8	210419	Brine Facility Fontana-Closing	Aluman Inc	Facility		Indt Priv	1 N.E. of Santa Ana & Beach	Fontana
8	236468	Mid-Valley Landfill	San Bernardino Cnty Waste	Facility	Land fill	Soli Cou	1	Fontana
8	259198	Western Water Recycling Facility	Western Municipal Water Dist	Facility	Wastewater Treatment Facility	Mur Spe	1 I 215	Riverside
8	230195	Hettinga Ranch	Hettinga, Hein	Facility	Animal Feeding Facility	Agri Priv	1 15250 El Sobrante Road	Riverside
8	257610	SOIL RECYCLING, RIVERSIDE		Facility		Industrial	9800 BEAR AVENUE	RIVERSIDE
8	228451	GW CLEANUP-RIVERSIDE,FLIGHT RD	ORCO AVIATION	Facility		Indt Priv	1 6741 FLIGHT	RIVERSIDE
8	228446	GW CLEANUP-RIVERSIDE,12TH ST.	FMC CORPORATION	Facility		Indt Priv	1 3075 12TH	RIVERSIDE



Cortese List: Section 65962.5(a)

Information Required From the Department of Toxic Substances Control (DTSC) Under Government Code Section 65962.5(a)

Section 65962.5(a)(1) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following:(1) [a]ll hazardous waste facilities subject to corrective action pursuant to [Section 25187.5 of the Health and Safety Code \("HSC"\).](#)"

[The hazardous](#) waste facilities identified in HSC § 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This is a very small and specific subgroup of facilities and they are not separately posted on the DTSC or CalEPA's website.

The facilities listed below fall under this category:

- AAD Distribution & Dry Cleaning Inc.
EPA ID CAD981397417
2306 E. 38th Street
Vernon, CA 90058
- The Marquardt Co.
CA ID CAD044696102
16555 Saticoy Street
Van Nuys, CA 91406

Section 65962.5(a)(2) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following: ... (2) [a]ll land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with [Section 25220](#)) of Chapter 6.5 of Division 20 of the Health and Safety Code."

No facilities or lands are listed under this provision because DTSC has not designated any hazardous waste property or border zone property pursuant to the cited provisions.

Section 65962.5(a)(3) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following:(3) [a]ll information received by the Department of Toxic Substances Control pursuant to [Section 25242](#) of the Health and Safety Code on hazardous waste disposals on public land.

HSC § 25242(a) requires a city, county, or state agency that owns or leases land to notify DTSC if it "has probable cause to believe that a disposal of hazardous waste, which is not authorized pursuant to this chapter has occurred on, under or into the land which the city, county, or state agency owns or leases..."; DTSC then shall determine if there has been an unauthorized disposal of hazardous waste.

In practice, if a city, county or state agency contacts DTSC to provide such information, they also will have contacted or will be directed to contact DTSC's Emergency Response Duty Officer, who determines whether to authorize DTSC-funding for an emergency action to properly remove and dispose of the hazardous waste.

DTSC's Emergency Response program does not keep separate records of such reports that relate to city, county or state agency property.

In the future, DTSC will track any reports received from cities, counties, or state agencies of hazardous waste disposal on land owned or leased by a city, county or state agency, where hazardous waste was released into the environment, and provide the information to CalEPA for inclusion in this section of the Cortese list.

Section 65962.5(a)(4) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following:(4) [a]ll sites listed pursuant to [Section 25356 of the Health and Safety Code.](#)"

HSC § 25356(b)(1) requires "a listing of hazardous substance release sites selected for, and subject to, a response action under this chapter." HSC § 25356(b)(2) requires DTSC to "update the list of sites at least annually to reflect new information regarding previously listed sites or the addition of new sites requiring response action." The implementing regulations provide that sites may be listed pursuant to HSC § 25356 if (a) they are not owned by the Federal Government and (b) a release or threatened release of hazardous substances has been confirmed by on-site sampling. ([California Code of Regulations, Title 22, Section 67400.1](#)). DTSC's list of sites that meet those criteria as well as the criteria in HSC § 25356(c), is found in a report in DTSC's "Envirostor" database:

- [Hazardous Waste and Substances site "Cortese" list](#)

Sites where response actions have been completed and no operation and maintenance activities are required are not included on the list.

Section 65962.5(a)(5) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following:(5) [a]ll sites included in the Abandoned Site Assessment Program."

DTSC had an abandoned site program in the 1980s. [HSC § 25369](#), which was enacted in 1985, required an abandoned site survey in "rural unsurveyed counties." Sites identified in the abandoned site program were included in the "CalSites" database of known and potential hazardous substance release sites. After further investigation, many sites were removed from the "CalSites" database because there was no evidence that a release of hazardous substances occurred. Some time in the early 1990s, DTSC's activities under HSC § 25369, and the entire Abandoned Site Program, were concluded.

DTSC recently replaced the "CalSites" database with a new database of hazardous substance release sites, known as the "EnviroStor" database. The [EnviroStor database](#) does not indicate if a specific site was at one time included in the abandoned site program and does not have a category for sites that are considered abandoned. The CalSites database also did not include this information. Consequently, DTSC does not provide the information to CalEPA originally called for under section 65962.5(a)(5).

[Background and History](#) | [Cortese List Home](#)

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SITE / FACI	ENVIROSTC	PROGRAM STATUS	STATUS	DA	ADDRESS DESCRIPTION	CITY	ZIP	COUNTY	SITE CODE	LATITUDE	LONGITUDE
ALAMEDA	1970005	FEDERAL S ACTIVE - L/	#####		2,616 ACRES IN ALAMEDA, CALIFORNIA	ALAMEDA	94501	ALAMEDA	201209, 2	37.78611	-122.31
FORMER J.	1240036	STATE RESIACTIVE	#####		2201 CLEMENT AVENUE	ALAMEDA	94501	ALAMEDA	201525, 2	37.77372	-122.242
AREA 3 (SA	60001335	FEDERAL S ACTIVE	#####		COVERS CITY OF SAN GABRIEL, PORTIONS OF	ALHAMBRA	91778	LOS ANGELES	301178	34.09859	-118.117
CLASSIC PL	71003472	STATE RESIACTIVE	#####		2985 E. MIRALOMA AVENUE #U	ANAHEIM	92806	ORANGE	401657	33.85781	-117.865
DUCKETT F	60002000	STATE RESIACTIVE	#####		2811 E. LINCOLN AVENUE	ANAHEIM	92806	ORANGE	401668	33.83722	-117.871
FORT MCD	71000007	STATE RESIACTIVE	#####		4 MILES NORTH OF SAN FRANCISCO	ANGEL ISLAND	93933	MARIN	201263	37.8625	-122.423
NCCOSC M	19970010	STATE RESIACTIVE		7/1/1994	STATE HWY 39, 4.5 MI NORTHEAST OF AZUSA	ANGELES N FOREST	91702	LOS ANGELES	400318	34.18188	-117.872
FULTON SH	7440009	STATE RESIACTIVE	#####		307 FULTON SHIPYARD ROAD	ANTIOCH	94509	CONTRA COSTA	201495	38.01659	-121.801
GBF / PITT	7490038	FEDERAL S ACTIVE - L/		1/1/1988	SOMERVILLE RD & JAMES DONLON BLVD	ANTIOCH	94509	CONTRA COSTA	200041	37.98815	-121.847
MCNAMAF	12240115	STATE RESICERTIFIED		3/9/1998	1619 GLENDALE DRIVE	ARCATA	95521	HUMBOLDT	200066	40.90077	-124.019
BROWN AI	15280011	FEDERAL S ACTIVE		3/1/1985	600 S DERBY ST	ARVIN	93203	KERN	100025	35.20315	-118.823
CALTRANS	19990002	STATE RESICERTIFIED		4/9/1996	NE OF INTRSECTN OF WESTERN AVE & 120 ST	ATHENS	90047	LOS ANGELES	300202	33.92366	-118.309
CASTLE AF	80001230	FEDERAL S ACTIVE	#####		5 MI NW OF MERCED	ATWATER	95342	MERCED	101914	37.38665	-120.586
CASTLE AIF	24970001	FEDERAL S CERTIFIED	#####		2,777 ACRES; 5 MI NW OF MERCED, CA	ATWATER	95342	MERCED	100029	37.36278	-120.567
ASSURED T	15420001	STATE RESIACTIVE	#####		3228 GIBSON ST	BAKERSFIELD	93308	KERN	100562	35.39045	-119.052
AVIATION	80000981	MILITARY E ACTIVE	#####		ADJACENT TO FORMER MOHAWK REFINERY	BAKERSFIELD	93304	KERN		35.37609	-119.065
BENHAM A	15280253	STATE RESIACTIVE	#####		340 DANIELS LN	BAKERSFIELD	93307	KERN	100020	35.34933	-118.998
ENVIRONM	15490019	STATE RESIACTIVE		7/1/1994	ROUND MOUNTAIN ROAD	BAKERSFIELD	93301	KERN	100054	35.46213	-118.899
K & D SALV	15500001	STATE RESIACTIVE	#####		600 SOUTH UNION AVENUE	BAKERSFIELD	93307	KERN	101086	35.34895	-119.002
SAN JOAQU	15340023	STATE RESIACTIVE		9/1/2010	3930 GILMORE AVENUE	BAKERSFIELD	93308	KERN	100128, 1	35.3897	-119.052
BALDWIN I	60001336	FEDERAL S ACTIVE	#####		COVERS PORTIONS OF CITIES OF AZUSA, IRW	BALDWIN PARK	91706	LOS ANGELES	300345	34.08679	-117.96
BARSTOW	36970001	FEDERAL S ACTIVE		5/1/1986	5,688 ACRES; MIDDLE OF THE MOJAVE DESER	BARSTOW	92311	SAN BERNARDINC	400092	34.87333	-116.953
MARINE C	60001632	STATE RESIBACKLOG		9/1/2015	MIDDLE OF THE MOJAVE DESERT	BARSTOW	92311	SAN BERNARDINC	401512	34.925	-117.68
CHEMICAL	7280017	STATE RESICERTIFIED	#####		600 NICHOLS ROAD	BAY POINT	94565	CONTRA COSTA	200019	38.04266	-121.989
BAYWOOD	71000008	STATE RESIACTIVE	#####		13 MI NW OF SAN LUIS OBISPO	BAYWOOD PARK	93402	SAN LUIS OBISPO	101047	35.30611	-120.873
BEALE AFB	58940001	STATE RESIACTIVE		5/1/1986	22,944 ACRES; 10MI EA OF MARYSVILLE, CA	BEALE AFB	95903	YUBA	100018	39.12621	-121.435
LOCKHEED	33370039	STATE RESIACTIVE	#####		HIGHLAND SPRINGS ROAD	BEAUMONT	92223	RIVERSIDE	400200	33.8638	-116.933
LOCKHEED	33370038	STATE RESIACTIVE	#####		JACK RABBIT TRAIL	BEAUMONT	92223	RIVERSIDE	400261	33.93	-117.031
FORMER D	60001235	STATE RESIACTIVE	#####		4032 GAGE AVENUE	BELL	90201	LOS ANGELES	301486	33.97893	-118.195
CHROME C	19350473	STATE RESIACTIVE	#####		6845 FLORENCE PL	BELL GARDENS	90201	LOS ANGELES	300736	33.96572	-118.142
J&S CHROF	19340358	STATE RESIACTIVE	#####		6863 FLORENCE PL	BELL GARDENS	90201	LOS ANGELES	300255, 3	33.96565	-118.141
BENICIA AF	60001960	STATE RESIACTIVE	#####		750 JACKSON STREET	BENICIA	94510	SOLANO	201993	38.04709	-122.142
BENICIA AF	60001959	STATE RESIACTIVE	#####		946 TYLER ROAD	BENICIA	94510	SOLANO	201994	38.04582	-122.14
BODEGA H	80001096	MILITARY E ACTIVE	#####			BOLINAS		SONOMA	201818	38.30167	-123.058
BRAWLEY I	13750002	STATE RESIACTIVE		8/6/2014	556 E STREET	BRAWLEY	92227	IMPERIAL	401171	32.97948	-115.533
PUREGRO	13070097	STATE RESIACTIVE	#####		1025 RIVER DRIVE	BRAWLEY	92227	IMPERIAL	401121	32.98814	-115.526
SOUTHERN	41490037	STATE RESIACTIVE - L/	#####		GENEVA AVENUE AND BAYSHORE BOULEVARI	BRISBANE	94005	SAN MATEO	200093	37.70592	-122.404
BUENA PAI	60001268	STATE RESIACTIVE - L/		3/9/2010	6522 STANTON AVENUE	BUENA PARK	90621	ORANGE	401478	33.8658	-117.994
NEW FASH	60001918	STATE RESIACTIVE	#####		4548 BEACH BOULEVARD	BUENA PARK	90621	ORANGE	401649	33.8953	-117.987
FORMER D	60000535	STATE RESIACTIVE	#####		1102 WEST ISABEL STREET	BURBANK	91506	LOS ANGELES	301328	34.18211	-118.323
CAMP LOC	37970030	STATE RESIACTIVE		6/4/2015	CAMPO	CAMPO	91906	SAN DIEGO	400767	32.60834	-116.467
LUBRICATI	19290153	STATE RESIACTIVE	#####		12500 LANG STATION ROAD	CANYON COUNTRY	91350	LOS ANGELES	300087	34.4323	-118.37
CARMEL CI	60002209	STATE RESIACTIVE	#####		SWC OF JUNIPERO STREET AND 3RD AVENUE	CARMEL	93921	MONTEREY	202043	36.55934	-121.92
ALCO PACI	19340753	STATE RESICERTIFIED		7/2/2013	16914 SOUTH BROADWAY	CARSON	90248	LOS ANGELES	300353, 3	33.87815	-118.278

CAL COMP 19490019	STATE RESIACTIVE	#####	20400 MAIN ST	CARSON	90745 LOS ANGELES	400721, 4	33.8426	-118.272
GOLDEN E/ 19290167	STATE RESIACTIVE - L/	#####	12000 SOUTH FIGUEROA STREET	CARSON	90745 LOS ANGELES	400072	33.838	-118.285
MOEN FO/ 19300002	STATE RESIBACKLOG	#####	16627 AVALON BLVD	CARSON	90746 LOS ANGELES	300256	33.8802	-118.266
MONSANT 19281200	STATE RESIACTIVE	#####	2100 EAST 223RD STREET	CARSON	90810 LOS ANGELES	400266	33.82292	-118.238
STAUFFER 19280083	STATE RESIACTIVE - L/	#####	2112 EAST 223RD STREET	CARSON	90745 LOS ANGELES	400264	33.82323	-118.236
VICTORIA C 19490191	STATE RESIACTIVE	6/9/2006	340 EAST 192ND STREET	CARSON	90746 LOS ANGELES	400579	33.85287	-118.272
CASMALIA 42490025	FEDERAL S ACTIVE	5/8/1995	3300 NTU ROAD	CASMALIA	93429 SANTA BARBARA	300208	34.87588	-120.553
MARSHALL 60000250	STATE RESIACTIVE	#####	20457 REDWOOD ROAD	CASTRO VALLEY	94546 ALAMEDA	201654	37.6969	-122.074
CHICO - SK 4880002	STATE RESIACTIVE	#####	HAGEN LANE/SKYWAY AVENUE	CHICO	95928 BUTTE	101681	39.70665	-121.8
CHICO GRC 4990003	STATE RESIACTIVE	#####	CHICO AREA GROUNDWATER	CHICO	95926 BUTTE	100035	39.73518	-121.835
CHICO GRC 4990002	STATE RESIACTIVE - L/	#####	CHICO AREA GROUNDWATER	CHICO	95926 BUTTE	100504	39.73333	-121.848
CHICO MU 4450006	STATE RESIACTIVE - L/	1/1/1985	651 AND 681 LIBERATOR STREET	CHICO	95926 BUTTE	100036, 1	39.79508	-121.848
CHICO SCR 60000800	STATE RESIACTIVE	#####	878 EAST 20TH STREET	CHICO	95928 BUTTE	101937	39.72485	-121.817
ESPLANAD 4720001	STATE RESIACTIVE	2/7/2011	164 E 2ND AVE	CHICO	95926 BUTTE	100263	39.73946	-121.846
FIRST AVE 4720002	STATE RESIACTIVE	#####	1082 EAST 1ST AVENUE	CHICO	95927 BUTTE	100264	39.74604	-121.831
FLAIR CUS 4720003	STATE RESIACTIVE	#####	660 MANGROVE AVE	CHICO	95926 BUTTE	100185	39.735	-121.835
FLOWSERV 60001983	STATE RESIACTIVE	3/4/2014	844 BROADWAY STREET, APN 004-285-002-00	CHICO	95928 BUTTE	102237	39.72509	-121.836
LOUISIANA 4240002	STATE RESICERTIFIED	#####	WEST 16TH STREET	CHICO	95926 BUTTE	100186	39.71579	-121.832
NORGE VIL 4720004	STATE RESICERTIFIED	#####	254 EAST FIRST STREET	CHICO	95926 BUTTE	101168	39.73158	-121.84
NORTH VA 4720005	STATE RESIACTIVE	7/1/1995	801 EAST AVENUE	CHICO	95926 BUTTE	100506	39.75812	-121.846
VICTOR INI 4360003	STATE RESIACTIVE - L/	#####	365 E 20TH ST	CHICO	95928 BUTTE	100178	39.72091	-121.821
AVALON PI 60001560	STATE RESIACTIVE	#####	200 FALLS CANYON ROAD	CITY OF AVALON	90704 LOS ANGELES	404868	33.33852	-118.333
PUENTE V/ 60001338	FEDERAL S ACTIVE	#####	COVERS MOST OF CITY OF INDUSTRY, PORTIO	CITY OF INDUSTRY	91744 LOS ANGELES	301404, 3	34.02933	-117.967
FORT ORD 80001207	FEDERAL S ACTIVE - L/	#####	INTERSECTION OF HWY 1 AND 8TH STREET	CITY OF MARINA	93933 MONTEREY	201772	36.65248	-121.823
SULPHUR E 17100001	FEDERAL S ACTIVE	1/1/1984	SULPHUR BANK ROAD	CLEARLAKE	95422 LAKE	100142	39.00389	-122.665
MOUNT O' 71000033	STATE RESIACTIVE	#####	APPROXIMATELY 6 MILES NORTHEAST OF CLC	CLOVIS	93911 FRESNO	101191, 1	36.88951	-119.628
FOSTER-G/ 33280137	STATE RESICERTIFIED	#####	1577 FIRST STREET	COACHELLA	92236 RIVERSIDE	400305	33.68323	-116.18
ATLAS ASB 10320044	FEDERAL S ACTIVE - L/	1/1/1983	20 MILES NW OF COALINGA-LOS GATOS CK R	COALINGA	93210 FRESNO	100161, 1	36.32119	-120.591
CITY OF CC 10330041	FEDERAL S CERTIFIED	#####	AREA SE OF LUCILLE AVENUE & HWY 198	COALINGA	93210 FRESNO	100289, 1	36.12775	-120.37
COALINGA 10140003	FEDERAL S CERTIFIED	#####	PINE CANYON, 15 MILES NW OF COALINGA	COALINGA	93210 FRESNO	100043	36.30963	-120.529
CAMEO 19390043	STATE RESIACTIVE	#####	6904 EAST SLAUSON AVENUE	COMMERCE	90040 LOS ANGELES	300546	33.98021	-118.141
NEWCROW 60000714	STATE RESIACTIVE	#####	6141 TO 6241 RANDOLPH STREET	COMMERCE	90040 LOS ANGELES	301321	33.97853	-118.153
SOUTHLAN 19290003	STATE RESICERTIFIED	#####	5619-5621 RANDOLPH STREET	COMMERCE	90040 LOS ANGELES	300148	33.97995	-118.165
WESTERN I 19330383	STATE RESIACTIVE	#####	4530 E PACIFIC WAY	COMMERCE	90040 LOS ANGELES	300590, 3	34.00564	-118.177
CONCORD 7970005	FEDERAL S ACTIVE	#####	12,922 ACRES; 30 MI NE OF SAN FRANCISCO	CONCORD	94520 CONTRA COSTA	201776	38.02111	-122.026
MILITARY C 7970004	FEDERAL S ACTIVE	#####	PORT CHICAGO HIGHWAY	CONCORD	94520 CONTRA COSTA	200022	38.0535	-122.02
PUREGRO- 16070076	STATE RESIACTIVE	#####	6991 NEVADA AVENUE	CORCORAN	93212 KINGS	100274	36.137	-119.581
THOMAS R 33290115	STATE RESICERTIFIED	#####	S OF PALISADES DR, W OF SERFAS CLUB DR	CORONA	91720 RIVERSIDE	400158	33.88022	-117.614
CLA-VAL F/ 60001550	STATE RESIACTIVE	#####	1701 PLACENTIA AVENUE	COSTA MESA	92627 ORANGE	401579	33.63706	-117.933
COSTA ME 30970004	STATE RESIACTIVE	#####	S OF PRESIDIO DR & WEST OF NEWPORT BLV	COSTA MESA	92626 ORANGE	400498	33.67167	-117.889
COSTA ME 60001245	STATE RESIACTIVE	6/1/2016	AREA BOUNDED BY MONROVIA AVENUE, PLA	COSTA MESA	92627 ORANGE	401385	33.63581	-117.934
MAURER N 60001549	STATE RESIACTIVE	8/4/2011	873 WEST 17TH STREET	COSTA MESA	92627 ORANGE	401578	33.63559	-117.935
PRECISION 60001612	STATE RESIACTIVE	#####	865 AND 869 WEST 17TH STREET	COSTA MESA	92627 ORANGE	401409	33.63608	-117.935
SOUTHERN 60001509	STATE RESIACTIVE	1/5/2012	1680 MONROVIA AVENUE	COSTA MESA	92627 ORANGE	401558	33.6354	-117.936
DEL NORTE 8420001	FEDERAL S CERTIFIED	#####	2650 W WASHINGTON BLVD	CRESCENT CITY	95531 DEL NORTE	200025	41.7737	-124.232

CROWS LA 50970001	STATE RESIACTIVE	7/1/1994	1.5 MI NW OF CROWS LANDING; (T6S R8E)	CROWS LANDING	95313	STANISLAUS	100245, 1	37.40722	-121.108
FORMER A 19340792	STATE RESIACTIVE	#####	5977 W. WASHINGTON BLVD.	CULVER CITY	90232	LOS ANGELES	301290	34.03211	-118.376
DELIA'S CL 60000349	STATE RESIACTIVE	#####	7335 BOLINGER ROAD	CUPERTINO	95014	SANTA CLARA	201670	37.31257	-122.034
MIDWAY V 41650007	STATE RESICERTIFIED	#####	47 MIDWAY DRIVE	DALY CITY	94014	SAN MATEO	200212	37.70212	-122.414
PG&E - MA 41360100	STATE RESICERTIFIED	5/4/1995	731 SCHWERIN STREET	DALY CITY	94014	SAN MATEO	200075, 9	37.70481	-122.412
PG&E - MA 41360093	STATE RESICERTIFIED	#####	731 SCHWERIN STREET	DALY CITY	94014	SAN MATEO	200075	37.70287	-122.41
FRONTIER 57070001	FEDERAL S ACTIVE - L	4/1/1985	SECOND STREET/BTWN PENA & MACE BLVD.	DAVIS	95616	YOLO	100060	38.55251	-121.703
LAB FOR EI 48990004	FEDERAL S ACTIVE - L	2/7/1995	U.C., DAVIS (ITEH) - OLD DAVIS ROAD	DAVIS	95616	SOLANO	100424, 1	38.51928	-121.757
H S MANN 10330038	STATE RESIACTIVE - L	1/1/1984	5404 SOUTH DEL REY AVENUE	DEL REY	93616	FRESNO	100101, 1	36.65747	-119.59
DELANO PI 60001327	STATE RESIACTIVE	8/4/2010	MAIN STREET AND 10TH AVENUE	DELANO	93215	KERN	102044	35.76911	-119.246
FORMER N 60002270	STATE RESIACTIVE	#####	811 11TH AVENUE	DELANO	93215	KERN	102277	0	0
OAK LANE 60002268	STATE RESIACTIVE	#####	910 MAIN STREET	DELANO	93215	KERN	102275	0	0
OASIS CLE/ 60002269	STATE RESIACTIVE	#####	920 MAIN STREET	DELANO	93215	KERN	102276	0	0
SO CAL GA 54830001	STATE RESIACTIVE	5/1/1986	216 S O ST	DINUBA	93618	TULARE	100050	36.53752	-119.392
DIXON NA 48970003	STATE RESIACTIVE	#####	7200 RADIO STATION ROAD	DIXON	95620	SOLANO	100278	38.37417	-121.774
CENTRAL V 24280039	STATE RESIACTIVE	#####	7657 AZUSA AVE	DOS PALOS	93620	MERCED	101085	37.04805	-120.63
DRY CANY 80000411	STATE RESIACTIVE	7/1/2012	53 MILES NORTHWEST OF THE CITY OF VENTL	DRY CANYON	93222	VENTURA	301338	34.75	-119.242
PARKS AIR 80000158	STATE RESIACTIVE	#####		DUBLIN		ALAMEDA		37.70306	-121.892
PARKS RES 1970012	STATE RESIACTIVE - L	4/1/1994	BLDG. 790, 5TH STREET	DUBLIN	94568	ALAMEDA	201104, 2	37.70917	-121.9
J R SIMPLC 15070030	STATE RESIACTIVE - L	5/1/1986	430 PEPPER DRIVE	EDISON	93220	KERN	100133	35.35148	-118.878
EDWARDS 15970001	FEDERAL S ACTIVE - L	5/1/1986	470 SQ MI; 60 MI NE OF LOS ANGELES, CA	EDWARDS	93523	KERN	100052	34.90604	-117.883
CASPIAN II 13280019	STATE RESICERTIFIED	#####	287 WEST ATEN ROAD	EL CENTRO	92243	IMPERIAL	400201, 4	32.82179	-115.56
NAVAL AIR 13970001	STATE RESIACTIVE	1/1/1995	OFF OLD HWY 80, 7 MILES W OF EL CENTRO	EL CENTRO	92243	IMPERIAL	400054	32.875	-115.875
MACDONA 60000506	STATE RESIBACKLOG	6/6/2008	SAN PABLO WALL 45TH PLUME	EL CERRITO AND RICHM	94804	CONTRA COSTA	201678	37.92969	-122.325
AEROJET G 60000742	STATE RESIACTIVE	#####	9100 FLAIR DRIVE	EL MONTE	91731	LOS ANGELES	301377	34.0715	-118.069
EL MONTE 60001337	FEDERAL S ACTIVE	#####	COVERS PORTIONS OF CITIES OF EL MONTE, R	EL MONTE	91732	LOS ANGELES	301369, 3	34.0801	-118.041
HYTONE CI 60000629	STATE RESIACTIVE	5/1/2007	2702 MOUNTAIN VIEW ROAD	EL MONTE	91732	LOS ANGELES	301319	34.05952	-118.025
SAN GABRI 19990006	FEDERAL S ACTIVE	#####	10-20 MI E OF L.A. ON HWY 10 IN AZUSA	EL MONTE	91732	LOS ANGELES	300132, 3	34.0724	-118.033
WICKES FC 48240001	STATE RESIACTIVE - L	#####	INTERSECTION OF HOLDENER & A STREETS	ELMIRA	95625	SOLANO	100164	38.35235	-121.907
IKEA (FORM 1440005	STATE RESICERTIFIED	#####	4300 EASTSHORE HIGHWAY	EMERYVILLE	94608	ALAMEDA	200312, 2	37.8295	-122.292
MYERS DR 1340110	STATE RESICERTIFIED	#####	4500 SHELLMOUND STREET	EMERYVILLE	94608	ALAMEDA	200144	37.83301	-122.293
SHERWIN 60000189	STATE RESICERTIFIED	#####	1450 SHERWIN AVENUE	EMERYVILLE	94608	ALAMEDA	200956, 2	37.83295	-122.29
CHATHAM 37490029	STATE RESIACTIVE	#####	2257 BERNARDO AVE	ESCONDIDO	92029	SAN DIEGO	400029	33.09303	-117.089
FAIR ANSEI 60001218	STATE RESIACTIVE	#####	709 & 711 CENTER BOULEVARD	FAIRFAX	94930	MARIN	201866	37.98578	-122.584
SOUTHERN 48400001	STATE RESICERTIFIED	#####	END OF CHADBORNE RD, SUISUN MARSH	FAIRFIELD	94585	SOLANO	200444	38.17333	-122.079
TRAVIS AFI 80000617	MILITARY F ACTIVE	#####		FAIRFIELD		SOLANO	FUDS MA	38.27648	-122.002
FALLBROO 37970003	STATE RESIACTIVE	9/1/1995	14 SQ MI; 53 MI NORTH OF SAN DIEGO, CA	FALLBROOK	92028	SAN DIEGO	400270	33.38139	-117.257
PACIFIC CC 56130038	FEDERAL S ACTIVE	#####	67 EAST TELEGRAPH ROAD	FILLMORE	93015	VENTURA	300156	34.40436	-118.905
TRI-AIR, IN 10070021	STATE RESIACTIVE - L	5/1/1986	915 TENTH STREET	FIREBAUGH	93622	FRESNO	100149, 1	36.85669	-120.464
BRITZ FERT 10280077	STATE RESICERTIFIED	#####	21817 SOUTH COALINGA ROAD	FIVE POINTS	93624	FRESNO	100024	36.41972	-120.121
POND MIN 60001301	STATE RESIBACKLOG	5/8/2012	NEAR 6501 PATENT ROAD (SITE OF FORMER F	FORESTHILL	95613	PLACER	102008	39.00113	-120.847
CITY OF FC 60002118	STATE RESIACTIVE	#####	STATE HIGHWAY 1	FORT BRAGG	95437	MENDOCINO	900279	39.44332	-123.811
GEORGIA-F 23240008	STATE RESIACTIVE - L	8/1/2006	90 WEST REDWOOD AVENUE	FORT BRAGG	95437	MENDOCINO	200402	39.44332	-123.811
FORT IRWI 36970003	STATE RESIACTIVE	2/2/2010	36313 ACRES; 36 MI EAST OF BARSTOW, CA	FORT IRWIN	92310	SAN BERNARDINC	400063	35.25	-116.625
FORT ORD 80001196	FEDERAL S ACTIVE	#####	NORTHEAST SIDE OF FORMER FORT ORD BASI	FORT ORD	93941	MONTEREY	201648	36.654	-121.731

FORT ORD 80001198	FEDERAL S ACTIVE - L/	3/2/2007	3500 ACRES OF THE FORMER FORT ORD; 5 MI	FORT ORD	93941 MONTEREY	201729, 2	36.63604	-121.783
FORT ORD, 27970002	FEDERAL S ACTIVE - L/	5/1/1986	28,016 ACRES; 5 MILES N OF MONTEREY, CA	FORT ORD	93941 MONTEREY	200040, 2	36.62951	-121.791
EEL RIVER 12240119	STATE RESIACTIVE	#####	1053 NORTHWESTERN AVE	FORTUNA	95540 HUMBOLDT	200757	40.51466	-124.124
COMMERC 10340074	STATE RESIACTIVE	#####	2940 SOUTH ELM AVENUE	FRESNO	93706 FRESNO	100044	36.69437	-119.792
FMC CORP 10280013	STATE RESIACTIVE	1/1/1985	2501 SOUTH SUNLAND AVENUE	FRESNO	93725 FRESNO	100056	36.71261	-119.77
FORMER B 10400004	STATE RESIACTIVE	#####	3090 E CHURCH AVE	FRESNO	93721 FRESNO	101503	36.71418	-119.773
FRESNO AI 10450005	STATE RESIACTIVE	1/1/1990	MCKINLEY AND CLOVIS AVENUES	FRESNO	93727 FRESNO	100242, 1	36.76611	-119.71
FRESNO SA 10490097	FEDERAL S ACTIVE - L/	1/1/1989	SW CORNER OF JENSEN & WEST AVENUES	FRESNO	93706 FRESNO	100246	36.70389	-119.827
LEMOORE 80000544	MILITARY F ACTIVE	4/6/2015		FRESNO	FRESNO		36.16167	-120.365
PINEDALE 10990001	STATE RESIBACKLOG	9/8/2008	PINEDALE/N. FRESNO AREA	FRESNO	93650 FRESNO	100168	36.83972	-119.785
SOUTH FRI 60000706	STATE RESIACTIVE	#####	2376 S. RAILROAD AVENUE	FRESNO	93721 FRESNO	101591	36.71498	-119.775
SOUTH FRI 10400005	STATE RESIACTIVE	#####	NORTH OF CHURCH AVENUE AT SOUTH EAST	FRESNO	93721 FRESNO	101491, 1	36.7185	-119.773
T H AGRIC 10280334	FEDERAL S CERTIFIED	#####	7183 EAST MCKINLEY AVENUE	FRESNO	93727 FRESNO	100146	36.76416	-119.66
VALLEY FO 10390001	STATE RESIACTIVE	#####	2510 SOUTH EAST AVENUE	FRESNO	93717 FRESNO	101585	36.70974	-119.775
WEIR FLOV 10340137	STATE RESICERTIFIED	#####	2494 SOUTH RAILROAD AVENUE, P.O. BOX 16	FRESNO	93707 FRESNO	101163, 1	36.70779	-119.771
CHICAGO 1 60001251	STATE RESIACTIVE	#####	350 SOUTH RAYMOND AVENUE	FULLERTON	92831 ORANGE	401489	33.86775	-117.906
MCCOLL 30290001	FEDERAL S CERTIFIED	#####	ROSECRANS & SUNNY RIDGE	FULLERTON	92633 ORANGE	300093, 4	33.89513	-117.971
ORANGE C 71002520	STATE RESIACTIVE	#####	1711 E. KIMBERLY AVENUE	FULLERTON	92831 ORANGE	401605, 5	33.86319	-117.897
PCA META 71002360	STATE RESIACTIVE	#####	1726 E. ROSSLYNN AVENUE	FULLERTON	92831 ORANGE	102224, 4	33.86398	-117.897
GARDENA 19490135	STATE RESIACTIVE	#####	1450 WEST ARTESIA BOULEVARD (AT NORMA	GARDENA	90247 LOS ANGELES	300067, 4	33.87235	-118.3
INDUSTRIA 60001937	STATE RESIACTIVE	#####	17109 SOUTH MAIN STREET	GARDENA	90248 LOS ANGELES	301601	33.87624	-118.277
GILROY - N 43490064	STATE RESIBACKLOG	9/6/1991	MONTEREY/6TH/OLD GILROY	GILROY	95020 SANTA CLARA		37.00682	-121.568
PALACE CL 60002013	STATE RESIACTIVE	6/2/2014	201 SOUTH GLENDALE AVENUE	GLENDALE	91205 LOS ANGELES	301655-0	34.14431	-118.249
SAN FERN 19990012	FEDERAL S ACTIVE	1/1/1984	CRYSTAL SPRINGS WELLFIELD AREA	GLENDALE	91209 LOS ANGELES	300127, 3	34.1575	-118.285
GOFFS CPS 80000412	STATE RESIACTIVE	#####	35 MILES WEST OF NEEDLES	GOFFS	92363 SAN BERNARDINC	401352	34.925	-115.063
SHELL- FOF 42290014	STATE RESIACTIVE - L/	#####	14730 HIGHWAY 101	GOLETA	93117 SANTA BARBARA	300138	34.47653	-120.135
GOSHEN C. 60002004	STATE RESIACTIVE	5/5/2014	BETTY DRIVE	GOSHEN	93227 TULARE	102240	36.35571	-119.423
EMPIRE MI 29100003	STATE RESIACTIVE	#####	10791 E EMPIRE ST	GRASS VALLEY	95945 NEVADA	100235	39.20776	-121.043
ARMY REC 80000765	MILITARY F ACTIVE	4/8/2015		GROVER CITY	SAN LUIS OBISPO	900196	35.12944	-120.63
HALF MOC 80000398	MILITARY F ACTIVE	4/6/2015	WAVECREST ROAD	HALF MOON BAY	94019 SAN MATEO		37.44719	-122.433
HAYWARD 1970009	STATE RESIACTIVE	#####	1525 WEST WINTON AVENUE	HAYWARD	94545 ALAMEDA	200588	37.65479	-122.122
HAYWARD 1970008	STATE RESIACTIVE	#####	20301 SKYWEST DR	HAYWARD	94541 ALAMEDA	200635, 9	37.66279	-122.12
HERCULES 7280156	STATE RESICERTIFIED	#####	CORNER OF SAN PABLO & SYCAMORE AVENU	HERCULES	94547 CONTRA COSTA	200044	38.01341	-122.28
HERCULES 7280016	STATE RESICERTIFIED	6/9/1997	560 RAILROAD AVENUE	HERCULES	94547 CONTRA COSTA	200045, 2	38.02071	-122.289
SIERRA ARI 18940001	STATE RESIACTIVE - L/	5/1/1986	50 MI NORTH OF RENO, NV	HERLONG	96113 LASSEN	100132	40.14556	-120.128
SIERRA ARI 18940002	STATE RESIACTIVE - L/	7/1/1995	50 MI. NORTH OF RENO, NV	HERLONG	96113 LASSEN	100657	40.26528	-120.206
PG&E HOL 35490002	STATE RESIBACKLOG	6/8/1994	1980 SANTA ANA ROAD	HOLLISTER	95023 SAN BENITO		36.855	-121.364
ASCON LAI 30490018	STATE RESIACTIVE	1/1/1984	21641 MAGNOLIA STREET	HUNTINGTON BEACH	92646 ORANGE	400007, 4	33.64776	-117.973
TALLEY BRI 19290138	STATE RESIACTIVE	#####	2007 LAURA AVENUE	HUNTINGTON PARK	90255 LOS ANGELES	301368	33.98845	-118.236
BORDER FI 80001037	STATE RESIACTIVE	2/3/2016	1/2 MILE NORTH OF U.S. & MEXICO BORDER	IMPERIAL BEACH	92154 SAN DIEGO	401363	32.56667	-117.129
IMPERIAL I 37970008	STATE RESIACTIVE	#####	OFF ROUTE 75 BORDERING THE LANDING FIE	IMPERIAL BEACH	92032 SAN DIEGO	400041, 4	32.56611	-117.113
SALINE VAI 80000433	STATE RESIBACKLOG	9/1/2015	APPROXIMATELY 10 MILES EAST OF CA HWY 3	INDEPENDENCE	93562 INYO	102052	36.70694	-117.6
INYOKERN 71000047	MILITARY F ACTIVE	5/3/2011	KERN COUNTY	INYOKERN	93517 KERN	101043	35.66944	-117.829
MP ASSOC 3390001	STATE RESIACTIVE	#####	6555 JACKSON VALLEY ROAD	IONE	95640 AMADOR	101568	38.30763	-120.902
EL TORO N 30970003	FEDERAL S ACTIVE - L/	5/1/1986	4,741 ACRES; 9MI NE OF NEWPORT BEACH, C	IRVINE	92709 ORANGE	400055	33.68306	-117.734

ALLEN RAN 70000030 STATE RESIACTIVE	##### APPROXIMATELY ONE HALF MILE WEST OF AL JACKSON	95968 AMADOR	101767	38.38126	-120.814
ARGONAU 3100002 STATE RESIACTIVE	2/5/1987 ARGONAUT LANE JACKSON	95642 AMADOR	100347	38.35771	-120.789
UCSD (CAN 37970031 STATE RESIBACKLOG	##### 12 MILES NORTH OF SAN DIEGO LA JOLLA	92103 SAN DIEGO	401221	32.89167	-117.241
LAKE CHAE 80000783 STATE RESIACTIVE	##### 20 MILES SOUTHEAST OF ALAMEDA @ N37.4 LAKE CHABOT	94546 ALAMEDA	201779	37.75444	-122.075
DEFENSE C 39970002 FEDERAL S ACTIVE	5/1/1986 60 MI EA OF SAN FRANCISCO, CA LATHROP	95331 SAN JOAQUIN	100131	37.84	-121.269
LEMOORE 16970001 STATE RESIACTIVE	1/1/1983 39,823 ACRES; 35 MI SOUTH OF FRESNO, CA LEMOORE	93245 KINGS	100087	36.25617	-119.905
NAS LEMO 80000645 MILITARY F ACTIVE	4/6/2015 SOUTH SIDE OF ROUTE 198 LEMOORE	KINGS		36.25432	-119.929
LAWRENCE 1730095 FEDERAL S ACTIVE	5/1/1986 7000 EAST AVENUE LIVERMORE	94550 ALAMEDA	200057	37.68711	-121.706
VANDENBE 42970003 STATE RESIACTIVE	5/1/1986 98400 ACRES;55MI NW OF SANTA BARBARA, LOMPOC	93437 SANTA BARBARA	300162	34.71722	-120.556
LONG BEACH 19970011 STATE RESIACTIVE - L/	##### OFF OCEAN BLVD & NAVY WAY LONG BEACH	90822 LOS ANGELES	400289, 4	33.75833	-118.233
HILLVIEW - 43490059 STATE RESIBACKLOG	##### BTW HILLVIEW;ELEANOR AVE&SAN ANTONIO LOS ALTOS	94022 SANTA CLARA	200047	37.3796	-122.113
AMTRAK R 19400012 STATE RESIACTIVE	##### 2435 E. WASHINGTON BLVD. LOS ANGELES	90021 LOS ANGELES	300719	34.01916	-118.226
CALTRANS 19990003 STATE RESICERTIFIED	##### I-5 FWY BTW NORMANDIE BLV & IMPERIAL H' LOS ANGELES	90047 LOS ANGELES	300203	33.92889	-118.3
CHARLES C 19281216 STATE RESIACTIVE	7/2/2001 8325 HINDRY AVENUE LOS ANGELES	90045 LOS ANGELES	300997	33.96278	-118.374
DAVIS CHE 19281215 STATE RESIACTIVE	9/6/2000 1550 NORTH BONNIE BEACH PLACE LOS ANGELES	90063 LOS ANGELES	300432	34.05918	-118.183
DEL AMO F 19300230 FEDERAL S ACTIVE - L/	##### DEL AMO BLVD & VERMONT AVE LOS ANGELES	90020 LOS ANGELES	400048, 4	33.8497	-118.292
FRANCISCA 19320112 STATE RESICERTIFIED	##### 2901 LOS FELIZ BOULEVARD LOS ANGELES	90039 LOS ANGELES	300065, 3	34.12656	-118.263
HARD CHR 19340231 STATE RESIACTIVE	7/1/2001 617 EAST 56TH STREET LOS ANGELES	90011 LOS ANGELES	300457, 3	33.99184	-118.264
INTERNATI 19390044 STATE RESICERTIFIED	##### 2182 EAST 11TH STREET LOS ANGELES	90021 LOS ANGELES	300591	34.02421	-118.234
LOS ANGE 19970021 STATE RESIACTIVE	##### 1700 STADIUM WAY LOS ANGELES	90012 LOS ANGELES	300784	34.06903	-118.242
PALACE PL 19340646 STATE RESIACTIVE	5/5/2010 710 EAST 29TH STREET LOS ANGELES	90011 LOS ANGELES	301391	34.01845	-118.263
SAN FERN 19990011 FEDERAL S ACTIVE	##### NORTH HOLLYWOOD WELLFIELD AREA LOS ANGELES	91601 LOS ANGELES	300126, 3	34.1875	-118.384
SAN FERN 19990009 FEDERAL S CERTIFIED	1/1/1999 POLLOCK WELLFIELD LOS ANGELES	90086 LOS ANGELES	300127, 3	34.12944	-118.264
SERVICE PI 60002166 STATE RESIACTIVE	4/1/2015 1855 EAST 62ND STREET LOS ANGELES	90001 LOS ANGELES	301695, 3	33.98385	-118.239
SOUTHERN 80001142 MILITARY F ACTIVE	3/2/2015 LOS ANGELES	LOS ANGELES		34.05556	-118.229
SPENCE PI 60000305 STATE RESIACTIVE	5/5/2006 7047-7051 NORTH FIGUEROA STREET LOS ANGELES	90042 LOS ANGELES	301285	34.13054	-118.189
STANDARD 71003183 STATE RESIACTIVE	6/4/2004 811,817/819, 825 & 826 E. 62ND STREET LOS ANGELES	90001 LOS ANGELES	300683, 3	33.98292	-118.26
TAYLOR YA 19470006 STATE RESIACTIVE	##### 2800 KERR STREET LOS ANGELES	90039 LOS ANGELES	300358	34.09782	-118.239
WATTS/SO 60002017 STATE RESIACTIVE	##### VARIOUS ADDRESSES NEAR ALAMEDA STREET LOS ANGELES	90002 LOS ANGELES	900272	33.94876	-118.23
WILLIAM N 19290312 STATE RESIACTIVE - L/	##### 1300 CARDINAL STREET LOS ANGELES	90012 LOS ANGELES	300545, 3	34.06318	-118.23
CAMP COM 80001098 MILITARY F ACTIVE	##### LOWER PETERS CANYON RETARDIN ORANGE			33.7625	-117.771
MACGILLIS 20240001 STATE RESIACTIVE	8/1/1985 11272 ROAD 32 MADERA	93639 MADERA	100098	36.91366	-119.965
MADERA P 60001450 STATE RESIACTIVE	##### SOUTH C STREET AND 7TH STREET MADERA	93638 MADERA	102045	36.9583	-120.056
PURITY OIL 10500005 FEDERAL S ACTIVE	1/1/1985 3265 SOUTH MAPLE AVENUE MALAGA	93726 FRESNO	100122	36.68732	-119.746
MANHATT. 80001033 MILITARY F ACTIVE	3/2/2015 MANHATTAN BEACH	LOS ANGELES		33.925	-118.358
GORDON F 60000746 STATE RESIACTIVE	##### 1085 SOUTH UNION ROAD MANTECA	95336 SAN JOAQUIN	101924	37.78831	-121.236
NUR-AL-HI 60002130 STATE RESIACTIVE	##### 1085 SOUTH UNION ROAD MANTECA	95337 SAN JOAQUIN	102257, 1	37.78833	-121.235
RESOURCE 70000045 STATE RESIACTIVE	##### 24306 HIGHWAY 166 MARICOPA	93252 KERN	101650	35.05835	-119.357
CORNELL-I 19360279 STATE RESIACTIVE - L/	##### 4144 GLENCOE AVENUE MARINA DEL REY	90292 LOS ANGELES	300040	33.98898	-118.441
AMERICAN 3240002 STATE RESIBACKLOG	##### HIGHWAY 49 AND HIGHWAY 88 JUNCTION MARTELL	95654 AMADOR	100010	38.36809	-120.798
CAMP BEA 58970001 STATE RESIACTIVE	##### 97.74 SQ MI; 40 MI N OF SACRAMENTO MARYSVILLE	95901 YUBA	101188, 1	39.12833	-121.248
CALIFORNI 60001551 STATE RESIACTIVE	##### CALIFORNIA JOINT FORCES HEADQUARTERS 1 MATHER	95655 SACRAMENTO	102150	38.55246	-121.298
PEMACO C 19281217 FEDERAL S ACTIVE	7/1/2001 5040-5050 SLAUSON BLVD. MAYWOOD	90270 LOS ANGELES	300705	33.98605	-118.175
MCCLELLA 80001223 FEDERAL S ACTIVE - L/	##### APPROX 5200 WATT AVE MCCLELLAN AFB	95652 SACRAMENTO	102047, 1	38.66	-121.399
DERRY LAN 60000286 STATE RESIACTIVE	5/1/2006 DERRY LANE MENLO PARK	94025 SAN MATEO	201659	37.45577	-122.185

GALLO GLA 50320003	STATE RESICERTIFIED	#####	3666 W SERVICE RD	MODESTO	95358	STANISLAUS	100062	37.58008	-121.061
MODESTO 50950002	FEDERAL S ACTIVE - L/	1/1/1989	MCHENRY AVE., SOUTH OF ORANGEBURG AV	MODESTO	95351	STANISLAUS	100111, 1	37.65667	-120.994
COMMODI 15330008	STATE RESICERTIFIED	#####	11847 UNITED STREET	MOJAVE	93501	KERN	100175	34.9935	-118.15
MOBILE SM 15330011	STATE RESIACTIVE	#####	UNITED STREET & REED ROAD	MOJAVE	93501	KERN	100188	34.98296	-118.151
MOJAVE G 80000950	STATE RESIACTIVE	#####	2 MILE SW OF 21000 HACIENDA BLVD	MOJAVE	93505	KERN	101450	35.07581	-117.998
PRODUCTS 15130013	STATE RESIBACKLOG	6/8/1995	11601 UNITED STREET	MOJAVE	93501	KERN	100308	34.98891	-118.151
PURDY COI 15330010	STATE RESICERTIFIED	#####	12901 UNITED ROAD	MOJAVE	93501	KERN	100176, 1	35.00891	-118.15
SILVER QU 15500002	STATE RESICERTIFIED	#####	BACK LOT AT 11847 UNITED STREET	MOJAVE	93501	KERN	100273	34.99468	-118.152
UNITED MI 15330007	STATE RESICERTIFIED	6/1/1995	12433 UNITED STREET	MOJAVE	93501	KERN	100177	35.00249	-118.152
FORT ORD 80001228	FEDERAL S ACTIVE	#####	5 MILES N OF MONTEREY, CA	MONTEREY	93941	MONTEREY	201816	36.63604	-121.783
FORT ORD 80001229	FEDERAL S ACTIVE	#####	5 MILES N OF MONTEREY, CA	MONTEREY	93941	MONTEREY	201815	36.57523	-121.804
FORT ORD 80001194	FEDERAL S ACTIVE	#####	DEL REY OAKS	MONTEREY	93941	MONTEREY	201679	36.59079	-121.821
OWL CLEA 60002357	STATE RESIACTIVE	#####	153 WEBSTER STREET	MONTEREY	93940	MONTEREY	202095	36.59615	-121.895
OPERATIN 19490207	FEDERAL S CERTIFIED	8/2/2012	900 POTRERO GRANDE DR	MONTEREY PARK	91755	LOS ANGELES	300110, 3	34.0365	-118.104
MILL VALLI 80000719	STATE RESIACTIVE	#####		MOUNT TAMALPAIS		MARIN		37.92278	-122.602
PLESSEY M 43360069	STATE RESICERTIFIED	#####	2274 MORA DRIVE	MOUNTAIN VIEW	94040	SANTA CLARA	200080	37.40324	-122.101
CAMA DES 36970013	MILITARY I BACKLOG	#####	MOJAVE DESERT-VARIOUS SITES	NEEDLES	92363	SAN BERNARDINO		0	0
CAMP IBIS 36970011	STATE RESICERTIFIED	1/6/2009	21 MILES NORTHWEST OF NEEDLES	NEEDLES	92363	SAN BERNARDINC	400765	34.96694	-114.817
DAVIS MIL 60000691	STATE RESIBACKLOG	#####	13145 NORTH BLOOMFIELD-GRANITEVILLE RC	NEVADA CITY	95959	NEVADA	102007	39.2914	-120.98
LAVA CAP 29100004	FEDERAL S ACTIVE	#####	14501 LAVA CAP MINE ROAD	NEVADA CITY	95959	NEVADA	100337, 1	39.22867	-120.972
PINEWOOD 29100010	STATE RESIBACKLOG	1/1/2008	NORTH BLOOMFIELD ROAD	NEVADA CITY	95959	NEVADA	101487	39.28981	-120.99
CAMP DUN 80000005	STATE RESIACTIVE	#####	10 MILES N/E OF NILAND	NILAND	92257	IMPERIAL	401677, 4	33.25833	-115.467
CHOCOLAT 13970002	STATE RESIACTIVE	#####	NAVAL WEAPONS RANGE, EAST OF SALTON SINILAND	NILAND	92257	IMPERIAL	400033	33.26669	-115.467
CORONA N 80001224	MILITARY I ACTIVE	6/4/2014	IN THE CITY OF NORCO WEST OF I-15 BETWEEN	NORCO	92860	RIVERSIDE	400496	33.922	-117.568
WYLE LABS 33730084	STATE RESIACTIVE - L/	#####	1841 HILLSIDE AVENUE	NORCO	92860	RIVERSIDE	401144	33.91046	-117.542
MCCLELLA 80001199	FEDERAL S CERTIFIED	#####	4450 ROSEVILLE ROAD	NORTH HIGHLANDS	95660	SACRAMENTO	101873	38.649	-121.391
DEPT. OF C 80001201	STATE RESIACTIVE	9/9/2014	HIGHWAY 101 3 MI N OF LUCAS VALLEY ROAD	NOVATO	94947	MARIN	201597	38.05629	-122.527
HAMILTON 21970010	STATE RESIACTIVE	#####	HIGHWAY 101; 3 MI N OF LUCAS VALLEY ROAD	NOVATO	94947	MARIN	201268	38.06188	-122.523
HAMILTON 21970012	STATE RESIACTIVE	#####	HIGHWAY 101; 3 MI N OF LUCAS VALLEY ROAD	NOVATO	94947	MARIN	200714	38.06444	-122.492
NOVATO D 21970011	STATE RESIACTIVE - L/	#####	HIGHWAY 101 3 MI N OF LUCAS VALLEY ROAD	NOVATO	94947	MARIN	200529	38.04593	-122.514
ACTION PL 1340116	STATE RESICERTIFIED	#####	10132 EDES AVENUE	OAKLAND	94603	ALAMEDA	201569	37.73513	-122.18
AMCO CHE 1390001	FEDERAL S ACTIVE	5/1/2002	1414 THIRD STREET	OAKLAND	94607	ALAMEDA	200687	37.80284	-122.295
CAL TECH I 1340118	STATE RESIACTIVE	5/2/2006	825, 829, 841 31ST STREET	OAKLAND	94608	ALAMEDA	200882	37.82087	-122.274
COMMERC 1720110	STATE RESIACTIVE	#####	1250-1276, 1284 W. GRAND & 2232 POPLAR	OAKLAND	94607	ALAMEDA	201386	37.81655	-122.287
DUTCH BO 1390006	STATE RESICERTIFIED	#####	4825 SAN LEANDRO STREET	OAKLAND	94601	ALAMEDA	201426	37.7665	-122.214
GENERAL E 1360059	STATE RESIACTIVE - L/	#####	5441 EAST 14TH STREET	OAKLAND	94601	ALAMEDA	200135	37.76532	-122.206
HARD CHR 1870003	STATE RESIACTIVE	#####	750 107TH AVENUE	OAKLAND	94603	ALAMEDA	201529	37.73253	-122.175
HARRIS DR 1720109	STATE RESIACTIVE	#####	2801 MARTIN LUTHER KING JR. WAY	OAKLAND	94609	ALAMEDA	201253	37.81813	-122.272
HEROIC W. 80001225	STATE RESICERTIFIED	6/5/2015	2400 ENGINEER ROAD	OAKLAND	94607	ALAMEDA	201764	37.82498	-122.3
HOWARD I 1440006	STATE RESICERTIFIED	#####	EMBARCADERO WEST AND MARKET STREETS	OAKLAND	94604	ALAMEDA	201089	37.79722	-122.283
JENKINS AI 1750025	STATE RESIBACKLOG	#####	1778 10TH STREET	OAKLAND	94607	ALAMEDA	200869	37.81093	-122.301
LANE MET. 60000594	STATE RESIACTIVE	#####	2942 SAN PABLO AVENUE	OAKLAND	94608	ALAMEDA	201736	37.82015	-122.276
MYERS DR 1340111	STATE RESICERTIFIED	#####	6549 SAN PABLO AVENUE	OAKLAND	94608	ALAMEDA	200143	37.84857	-122.286
NORTHWE 1340123	STATE RESIACTIVE - L/	#####	1218 24TH STREET	OAKLAND	94607	ALAMEDA	201574, 2	37.81775	-122.285
OAKLAND 1970006	STATE RESIACTIVE	#####	2475-D WEST 12TH STREET	OAKLAND	94607	ALAMEDA	200233	37.82	-122.3

OAKLAND	1970016	STATE RESI	ACTIVE - L/	#####	700 MURMANSK STREET, SUITE 3	OAKLAND	94607	ALAMEDA	201537	37.81033	-122.312
PORT OF C	1510021	STATE RESI	CERTIFIED	#####	DENNISON AND EMBARCADERO STREETS	OAKLAND	94606	ALAMEDA	200083	37.77977	-122.243
PORT OF C	1280092	STATE RESI	CERTIFIED	#####	2500 7TH STREET	OAKLAND	94607	ALAMEDA	201392	37.81087	-122.322
SOUTHERN	1400010	STATE RESI	CERTIFIED	#####	CYPRESS CORRIDOR	OAKLAND	94607	ALAMEDA	200486	37.80306	-122.299
UNION PA	1400015	STATE RESI	ACTIVE	4/4/2002	700 73RD AVENUE	OAKLAND	94621	ALAMEDA	201420	37.75231	-122.198
COOK BAT	7360035	STATE RESI	CERTIFIED	#####	139 HILL AVENUE	OAKLEY	94561	CONTRA COSTA	200072	37.9736	-121.692
CAMP PEN	37970009	FEDERAL S	ACTIVE - L/	5/1/1986	125,000 ACRES; 35 MI NO OF SAN DIEGO, CA	OCEANSIDE	92055	SAN DIEGO	400025	33.36528	-117.423
TRI-CITY PI	37340034	STATE RESI	ACTIVE	#####	1307 SOUTH COAST HIGHWAY	OCEANSIDE	92054	SAN DIEGO	401562, 5	33.18236	-117.369
GE ENGINE	36370024	STATE RESI	ACTIVE	#####	2264 E. AVION PLACE	ONTARIO	91761	SAN BERNARDINC	400070	34.04933	-117.6
ORLAND CI	11720001	STATE RESI	CERTIFIED	#####	726 FIFTH STREET	ORLAND	95963	GLENN	100348	39.74655	-122.196
PARMENTI	54070063	STATE RESI	BACKLOG	#####	13133 AVENUE 416	OROSI	93647	TULARE	100167, 1	36.54472	-119.279
KOPPERS II	4240001	FEDERAL S	CERTIFIED	#####	BAGGETT-MARYSVILLE ROAD	OROVILLE	95965	BUTTE	100084	39.46949	-121.562
OPHIR RO	60000689	STATE RESI	ACTIVE	8/1/2007	ASSESSOR'S PARCEL NUMBERS (APNS)078-01	OROVILLE	95965	BUTTE	101886	39.46656	-121.571
SIERRA PA	4240024	STATE RESI	BACKLOG	#####	1980 KUSEL ROAD	OROVILLE	95966	BUTTE	100342	39.45815	-121.558
HALACO EI	56330002	FEDERAL S	ACTIVE	#####	6200 PERKINS ROAD	OXNARD	93033	VENTURA	300075, 3	34.13919	-119.183
VEHICLE PI	56010004	STATE RESI	BACKLOG	6/8/1995	5601 EDISON DR	OXNARD	93033	VENTURA	300321	34.14592	-119.168
HOLCHEM,	19281213	STATE RESI	ACTIVE	#####	13546 DESMOND STREET	PACOIMA	91331	LOS ANGELES	300593	34.27496	-118.427
AIR FORCE	19970004	STATE RESI	ACTIVE	7/1/1994	5832 ACRES; BETWN PALMDALE AND LANCA	PALMDALE	93550	LOS ANGELES	300002	34.62961	-118.092
AYDIN ENE	43360085	STATE RESI	CERTIFIED	#####	3180 HANOVER STREET	PALO ALTO	94304	SANTA CLARA	200010	37.41465	-122.146
COHERENT	43360115	STATE RESI	CERTIFIED	#####	3210 PORTER DR	PALO ALTO	94304	SANTA CLARA	200138	37.40725	-122.147
HEWLETT I	43360078	STATE RESI	CERTIFIED	#####	3215 PORTER DRIVE	PALO ALTO	94304	SANTA CLARA	200119	37.40898	-122.148
HEWLETT I	43350089	STATE RESI	CERTIFIED	#####	CORNER OF PAGE MILL RD AND PORTER DRIV	PALO ALTO	94304	SANTA CLARA	200142	37.40971	-122.152
HILLVIEW I	43360077	STATE RESI	CERTIFIED	#####	HILLVIEW AVENUE AND PORTER DRIVE	PALO ALTO	94304	SANTA CLARA	200048	37.40778	-122.15
LOCKHEED	43280130	STATE RESI	CERTIFIED	#####	3170 PORTER DRIVE	PALO ALTO	94304	SANTA CLARA	200139	37.4069	-122.152
SMITHKLIN	43360079	STATE RESI	CERTIFIED	#####	3400 HILLVIEW AVENUE	PALO ALTO	94304	SANTA CLARA	200118	37.40406	-122.149
SYNTEX	43360114	STATE RESI	CERTIFIED	#####	3300 HILLVIEW AVE	PALO ALTO	94304	SANTA CLARA	200141	37.40688	-122.146
TELEDYNE	43360088	STATE RESI	CERTIFIED	#####	3165 PORTER DR	PALO ALTO	94304	SANTA CLARA	200140	37.40902	-122.15
TELEDYNE	43360073	STATE RESI	CERTIFIED	#####	3176 PORTER DRIVE	PALO ALTO	94304	SANTA CLARA	200096	37.40684	-122.149
VARIAN	43360086	STATE RESI	CERTIFIED	#####	611 HANSEN WAY	PALO ALTO	94304	SANTA CLARA	200122	37.41999	-122.137
WATKINS J	43360076	STATE RESI	CERTIFIED	#####	3333 HILLVIEW AVENUE	PALO ALTO	94304	SANTA CLARA	200137	37.40809	-122.143
PALOS VER	19460003	FEDERAL S	ACTIVE	#####	PACIFIC OCEAN - WHITE POINT OUTFALL	PALOS VERDES	90000	LOS ANGELES	400645	33.7105	-118.322
WORLD RA	4750001	STATE RESI	ACTIVE	8/2/2000	8336 SKYWAY	PARADISE	95969	BUTTE	101452	39.77852	-121.605
JET PROP	19970008	FEDERAL S	ACTIVE	#####	4800 OAK GROVE DRIVE	PASADENA	91109	LOS ANGELES	300318	34.19865	-118.175
NAVAL INF	19970020	STATE RESI	ACTIVE	#####	3202 E FOOTHILL BLVD	PASADENA	91107	LOS ANGELES	300702, 3	34.14922	-118.085
NIRF (UND	80000707	MILITARY	ACTIVE	#####	**DUPLICATE** SEE NAVAL INFORMATION I	PASADENA		LOS ANGELES		34.14944	-118.084
BUENA VIS	60000405	FEDERAL S	ACTIVE	#####	12 MILES WEST OF PASO ROBLES, SAN LUIS O	PASO ROBLES	93447	SAN LUIS OBISPO	101804	35.6259	-120.897
SHERWOOD	80000757	MILITARY	ACTIVE	#####	298 SHERWOOD ROAD	PASO ROBLES		SAN LUIS OBISPO		35.61503	-120.655
PETALUM	80001081	STATE RESI	ACTIVE	#####		PETALUMA		SONOMA		38.18361	-122.557
MARINE CI	19970022	STATE RESI	ACTIVE	#####	3551 SAN GABRIEL RIVER PARKWAY	PICO RIVERA	90660	LOS ANGELES	301029	34.01417	-118.058
ROSEN'S EI	19360068	STATE RESI	CERTIFIED	#####	8226 E. WHITTIER BLVD.	PICO RIVERA	90660	LOS ANGELES	300369, 3	34.0058	-118.096
VENDO CO	10590001	STATE RESI	ACTIVE	#####	7209 NORTH INGRAM AVENUE	PINEDALE	93650	FRESNO	100249	36.84161	-119.806
DELTA AU	7750026	STATE RESI	ACTIVE	6/5/2009	6 INDUSTRY ROAD	PITTSBURG	94565	CONTRA COSTA	201333, 2	38.02988	-121.876
HARMON I	54070051	STATE RESI	ACTIVE	5/1/1985	1494 SOUTH AIRPORT DRIVE	PIXLEY	93256	TULARE	100073	35.9609	-119.305
POINT ARE	23970001	STATE RESI	ACTIVE - L/	6/8/1994	EUREKA HILL ROAD; EA OF POINT ARENA, CA	POINT ARENA	95468	MENDOCINO	200585	38.8911	-123.55
POINT MU	56970001	STATE RESI	ACTIVE	#####	4500 ACRES; 50 MI NW OF LOS ANGELES, CA	POINT MUGU	93042	VENTURA	300113	34.11694	-119.104

POINT MU 60001864 STATE RESI	ACTIVE	5/9/2011	4500 ACRES; 50 MI NW OF LOS ANGELES	POINT MUGU	93042	VENTURA	300113	34.11694	-119.104
A Z DECA51 19330371 STATE RESI	CERTIFIED	#####	1420 SOUTH SIGNAL DRIVE	POMONA	91766	LOS ANGELES	300248	34.04629	-117.727
NAVAL BA5 56970002 STATE RESI	ACTIVE	3/3/2006	1000 23RD AVE	PORT HUENEME	93043	VENTURA	300120	34.16161	-119.198
NAVAL BA5 60001865 STATE RESI	ACTIVE	5/9/2011	1000 23RD AVE	PORT HUENEME	93043	VENTURA	300120	34.16161	-119.198
SOUTHWE5 60000999 STATE RESI	ACTIVE	#####	985 SEASIDE AVENUE	PORT OF LOS ANGELES	90731	LOS ANGELES	401456	33.73449	-118.27
BECKMAN 54360008 FEDERAL S	ACTIVE	#####	167 WEST POPLAR AVENUE	PORTERVILLE	93257	TULARE	100019	36.05078	-119.024
AEROJET G 34370002 FEDERAL S	ACTIVE - L/	1/1/1983	HIGHWAY 50 AND AEROJET ROAD	RANCHO CORDOVA	95670	SACRAMENTO	100002, 1	38.61497	-121.207
MCDONNE 34370069 STATE RESI	ACTIVE - L/	#####	11505 DOUGLAS RD	RANCHO CORDOVA	95742	SACRAMENTO	100295, 1	38.5616	-121.211
PURITY OIL 34170001 STATE RESI	ACTIVE - L/	#####	WHITE ROCK ROAD & KILGORE ROAD	RANCHO CORDOVA	95813	SACRAMENTO	100123	38.58932	-121.269
WHITE RO5 60001748 STATE RESI	ACTIVE	#####	WHITE ROCK DUMPS (WRD) 1 AND 2 ARE LOC	RANCHO CORDOVA	95742	SACRAMENTO	102127	38.60124	-121.193
POINT VIC5 19970023 STATE RESI	CERTIFIED	1/6/2009	PALOS VERDES DR. AND HAWTHORNE BLVD.,	RANCHO PALOS VER	90275	LOS ANGELES	400953	33.74167	-118.406
TRABUCO5 30970010 STATE RESI	BACKLOG	#####	RANCHO SANTA MARGARITA	RANCHO SANTA MAG	92688	ORANGE	400921	33.66556	-117.588
MODERN I 60001154 STATE RESI	ACTIVE	5/6/2010	609 WALNUT STREET	RED BLUFF	96080	TEHAMA	102020	40.17664	-122.239
IRON MOU 45100001 FEDERAL S	ACTIVE	1/1/1983	OFF HWY 299 - 9 MI NW OF REDDING	REDDING	96001	SHASTA	100077	40.67083	-122.528
SHORT'S S5 45500010 STATE RESI	BACKLOG	#####	2041 GIRVAN ROAD	REDDING	96001	SHASTA	100502	40.51142	-122.379
FOLSOM P 34920001 STATE RESI	CERTIFIED	#####	N OF FOLSOM CITY; ADJ TO AMERICAN RIVER	REPRESA	95671	SACRAMENTO	100058	38.69394	-121.157
BLAIR SOU 7490012 STATE RESI	ACTIVE	#####	AT THE FOOT OF SOUTH 51ST STREET	RICHMOND	94804	CONTRA COSTA	200060, 2	37.91037	-122.327
COOPER CI 7280154 STATE RESI	CERTIFIED	3/7/1997	2801 GIANT ROAD	RICHMOND	94806	CONTRA COSTA	200023	37.97482	-122.356
DREW SAL5 7500035 STATE RESI	CERTIFIED	#####	1156 CASTRO STREET	RICHMOND	94804	CONTRA COSTA	200026	37.94969	-122.368
ELECTRO F 1330044 STATE RESI	ACTIVE	5/2/2006	130 NEVIN AVENUE	RICHMOND	94801	CONTRA COSTA	201414	37.93658	-122.368
FASS MET5 7330030 STATE RESI	CERTIFIED	#####	818 W. GERTRUDE AVENUE	RICHMOND	94801	CONTRA COSTA	200037	37.95449	-122.378
FMC CORP 7280011 STATE RESI	CERTIFIED	#####	855 PARR BLVD	RICHMOND	94801	CONTRA COSTA	200033	37.96783	-122.357
HARBORFF 70000178 STATE RESI	ACTIVE	7/1/2005	MEADE SOUTH 49TH EAST MONTGOMERY	RICHMOND	94804	CONTRA COSTA	201734	37.91234	-122.328
HARBOUR 7340024 STATE RESI	ACTIVE - L/	#####	738 HARBOUR WAY SOUTH	RICHMOND	94804	CONTRA COSTA	200043	37.92173	-122.36
LIQUID GO 7290039 FEDERAL S	ACTIVE - L/	#####	HOFFMAN BLVD & S 47TH ST	RICHMOND	94804	CONTRA COSTA	200060	37.91011	-122.324
PORT OF R 7370030 STATE RESI	CERTIFIED	#####	1312 CANAL BLVD	RICHMOND	94804	CONTRA COSTA	200084, 2	37.90899	-122.37
REACTION 7280013 STATE RESI	ACTIVE	#####	840 MORTON AVENUE	RICHMOND	94806	CONTRA COSTA	200599	37.98192	-122.357
RICHMON5 7990005 STATE RESI	CERTIFIED	#####	2887 AND 2989 PULLMAN AVENUE	RICHMOND	94804	CONTRA COSTA	201508	37.92862	-122.341
UNITED HE 7280015 FEDERAL S	ACTIVE - L/	1/1/1983	8TH & WRIGHT	RICHMOND	94804	CONTRA COSTA	200059	37.92097	-122.367
UNIVERSIT 7730003 STATE RESI	ACTIVE	#####	1301 SOUTH 46TH STREET	RICHMOND	94804	CONTRA COSTA	201605	37.91536	-122.335
ZENECA RI5 7280002 STATE RESI	ACTIVE - L/	#####	1415 SOUTH 47TH STREET	RICHMOND	94804	CONTRA COSTA	201567, 2	37.9119	-122.331
CHINA LAK 15970006 STATE RESI	ACTIVE - L/	5/1/1986	APPROX 1,710 SQ MI; 120 MILES NORTHEAST	RIDGECREST	93555	KERN	100038	35.6	-117.48
CUDDEBAC 36970016 STATE RESI	BACKLOG	#####	RIDGECREST	RIDGECREST	93555	SAN BERNARDINC	400870	35.28675	-117.383
RIVERBANI 50340001 FEDERAL S	ACTIVE	5/1/1986	5300 CLAUS ROAD	RIVERBANK	95367	STANISLAUS	100125	37.715	-120.922
ALARK HAF 33340002 FEDERAL S	ACTIVE	#####	2775 MAIN STREET	RIVERSIDE	92501	RIVERSIDE	400003	33.99167	-117.368
CAMP HAA5 80000214 MILITARY I	BACKLOG	#####	SOUTH-WEST OF MARCH AIR FORCE BASE AN	RIVERSIDE	92518	RIVERSIDE		33.87222	-117.292
CAMP HAA5 71000062 STATE RESI	BACKLOG	3/9/2016	WEST AND NORTH OF THE INTERSECTION OF	RIVERSIDE	92518	RIVERSIDE	401244	33.8678	-117.268
CP ANZA (J 33970009 MILITARY I	ACTIVE	#####	ARLANZA DISTRICT	RIVERSIDE	92505	RIVERSIDE	400509	33.94494	-117.459
MARCH AII 33970002 FEDERAL S	ACTIVE - L/	5/1/1986	3430 BUNDY AVE.,	RIVERSIDE	92518	RIVERSIDE	400090	33.87519	-117.297
MARCH AII 33970004 FEDERAL S	ACTIVE	#####	3,545 ACRES; EAST OF RIVERSIDE	RIVERSIDE	92518	RIVERSIDE	400689	34.09	-117.263
STRINGFEL 33490001 FEDERAL S	CERTIFIED	6/1/2016	3450 PYRITE STREET	RIVERSIDE	92509	RIVERSIDE	400152	34.02944	-117.454
STRINGFEL 60002365 FEDERAL S	CERTIFIED	6/1/2016	3450 PYRITE STREET	RIVERSIDE	92509	RIVERSIDE	400152	34.02944	-117.454
TORNEY GI 71000035 MILITARY I	BACKLOG	4/1/2005	RIVERSIDE	RIVERSIDE	92503	RIVERSIDE	400999		
BLUE LEDG 60001382 FEDERAL S	ACTIVE	3/2/2011	2 MILES SOUTH OF OREGON ON ROAD 1060	ROGUE RIVER NATIONAL	0	SISKIYOU	102152	41.95895	-123.107
PALOS VER 19490181 STATE RESI	CERTIFIED	#####	25706 HAWTHORNE BLVD.	ROLLING HILLS ESTATES	90274	LOS ANGELES	400116	33.78478	-118.348

AVENUE A 15490015	STATE RESIACTIVE	#####	AVENUE A 1-1/2 MILE EAST HIGHWAY 14	ROSAMOND	93560 KERN	101339	34.8208	-118.139
BRIDGES A 15280037	STATE RESIACTIVE	5/1/2006	1200 ORANGE AVENUE	ROSAMOND	93560 KERN	100179	34.85704	-118.152
GROSSI/CA 15100008	STATE RESICERTIFIED	2/7/1997	INTERSECTION OF MARIE AVE & W 15TH ST	ROSAMOND	93560 KERN	100184	34.84956	-118.159
JOHN ALEX 15330004	STATE RESICERTIFIED	3/7/2003	1753 SIERRA HIGHWAY	ROSAMOND	93560 KERN	100006	34.84572	-118.16
OSAGE INC 15330001	STATE RESIACTIVE	6/8/1995	2001 15TH STREET, WEST	ROSAMOND	93560 KERN	100257	34.85192	-118.159
OSAGE INC 15330005	STATE RESIACTIVE	6/2/1994	60TH STREET WEST T9N, R13W, S10 SE CORN	ROSAMOND	93560 KERN	101534	34.88333	-118.233
S R KILBY P 15100009	STATE RESIACTIVE	#####	2021 WEST 15TH STREET	ROSAMOND	93560 KERN	100183	34.85038	-118.159
SP-ROSEVI 31400007	STATE RESIACTIVE	1/1/1983	SP ROSEVILLE RAILYARD	ROSEVILLE	95678 PLACER	100138	38.7291	-121.308
SP-ROSEVI 31400006	STATE RESIACTIVE	#####	SP ROSEVILLE RAILYARD	ROSEVILLE	95678 PLACER	100138	38.7473	-121.288
CALTRANS, 41280108	STATE RESIBACKLOG	#####	166 HARBOR WAY	S SAN FRANCISCO	94080 SAN MATEO	200875	37.65239	-122.401
KEN'S BUFI 70000051	STATE RESIBACKLOG	#####	1816 21ST STREET	SACRAMENTO	95814 SACRAMENTO	101737	38.56694	-121.483
MATHER A 34970003	FEDERAL S ACTIVE - L/	1/1/1987	5,485 ACRES; 12 MI EA OF SACRAMENTO, CA	SACRAMENTO	95655 SACRAMENTO	100104	38.55972	-121.296
MCCLELLA 34970002	FEDERAL S ACTIVE - L/	5/1/1986	APPROX 5200 WATT AVE	SACRAMENTO	95652 SACRAMENTO	100105	38.66	-121.399
MCCLELLA 80001195	FEDERAL S ACTIVE - L/	#####	CORNER OF BELL AVE AND PARKER STREET	SACRAMENTO	95652 SACRAMENTO	101850	38.66	-121.399
ORCHARD 34280048	STATE RESICERTIFIED	#####	1731 17TH STREET	SACRAMENTO	95814 SACRAMENTO	100116	38.56899	-121.487
PG&E - SA(34490048	STATE RESIACTIVE - L/	1/1/1987	2000 FRONT STREET	SACRAMENTO	95818 SACRAMENTO	100160	38.57219	-121.511
SACRAMEN 34970004	FEDERAL S ACTIVE - L/	5/1/1986	8350 FRUITRIDGE ROAD	SACRAMENTO	95813 SACRAMENTO	100126	38.51861	-121.396
SACRAMEN 34370014	STATE RESIACTIVE	#####	2809 S STREET	SACRAMENTO	95816 SACRAMENTO	100247	38.56411	-121.473
SIMS MET/ 70000019	STATE RESIACTIVE	#####	130 NORTH 12 STREET; AT INTERSECTION OF	SACRAMENTO	95814 SACRAMENTO	101762	38.59031	-121.488
UNION PA 34400003	STATE RESIACTIVE - L/	1/1/1987	3675 WESTERN PACIFIC AVENUE	SACRAMENTO	95818 SACRAMENTO	100151, 1	38.54293	-121.483
UP, DOWN 34400004	STATE RESIACTIVE	1/1/1983	401 I STREET	SACRAMENTO	95814 SACRAMENTO	100139	38.58586	-121.502
UP, DOWN 34400008	STATE RESIACTIVE - L/	6/3/1992	401 I STREET	SACRAMENTO	95814 SACRAMENTO	100139	38.5895	-121.497
UP, DOWN 70000034	STATE RESIACTIVE	#####	400 I STREET	SACRAMENTO	95814 SACRAMENTO	100139	38.5833	-121.501
UP, DOWN 34400005	STATE RESICERTIFIED	#####	401 I STREET	SACRAMENTO	95814 SACRAMENTO	100139	38.5885	-121.499
UP, DOWN 60001957	STATE RESIACTIVE	1/8/2014	401 I STREET	SACRAMENTO	95814 SACRAMENTO	100139	38.58422	-121.5
BERMAN S 27350001	STATE RESICERTIFIED	#####	HIGHWAY 101 AT SPENCE ROAD	SALINAS	93908 MONTEREY	200014	36.6125	-121.565
BOLINAS A 60001614	STATE RESIACTIVE	#####	4&8 BOLINAS AVENUE & 21 SAN ANSELMO A	SAN ANSELMO	94960 MARIN	201927	37.96961	-122.561
NEWMARK 36990002	FEDERAL S ACTIVE	#####	BUNKER HILL GROUND WATER BASIN	SAN BERNARDINO	92408 SAN BERNARDINC	400259	34.1821	-117.345
NORTON A 36970004	FEDERAL S ACTIVE - L/	5/1/1986	2,208 ACRES;58 MI EA OF LOS ANGELES, CA	SAN BERNARDINO	92409 SAN BERNARDINC	400108	34.0966	-117.248
WESTERN I 80000623	STATE RESIACTIVE	#####		SAN CARLOS	SAN MATEO		37.48972	-122.296
BROWN FI 80000890	STATE RESIBACKLOG	9/1/2015	2 MILES NORTHEAST OF OTEY MESA, SAN DIE	SAN DIEGO	92154 SAN DIEGO	401302	32.5875	-116.942
CAMP ELLI 37970025	STATE RESIACTIVE	#####	NORTHERN PORTION OF SAN DIEGO	SAN DIEGO	92103 SAN DIEGO	400690	32.82278	-117.103
MCAS MIR 37970010	STATE RESIACTIVE	#####	OFF OF MIRAMAR BOULEVARD	SAN DIEGO	92136 SAN DIEGO	400097	32.87917	-117.125
NAVAL AM 37970013	STATE RESIACTIVE	7/1/1994	NAVAL AMPHIBIOUS BASE, CORONADO	SAN DIEGO	92155 SAN DIEGO	400041	32.67417	-117.166
NAVAL AM 60001869	STATE RESIACTIVE	7/1/1994	NAVAL AMPHIBIOUS BASE-CORONADO	SAN DIEGO	92155 SAN DIEGO	400041	32.67417	-117.166
NAVAL BA 37970012	STATE RESIACTIVE	7/1/1994	SAN DIEGO BAY, 113 NAVAL BASE 610	SAN DIEGO	92136 SAN DIEGO	400125	32.68278	-117.126
NAVAL BA 60001866	STATE RESIACTIVE	7/1/1994	SAN DIEGO BAY, 113 NAVAL BASE 610	SAN DIEGO	92136 SAN DIEGO	400125	32.68278	-117.126
NORTH ISL 37970011	STATE RESIACTIVE	5/1/1991	2520 ACRES; ADJACENT TO CORONADO, CA	SAN DIEGO	92135 SAN DIEGO	400105	32.70119	-117.203
POINT LON 37970016	STATE RESIACTIVE	7/1/1994	SYLVESTER & HUMPHRIES	SAN DIEGO	92152 SAN DIEGO	400272	32.70833	-117.242
SAN DIEGC 60001020	STATE RESIACTIVE	1/8/2008	989 HERITAGE ROAD	SAN DIEGO	92154 SAN DIEGO	401413	32.5785	-116.978
SAN DIEGC 37970022	STATE RESIACTIVE	1/1/1995	4297 PACIFIC COAST HIGHWAY	SAN DIEGO	92186 SAN DIEGO	400495	32.7375	-117.213
SUNFLOWI 37590003	STATE RESIACTIVE	#####	9755 DISTRIBUTION AVENUE	SAN DIEGO	92121 SAN DIEGO	400700	32.88449	-117.162
1450 MAR 38330005	STATE RESICERTIFIED	7/6/2012	1901 CESAR CHAVEZ	SAN FRANCISCO	94124 SAN FRANCISCO	201731	37.74907	-122.395
ARLENE'S C 60001242	STATE RESIACTIVE	8/8/2011	2017 CHESTNUT STREET	SAN FRANCISCO	94123 SAN FRANCISCO	201871	37.80059	-122.437
BAYVIEW F 70000015	STATE RESIBACKLOG	#####	NEAR INTERSECTION OF SHAFTER AVENUE AN	SAN FRANCISCO	94124 SAN FRANCISCO	201572	37.72696	-122.383

HUNTERS F 38440002	FEDERAL S ACTIVE	5/1/1986	965 ACRES; SE PORTION OF SF, CA	SAN FRANCISCO	94124	SAN FRANCISCO	200050	37.72972	-122.364
HUNTERS F 38440003	FEDERAL S ACTIVE - L/	5/1/1986	965 ACRES; SE PORTION OF SF, CA	SAN FRANCISCO	94124	SAN FRANCISCO	200050	37.72611	-122.359
HUNTERS F 38440004	FEDERAL S ACTIVE - L/	5/1/1986	965 ACRES; SE PORTION OF SF, CA	SAN FRANCISCO	94124	SAN FRANCISCO	200050	37.72111	-122.364
HUNTERS F 38440005	FEDERAL S ACTIVE	5/1/1986	965 ACRES; SE PORTION OF SF, CA	SAN FRANCISCO	94124	SAN FRANCISCO	200050	37.71972	-122.371
HUNTERS F 38440007	FEDERAL S ACTIVE	#####	965 ACRES; SE PORTION OF SF, CA	SAN FRANCISCO	94124	SAN FRANCISCO	200050	37.71889	-122.374
NAVAL STA 38370044	STATE RESIACTIVE - L/	1/1/1991	550 ACRES; BETWN SAN FRANCISCO & OAKLA	SAN FRANCISCO	94130	SAN FRANCISCO	200231, 2/	37.81673	-122.371
NAVAL STA 60001162	STATE RESIACTIVE	#####	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.81323	-122.36
NAVAL STA 60001092	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.82724	-122.376
NAVAL STA 60001093	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.81897	-122.365
NAVAL STA 60001094	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.82463	-122.367
NAVAL STA 60001095	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.81667	-122.367
NAVAL STA 60001096	STATE RESIACTIVE	1/1/1991	YERBA BUENA ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.80901	-122.369
NAVAL STA 60001164	STATE RESIACTIVE	#####	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.81192	-122.363
NAVAL STA 60001097	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.82562	-122.373
NAVAL STA 60001098	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.82629	-122.374
NAVAL STA 60001099	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.83082	-122.369
NAVAL STA 60001091	STATE RESIACTIVE	1/1/1991	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.83053	-122.371
NAVAL STA 60001161	STATE RESIACTIVE	#####	TREASURE ISLAND, BETWEEN SAN FRANCISCO	SAN FRANCISCO	94130	SAN FRANCISCO	201210	37.81409	-122.36
PRESIDIO C 38970002	STATE RESICERTIFIED	#####	1,400 AC; N-MOST TIP OF THE SF PENINSULA	SAN FRANCISCO	94129	SAN FRANCISCO	201239	37.79778	-122.472
PRESIDIO C 60001318	STATE RESICERTIFIED	#####	BARNARD AND FERNANDEZ AVENUE	SAN FRANCISCO	94129	SAN FRANCISCO	201239	37.79527	-122.458
SCHLAGE L 38340157	STATE RESIACTIVE - L/	#####	BAYSHORE BLVD AND SUNNYDALE AVE.	SAN FRANCISCO	94134	SAN FRANCISCO	201789	37.71056	-122.403
AJ COMME 60000133	STATE RESIACTIVE	#####	1173-1175 CAMPBELL AVENUE	SAN JOSE	95126	SANTA CLARA	201631	37.34627	-121.928
ALMADEN 43100001	STATE RESICERTIFIED	#####	ALAMITOS ROAD & HICKS ROAD	SAN JOSE	95110	SANTA CLARA	200005	37.17392	-121.838
LORENTZ E 43300026	FEDERAL S ACTIVE - L/	1/1/1985	1507 SOUTH 10TH STREET	SAN JOSE	95112	SANTA CLARA	200061	37.31864	-121.866
MOYER CH 60001663	STATE RESIACTIVE	#####	1300,1310, 1336 OLD BAYSHORE HWY	SAN JOSE	95112	SANTA CLARA	201936	37.3663	-121.898
SOUTH BA 43490060	FEDERAL S ACTIVE - L/	1/1/1985	FT OF LIBERTY ST GUADALUPE RIV	SAN JOSE	95002	SANTA CLARA	200091	37.44106	-121.983
SWISS CLE 60001870	STATE RESIACTIVE	#####	14540 CAMDEN AVENUE	SAN JOSE	95124	SANTA CLARA	201961	37.26126	-121.923
TOWN & C 43590001	STATE RESICERTIFIED	#####	2980 & 3030 STEVENS CREEK BOULEVARD	SAN JOSE	95113	SANTA CLARA	200916	37.31985	-121.949
CATERPILL 1350119	STATE RESICERTIFIED	5/9/1997	800 DAVIS STREET	SAN LEANDRO	94577	ALAMEDA	200113	37.72397	-122.165
CINTAS/DE 1890017	STATE RESICERTIFIED	#####	777 139TH AVENUE	SAN LEANDRO	94578	ALAMEDA	200642	37.70991	-122.145
DWA PLUM 1990002	STATE RESIACTIVE	#####	SAN LEANDRO (GROUNDWATER CONTAMINA	SAN LEANDRO	94578	ALAMEDA	200327	37.70898	-122.143
KAISER AEI 1990015	STATE RESICERTIFIED	#####	880 DOOLITTLE DRIVE	SAN LEANDRO	94577	ALAMEDA	200559	37.72003	-122.188
SINGER FRI 1360094	STATE RESICERTIFIED	#####	2350 AND 2450 WASHINGTON AVENUE	SAN LEANDRO	94577	ALAMEDA	200251	37.71594	-122.149
CAMP SAN 40910001	STATE RESIACTIVE	#####	7 MILES W OF SAN LUIS OBISPO/HWY 1	SAN LUIS OBISPO	93401	SAN LUIS OBISPO	200604	35.33333	-120.7
SAN LUIS C 80000759	MILITARY F ACTIVE	4/7/2015		SAN LUIS OBISPO		SAN LUIS OBISPO	102286	35.24015	-120.642
SAN LUIS C 60001343	STATE RESIACTIVE	#####	LOS OSOS VALLEY ROAD AND HWY. 101	SAN LUIS OBISPO	93401	SAN LUIS OBISPO	102043	35.244	-120.682
DEFENSE F 19970007	STATE RESIACTIVE	3/4/2009	3171 NORTH GAFFEY STREET	SAN PEDRO	90731	LOS ANGELES	400046, 4/	33.77806	-118.296
GATX ANN 19420029	STATE RESICERTIFIED	#####	208 EAST 22ND STREET	SAN PEDRO	90731	LOS ANGELES	400066, 4/	33.7268	-118.278
RICHARDS 60000408	STATE RESIACTIVE	#####	538 WEST 5TH STREET	SAN PEDRO	90731	LOS ANGELES	401317	33.73992	-118.289
SAN PEDRC 70000023	STATE RESIACTIVE	4/1/2005	PORT OF LOS ANGELES BERTHS 44-45	SAN PEDRO	90731	LOS ANGELES	401270, 9/	33.715	-118.275
(CAFS) HEA 80000061	MILITARY F ACTIVE	1/7/2016		SAN SIMEON		SAN LUIS OBISPO		35.65833	-121.196
DIESEL LOC 60001272	STATE RESIACTIVE	4/6/2010	1331 E. WARNER AVE	SANTA ANA	92705	ORANGE	401519, 4/	33.71594	-117.853
ENGINEERI 71003391	STATE RESIACTIVE	#####	1224 E. POMONA STREET	SANTA ANA	92707	ORANGE	401052	33.72544	-117.855
SOCO WES 60002003	STATE RESIACTIVE	4/1/2014	1341 MAYWOOD AVENUE	SANTA ANA	92705	ORANGE	401671	33.71695	-117.853
SO CAL GA 42490036	STATE RESICERTIFIED	#####	630 EAST MONTECITO STREET	SANTA BARBARA	93103	SANTA BARBARA	300174	34.42197	-119.685

UC SANTA 42970004	MILITARY BACKLOG	#####	SANTA BARBARA AIRPORT, DAVID LOVE PLAC	SANTA BARBARA	93111	SANTA BARBARA	300781	34.41667	-119.846
MANSION 43280031	STATE RESI CERTIFIED	#####	4101 LICK MILL BOULEVARD	SANTA CLARA	95054	SANTA CLARA	200117	37.39898	-121.949
OLD ORCH 19720018	STATE RESI ACTIVE	#####	23357 LYONS AVENUE	SANTA CLARITA	91355	LOS ANGELES	301525	34.38093	-118.542
WHITTAKER 19281087	STATE RESI ACTIVE	#####	22116 SOLEDAD CANYON RD	SANTA CLARITA	91350	LOS ANGELES	300245	34.41125	-118.521
ANGELES C 19290306	STATE RESI ACTIVE	#####	8915 SORENSEN AVENUE	SANTA FE SPRINGS	90670	LOS ANGELES	301521, 3	33.95882	-118.063
BEAUMON 60000159	STATE RESI ACTIVE	#####	12525 PARK AVENUE	SANTA FE SPRINGS	90670	LOS ANGELES	301280	33.94083	-118.064
KELLY PIPE 60000424	STATE RESI BACKLOG	#####	11700 BLOOMFIELD	SANTA FE SPRINGS	90670	LOS ANGELES		33.92636	-118.063
MCKESSON 19280440	STATE RESI ACTIVE	#####	9005 SORENSEN AVENUE	SANTA FE SPRINGS	90670	LOS ANGELES	300094	33.95796	-118.063
NEVILLE C 19280515	STATE RESI CERTIFIED	#####	12800 IMPERIAL HWY	SANTA FE SPRINGS	90670	LOS ANGELES	300102	33.9165	-118.059
SONIC PLA 71002233	STATE RESI ACTIVE	#####	13002 LOS NIETOS ROAD	SANTA FE SPRINGS	90670	LOS ANGELES	301179	33.94605	-118.055
WASTE DIS 19490194	FEDERAL S CERTIFIED	#####	12731 LOS NIETOS RD	SANTA FE SPRINGS	90670	LOS ANGELES	300166	33.9486	-118.058
PETER PAN 60000979	STATE RESI ACTIVE	9/8/2008	2231 MENDOCINO AVENUE	SANTA ROSA	95403	SONOMA	201825	38.46181	-122.718
FORT BARF 71000009	STATE RESI ACTIVE	#####	9 MILES NORTHWEST OF SAN FRANCISCO IN T	SAUSILITO	94965	MARIN	201269, 2	37.8275	-122.523
EL PUEBLO 44490005	STATE RESI BACKLOG	#####	EL PUEBLO ROAD	SCOTTS VALLEY	95066	SANTA CRUZ	200030	37.05389	-122.009
NWS SEAL 30970001	STATE RESI ACTIVE	5/1/1986	SEAL BEACH BLVD AND WESTMINSTER AVE	SEAL BEACH	90740	ORANGE	400136	33.75889	-118.077
SITE 33 SE 60002204	STATE RESI ACTIVE	7/1/2015	1 MCCLURE WAY - SITE 33, SEASIDE, CA 9395	SEASIDE	93955	MONTEREY	202040	0	0
SELBY SLAC 7330031	STATE RESI ACTIVE	1/1/1983	SHORELINE&MARSH ADJ. TO CARQUINEZ STR.	SELBY	94802	CONTRA COSTA	200009	38.05384	-122.249
SELMA TRE 10240051	FEDERAL S ACTIVE - L	1/1/1983	1735 DOCKERY AVE & ADJOINING	SELMA	93662	FRESNO	100129	36.55723	-119.605
BROWN AI 15280010	STATE RESI ACTIVE	3/1/1985	135 COMMERCIAL DRIVE	SHAFTER	93263	KERN	100026, 1	35.49884	-119.268
SHAFTER A 15070029	STATE RESI CERTIFIED	2/7/1992	LERDO HIGHWAY AT HIGHWAY 99	SHAFTER	93263	KERN	100130	35.5003	-119.183
VALLEY PL 45340001	STATE RESI CERTIFIED	#####	3872 EL CAJON	SHASTA LAKE	96019	SHASTA	100152	40.67722	-122.377
JUNIPERO 19340779	STATE RESI ACTIVE	#####	2740-2760 JUNIPERO AVENUE	SIGNAL HILL	90806	LOS ANGELES	400828	33.80708	-118.163
SOUTH EL 60001339	FEDERAL S ACTIVE	#####	COVERS ALL OF CITY OF SOUTH EL MONTE AN	SOUTH EL MONTE	91733	LOS ANGELES	300347	34.05337	-118.042
WHITTIER 60001340	FEDERAL S ACTIVE	#####	BETWEEN HIGHWAY 60 AND THE MONTEBELI	SOUTH EL MONTE	91733	LOS ANGELES	300132	34.03045	-118.059
COOPER D 19500052	FEDERAL S ACTIVE	#####	9316 ATLANTIC AVENUE	SOUTH GATE	90280	LOS ANGELES	300251	33.94777	-118.182
FIRESTONE 70000165	STATE RESI ACTIVE - L	#####	8440 ALAMEDA STREET	SOUTH GATE	90280	LOS ANGELES	301249	33.96036	-118.23
FIRESTONE 19300231	STATE RESI ACTIVE	#####	2525 FIRESTONE BLVD	SOUTH GATE	90280	LOS ANGELES	300341	33.95877	-118.229
GREEN'S C 60002279	STATE RESI ACTIVE	#####	4600 FIRESTONE BOULEVARD	SOUTH GATE	90280	LOS ANGELES	301731	33.95219	-118.189
JERVIS WE 60000332	FEDERAL S ACTIVE	#####	9301 RAYO AVE.	SOUTH GATE	90280	LOS ANGELES	301286	33.94964	-118.178
SEAM MAS 60000483	FEDERAL S ACTIVE	#####	5211 SOUTHERN AVE.	SOUTH GATE	90280	LOS ANGELES	301128	33.94623	-118.178
MARLEY C 39240014	STATE RESI CERTIFIED	#####	150 N SINCLAIR AVE	STOCKTON	95215	SAN JOAQUIN	100102	37.96879	-121.234
MCCORMI 39240001	FEDERAL S ACTIVE - L	5/1/1986	1214 W. WASHINGTON STREET	STOCKTON	95203	SAN JOAQUIN	100108	37.9486	-121.307
STOCKTON 39420010	STATE RESI ACTIVE - L	#####	2201 W. WASHINGTON STREET	STOCKTON	95201	SAN JOAQUIN	101662	37.94896	-121.357
CENTRAL E 3100003	STATE RESI CERTIFIED	#####	OLD RIDGE ROAD AND EUREKA ROAD	SUTTER CREEK	95685	AMADOR	100449	38.38394	-120.803
TEMECULA 80001161	STATE RESI BACKLOG	#####	5 MILES EAST OF DOWNTOWN TEMECULA	TEMECULA	92593	RIVERSIDE	401339	33.52917	-117.038
AMOCO C 19290155	STATE RESI ACTIVE	2/1/2016	1225 WEST 196TH STREET	TORRANCE	90502	LOS ANGELES	401382	33.8535	-118.298
FREEMAN 60000835	STATE RESI ACTIVE	#####	2040 ARTESIA BOULEVARD	TORRANCE	90504	LOS ANGELES	401377	33.87166	-118.315
MOMIN LC 60001010	STATE RESI ACTIVE	#####	1918 ARTESIA BOULEVARD	TORRANCE	90504	LOS ANGELES	401470	33.8727	-118.312
MONTROS 19280024	FEDERAL S ACTIVE	#####	20201 NORMANDIE AVENUE	TORRANCE	90502	LOS ANGELES	400100, 4	33.8477	-118.302
HALBERT'S 19240022	STATE RESI BACKLOG	#####	2026 ABALONE AVENUE	TORRENCE	90501	LOS ANGELES		33.82722	-118.312
DEFENSE C 39970003	FEDERAL S ACTIVE - L	5/1/1986	25600 S CHRISMAN RD	TRACY	95304	SAN JOAQUIN	100048	37.71446	-121.398
LAWRENCE 39730018	FEDERAL S ACTIVE	1/1/1991	CORRAL HOLLOW ROAD	TRACY	94550	SAN JOAQUIN	200180	37.65518	-121.534
TRAVIS AFI 48970001	FEDERAL S ACTIVE - L	1/1/1990	5025 ACRES; 3 MILES EAST OF FAIRFIELD, CA	TRAVIS	94535	SOLANO	200208	38.26056	-121.944
OTH BRS T 60001244	STATE RESI ACTIVE	#####	N 41.710423; W 121.178084	TULELAKE	96134	MODOC	102075	41.71042	-121.178
VALLEY WC 50240001	FEDERAL S ACTIVE - L	1/1/1983	2237 SOUTH GOLDEN STATE BLVD	TURLOCK	95380	STANISLAUS	100153	37.47217	-120.824

RED HILL N 60001226	STATE RESIACTIVE	2/1/2016	BETWEEN RANCHVIEW DRIVE & MCLEAN DR	TUSTIN	92780	ORANGE	401515	33.74736	-117.793
TUSTIN M/ 30970002	STATE RESIACTIVE - L/	6/1/1986	NEWPORT FREEWAY AT EDINGER AVENUE	TUSTIN	92710	ORANGE	400091, 4/	33.71639	-117.831
TWENTY-N 36970007	STATE RESIACTIVE	#####	595,367 ACRES;5MI NO OF TWENTYNINE PALM	TWENTYNINE PALMS	92278	SAN BERNARDINC	400159	34.25028	-116
TWENTY-N 60001867	STATE RESIACTIVE	#####	595,367 ACRES;5MI NO OF TWENTYNINE PALM	TWENTYNINE PALMS	92278	SAN BERNARDINC	400159	34.25028	-116
COAST WC 23240013	FEDERAL S CERTIFIED	#####	PLANT RD & TAYLOR DR	UKIAH	95482	MENDOCINO	200021	39.11151	-123.194
PACIFIC ST. 1330031	STATE RESICERTIFIED	#####	35124 ALVARADO-NILES ROAD	UNION CITY	94587	ALAMEDA	200073	37.5844	-122.01
MARE ISLA 48330003	STATE RESIACTIVE - L/	3/1/2003	900 WALNUT AVENUE, QUARTERS D	VALLEJO	94592	SOLANO	201383, 2/	38.0954	-122.27
MARE ISLA 48970002	STATE RESIACTIVE - L/	5/1/1989	W END OF TENNESSEE STREET, MARE ISLAND	VALLEJO	94590	SOLANO	201208	38.08083	-122.263
MARE ISLA 48000004	STATE RESIACTIVE - L/	#####	750 DUMP ROAD - PO BOX 2135	VALLEJO	94592	SOLANO	201437	38.0954	-122.27
SEPULVED. 19970013	MILITARY E ACTIVE	#####	15900 VICTORY BLVD.	VAN NUYS	91406	LOS ANGELES	300307	34.18639	-118.479
EXIDE RESI 60002267	STATE RESIACTIVE	#####	VARIOUS LOCATIONS IN THE COUNTY OF LOS	VARIOUS	90058	LOS ANGELES	900291	34.0051	-118.193
READY PRC 56750014	STATE RESIACTIVE	#####	89 PEKING STREET	VENTURA	93001	VENTURA	301405	34.2833	-119.306
VERNALIS I 80001178	MILITARY E ACTIVE	#####	15 MIL SW OF PATTERSON	VERNALIS	95363	STANISLAUS	101972	37.39056	-121.397
AAD DISTR 19000031	STATE RESIACTIVE	1/1/2007	2306 E. 38TH STREET	VERNON	90058	LOS ANGELES	300461, 3/	34.00779	-118.232
PECHINEY 60001187	STATE RESIACTIVE	#####	3200 FRUITLAND AVENUE	VERNON	90058	LOS ANGELES	301396, 3/	33.99667	-118.211
SILVER PEA 80000037	MILITARY E ACTIVE	4/8/2015		VICTORVILLE		SAN BERNARDINO		34.65139	-117.267
COUNTRY I 60001054	STATE RESIBACKLOG	5/4/2015	2000 W. WHITENDALE	VISALIA	93277	TULARE	101996	36.30593	-119.313
FORMER V 60001053	STATE RESIBACKLOG	5/4/2015	2615 S. MOONEY BLVD.	VISALIA	93277	TULARE	101999	36.32626	-119.314
FORMER V 60001352	STATE RESIACTIVE	9/1/2010	4634 W. MINERAL KING AVENUE	VISALIA	93291	TULARE	102107	36.328	-119.342
GOSHEN A 54270005	STATE RESIACTIVE	5/1/1986	6941 AND 6707 WEST GOSHEN AVENUE	VISALIA	93291	TULARE	100022	36.3411	-119.367
KAWEAH - 60001917	STATE RESICERTIFIED	#####	11878 AVENUE 328	VISALIA	93291	TULARE	102187	0	0
LAMOUR'S 60001052	STATE RESIACTIVE	#####	2911 S. MOONEY BLVD.	VISALIA	93277	TULARE	102000	36.30492	-119.314
MILLER'S C 60001050	STATE RESIACTIVE	#####	2235 W. WHITENDALE AVENUE	VISALIA	93277	TULARE	102001	36.30562	-119.316
MILLERS D 60000242	STATE RESIBACKLOG	5/4/2015	110 NORTH WILLIS	VISALIA	93291	TULARE		36.33046	-119.298
MISSION U 60000969	STATE RESIACTIVE	#####	520 E. MINERAL KING AVENUE	VISALIA	93292	TULARE	102051	36.32746	-119.287
ONE HOUR 60000236	STATE RESIACTIVE	#####	717 WEST MAIN STREET	VISALIA	93291	TULARE	102049	36.32993	-119.3
ONE HOUR 60002277	STATE RESIACTIVE	#####	1841 SOUTH MOONEY BOULEVARD	VISALIA	93277	TULARE	N/A	0	0
PARAGON 60000240	STATE RESIACTIVE	#####	119 SOUTH WILLIS STREET	VISALIA	93291	TULARE	102050	36.32955	-119.298
SO CAL GA 54490015	STATE RESICERTIFIED	#####	300 NORTH TIPTON STREET	VISALIA	93277	TULARE	100277	36.33243	-119.285
VISALIA DF 60000403	STATE RESIACTIVE	8/4/2006	CENTRAL CITY AREA	VISALIA	93277	TULARE	101808	36.33028	-119.291
J H BAXTEF 47240001	FEDERAL S CERTIFIED	#####	422 MILL STREET	WEED	96094	SISKIYOU	100016	41.43288	-122.37
BKK SANIT. 19490005	STATE RESIACTIVE - L/	#####	2210 SOUTH AZUZA AVENUE	WEST COVINA	91792	LOS ANGELES	300012	34.0363	-117.913
CAPITOL PI 57340006	STATE RESIBACKLOG	#####	319 3RD STREET	WEST SACRAMENTO	95605	YOLO	100327	38.58784	-121.51
OMEGA C/ 19280436	FEDERAL S ACTIVE	#####	12504 WHITTIER BLVD	WHITTIER	90602	LOS ANGELES	300223, 3/	33.96957	-118.044
BASIN BY-F 19290278	STATE RESIACTIVE	1/1/1985	3031 EAST I STREET	WILMINGTON	90744	LOS ANGELES	400015, 4/	33.78396	-118.226
TCL CORP., 19510060	STATE RESICERTIFIED	#####	420 N HENRY FORD AVE	WILMINGTON	90744	LOS ANGELES	400431	33.77496	-118.241
TCL CORPC 19510062	STATE RESICERTIFIED	8/2/1995	420 N HENRY FORD AVE	WILMINGTON	90744	LOS ANGELES	400154	33.77496	-118.241
ECODYNE I 49240001	STATE RESIACTIVE	5/1/1986	930 SHILOH RD	WINDSOR	95492	SONOMA	200028	38.52576	-122.794
CALICO TA 60001302	STATE RESIBACKLOG	#####	SITE OF FORMER MILLS APN: 051-708-119, 05	YERMO	92398	SAN BERNARDINC	401479, 4/	34.92323	-116.867
CUSTOM C 51340009	STATE RESIACTIVE	#####	335 GARDEN HIGHWAY	YUBA CITY	95991	SUTTER	100047, 9/	39.12447	-121.61

SITE NAME	GLOBAL ID	FAC ID	STATUS	ADDRESS	CITY
ARCO AM/PM		99046911		7325 SIERRA AVE	FONTANA
BIG 5 SPORTING GOODS		89020103		7351 MCGUIRE AVE	FONTANA
CHEVRON USA #9956		90021378		12576 BASELINE RD	RANCHO CUCAMONGA
CI-RC FIRE PROTN DIST #5		91025960		11108 BANYAN ST	RANCHO CUCAMONGA
CIRCLE K #5244		88016785		16125 BASELINE AVE	FONTANA
COSTCO GASOLINE		FA0010248		16505 SIERRA LAKES PARKWAY	FONTANA
ETIWANDA FOREST FIRE STAT	T0607100017		COMPLETED - CASE CLOSED	6696 ETIWANDA AVE	RANCHO CUCAMONGA
ETIWANDA GENERATING STA	SL208183873		COMPLETED - CASE CLOSED	ETIWANDA	RANCHO CUCAMONGA
FORMER GAS STATION	T0607108153		COMPLETED - CASE CLOSED	16173 HIGHLAND AVENUE	FONTANA
FORMER UNION 76 STATION	T0607175710		COMPLETED - CASE CLOSED	120 BASELINE RD.WEST	RIALTO
KAISER STEEL CORPORATION	SLT8R1484121		COMPLETED - CASE CLOSED	9400 CHERRY AVENUE	FONTANA
LANDFILL,MID-VALLEY	L10002260603		OPEN - OPERATING	2390 N ALDER AVE	RIALTO
MOBIL OIL SS#11-GEB		91024273		6539 MILLIKEN AVE	RANCHO CUCAMONGA
MOBIL SS #18-003		86009076		10477 LEMON AVE	RANCHO CUCAMONGA
SC-CHAFFEY COLLEGE		87012665		5885 HAVEN AVE	RANCHO CUCAMONGA
SC-ETIWANDA SCH MAINT YD		95038039		6925 ETIWANDA AVE	RANCHO CUCAMONGA
STERLING CAN	SLT8R1864120		COMPLETED - CASE CLOSED	8939 ETIWANDA AVENUE	RANCHO CUCAMONGA
TAMCO	SLT8R1914124		COMPLETED - CASE CLOSED	12459 ARROW HIGHWAY	ETIWANDA
TEXACO STAR MART		98046658		11289 BASELINE RD	RANCHO CUCAMONGA
TOSCO SS # 31294-7304		90020515		6411 HAVEN AVE	RANCHO CUCAMONGA
VERIZON/ETIWANDA C O		86008876		6322 EAST AVE	RANCHO CUCAMONGA

SITES IDENTIFIED WITH WASTE CONSTITUENTS ABOVE HAZARDOUS WASTE LEVELS OUTSIDE THE WASTE MANAGEMENT UNIT

COUNTY	CITY	REGION	SWAT ID	WASTE DISCHARGER SYSTEM NO.	SOLID WASTE ID NO.	WASTE MANAGEMENT UNIT NAME	FACILITY NAME	AGENCY NAME
DEL NORTE	CRESCENT CITY	1	2	1A880520NSL-01		DEL NORTE COUNTY- PESTICIDE STORAGE	DEL NORTE PESTICIDE STORAGE AR	DEL NORTE, COUNTY OF
CONTRA COSTA	PITTSBURG	2	1	2 071059002-02	07-A1-0001	U.S. STEEL CORP.-PITTSBURG SITE LA	WDR-USS-POSCO	USS-POSCO
SOLANO	VALLEJO	2	1	2 482011003-01	48-AA-0008	US NAVY MARE ISLAND SANITARY LANDFILL	WDR-NAVAL SHIPYARD/CLASS I LAN	MARE ISLAND NAVAL SHIPYARD
CONTRA COSTA	RICHMOND	2	3	2 071007002-01		CHEVRON CHEMICAL COMPANY-OLD SITES	WDR-ORTHO DIV-RICHMOND PLANT	CHEVRON CHEMICAL COMPANY
MONTEREY	FORT ORD (Marina)	3	1	3 270301004-01	27-AA-0015	FORT ORD LANDFILL	SANITARY LANDFILL	U.S. ARMY, FORT ORD
SANTA BARBARA	LOMPOC	3	3	3 420305001-01	42-AA-0017	LOMPOC CITY LANDFILL	SOLID WASTE DISPOSAL SITE	LOMPOC CITY
LOS ANGELES	MONTEREY PARK	4	1	4B190332001-01	19-AM-0001	OPERATING INDUSTRIES LANDFILL	OPERATING INDUSTRIES, INC.	OPERATING INDUSTRIES, INC.
TULARE	WOODLAKE	5F	1	5D540300010-01	54-AA-0007	TULARE COUNTY-WOODLAKE LANDFILL	WOODLAKE SWDS	TULARE, COUNTY OF
FRESNO	FRESNO	5F	2	5D100300001-01		MCKINLEY AVE. YARD	T.H. AGRICULTURE AND NUTRITION	NORTH AMERICAN PHILLIPS
KINGS	CORCORAN	5F	2	5D160302001-01	16-AA-0011	KINGS COUNTY-CORCORAN LANDFILL	CORCORAN SWDS	KINGS COUNTY WASTE MGMT AUTH.
FRESNO	FRESNO	5F	3	5D100319001-01	10-AA-0013	ORANGE AVENUE DISPOSAL COMPANY	ORANGE AVENUE LANDFILL	ORANGE AVENUE DISP CO. INC
TULARE	EXETER	5F	3	5D540300003-01	54-AA-0002	TULARE COUNTY-EXETER DISPOSAL SITE	EXETER SWDS	TULARE, COUNTY OF
MERCED	ATWATER	5F	4	5C240115001-01		ATWATER CITY	BERT CRANE ROAD LANDFILL	ATWATER, CITY OF
FRESNO	FOWLER	5F	5	5D100325N01-01		FOWLER CITY	FOWLER CITY LANDFILL (OLD)	FOWLER, CITY OF
BUTTE	OROVILLE	5R	2	5A042005001-01		KOPPERS COMPANY-OROVILLE SITE	KOPPERS WOOD PRESERVING ISW	KOPPERS INDUSTRIES INC.
BUTTE	CHICO	5R	4	5A040302N01-01		CHICO CITY BURN DUMP	HUMBOLDT ROAD LANDFILL	CHICO, CITY OF
SACRAMENTO	SACRAMENTO	5S	1	5A340700003-01	34-AA-0008	US AIR FORCE-MCCLELLAN AFB LANDFILL	CLASS III SITE 8 (CLOSURE)	US AIR FORCE-MCCLELLAN AFB
SACRAMENTO	MATHER (Rancho Cordova)	5S	2	5A340700001-01		US AIR FORCE-MATHER FIELD LANDFILL	MATHER AFB ENVIRONMENTAL MGMT	US AIR FORCE – MATHER AFB
SACRAMENTO	SACRAMENTO	5S	3	5B342000N01-01		SACRAMENTO ARMY DEPOT	SACRAMENTO ARMY DEPOT	U.S. ARMY
SAN JOAQUIN	STOCKTON	5S	3	5 390002NUR-01	39-AA-0006	US NAVY COMMUNICATIONS LANDFILL	U.S.N. COMMUNICATION STA. LANDF	U.S. NAVY COMMUNICATIONS
SAN JOAQUIN	FRENCH CAMP	5S	3	5 390003NUR-01		US ARMY-SHARPE ARMY DEPOT	US ARMY-SHARPE ARMY DEPOT	US ARMY
SAN JOAQUIN	TRACY	5S	5	5 390006NUR-01		SITE 300 (OTHER 39 WMUS)	LAWRENCE LIVERMORE LAB	LAWRENCE LIVERMORE LABS
INYO	KEELER	6V	1	6B142000041-01	14-AA-0008	US TUNGSTEN OWENS LAKE LANDFILL	OWENS LAKE LANDFILL	UMETCO MINERALS CORPORATION
ORANGE	FULLERTON	8	1	8300002NUR-01		MCCOLL SITE	MCCOLL SLUDGE DISPOSAL SITE	TOXIC SUBSTANCES CONTROL DIVIS
RIVERSIDE	RIVERSIDE	8	1	8 330325001-01		STRINGFELLOW QUARRY ACID PITS	STATE OF CALIFORNIA-STRINGFELLOW	TOXIC PROGRAM MANAGEMENT SECT

SITE NAME	GLOBAL ID	FAC ID	STATUS	ADDRESS	CITY
ARCO AM/PM		99046911		7325 SIERRA AVE	FONTANA
BIG 5 SPORTING GOODS		89020103		7351 MCGUIRE AVE	FONTANA
CHEVRON USA #9956		90021378		12576 BASELINE RD	RANCHO CUCAMONGA
CI-RC FIRE PROTN DIST #5		91025960		11108 BANYAN ST	RANCHO CUCAMONGA
CIRCLE K #5244		88016785		16125 BASELINE AVE	FONTANA
COSTCO GASOLINE		FA0010248		16505 SIERRA LAKES PARKWAY	FONTANA
ETIWANDA FOREST FIRE STAT	T0607100017		COMPLETED - CASE CLOSED	6696 ETIWANDA AVE	RANCHO CUCAMONGA
ETIWANDA GENERATING STA	1SL208183873		COMPLETED - CASE CLOSED	ETIWANDA	RANCHO CUCAMONGA
FORMER GAS STATION	T0607108153		COMPLETED - CASE CLOSED	16173 HIGHLAND AVENUE	FONTANA
FORMER UNION 76 STATION	T0607175710		COMPLETED - CASE CLOSED	120 BASELINE RD.WEST	RIALTO
KAISER STEEL CORPORATION	SLT8R1484121		COMPLETED - CASE CLOSED	9400 CHERRY AVENUE	FONTANA
LANDFILL,MID-VALLEY	L10002260603		OPEN - OPERATING	2390 N ALDER AVE	RIALTO
MOBIL OIL SS#11-GEB		91024273		6539 MILLIKEN AVE	RANCHO CUCAMONGA
MOBIL SS #18-003		86009076		10477 LEMON AVE	RANCHO CUCAMONGA
SC-CHAFFEY COLLEGE		87012665		5885 HAVEN AVE	RANCHO CUCAMONGA
SC-ETIWANDA SCH MAINT YD		95038039		6925 ETIWANDA AVE	RANCHO CUCAMONGA
STERLING CAN	SLT8R1864120		COMPLETED - CASE CLOSED	8939 ETIWANDA AVENUE	RANCHO CUCAMONGA
TAMCO	SLT8R1914124		COMPLETED - CASE CLOSED	12459 ARROW HIGHWAY	ETIWANDA
TEXACO STAR MART		98046658		11289 BASELINE RD	RANCHO CUCAMONGA
TOSCO SS # 31294-7304		90020515		6411 HAVEN AVE	RANCHO CUCAMONGA
VERIZON/ETIWANDA C O		86008876		6322 EAST AVE	RANCHO CUCAMONGA

ENVIROSTOR PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
36010052 ARBORS ELEMENTARY SCHOOL	No Further Action	School Investigation	Victoria Park Lane/Base Line Road	Rancho Cucamonga
60000064 EAST BANYAN SCHOOL	No Action Required	School Investigation	13639 Banyan Street	Rancho Cucamonga
36010021 ETIWANDA EARLY EDUCATION CENTER	No Further Action	School Investigation	6084 Etiwanda Avenue	Etiwanda
36010011 ETIWANDA ELEMENTARY SCHOOL	Certified	School Cleanup	7128-7192 Etiwanda Avenue	Rancho Cucamonga
36010049 ETIWANDA HIGH SCHOOL	No Further Action	School Investigation	13500 Victoria Avenue	Etiwanda
36010054 HIGH SCHOOL NO. 9	No Further Action	School Investigation	San Sevaine Road/Walnut Avenue	Fontana
36010066 LYTLE CREEK HIGH SCHOOL NO. 4 ADDIT	No Action Required	School Investigation	Lytle Creek Road/Summit Avenue	Fontana
36010041 WEST BANYON ALTERNATIVE SCHOOL	No Further Action	School Investigation	6012 East Ave	Rancho Cucamonga
36010029 WEST BANYON SCHOOL	No Further Action	School Investigation	13149 Summit Avenue	Rancho Cucamonga

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Appendix E

WATER QUALITY TECHNICAL MEMORANDUM

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MEMORANDUM

To: Mr. Jeff Kim, P.E.
City of Fontana
Department of Engineering
8353 Sierra Avenue
Fontana, CA 92335

From: Mrs. Laura Larsen, P.E. and Ms. Nora Jans, LEED AP

Date: June 1, 2016

Subject: San Sevaine Trail Project Water Quality Technical Memorandum

1.0 Introduction

The San Sevaine Trail is the only north-south Class I bike path in the Inland Empire. The San Sevaine Trail is a fragmented, incomplete trail system, and it currently contains only one complete trail segment (1.4 miles). The trail in its entirety is planned to be 11 miles long at buildout, extending from Wilson Avenue in Rancho Cucamonga and Duncan Canyon Road in Fontana, south to the power line easement at Country Village Golf Course in Jurupa Valley. The San Sevaine Creek channel right-of-way, owned by the San Bernardino County Flood Control District, is a defining feature of the area. This channel corridor maintenance road will provide the primary spine for the San Sevaine Trail Connectivity Network through San Bernardino County, and the trail network will be comprised of three separate segments: North, Central, and South segments. The proposed project is part of the North segment. This assessment covers the following:

- 1) An evaluation of the potential impacts related to implementing the project;
- 2) A description of the site, regional and local hydrology, floodplains, groundwater resources, and soils/erosion potential;
- 3) Identification of the applicable requirements of the federal Clean Water Act (CWA), state water quality regulations, state requirements under the federal CWA, beneficial uses, groundwater and surface water quality objectives, and a review of the Section 303(d) Impaired Waters List; and
- 4) Identification of the potential stormwater quality mitigation measures (best management practices or BMPs) that may be needed based on the water quality requirements applicable to the project.

1.1. Site Description

The proposed project consists of the expansion of the existing Class I San Sevaine Trail, Segment 2 by adding a new 1.25-mile trail segment within the cities of Fontana and Rancho Cucamonga. The proposed project would involve converting an existing maintenance road, which currently runs parallel to the San Sevaine flood control channel, into a paved trail, and filling the gaps in the new linear path. The new trail segment would provide a direct connection to the existing 21-mile Pacific Electric Inland Empire Trail at the proposed project's southern terminus, approximately 0.25 miles south of Victoria Street. The Pacific Electric Inland Empire Trail, in turn, would provide connectivity to the 30-mile Santa Ana River Trail. This regional trail connection is a key component of the proposed project, as it is anticipated to enhance non-motorized access in the area and encourage increased trail use for both recreation and transportation.

1.1.1. Project Location

The proposed project is located within the cities of Fontana and Rancho Cucamonga in southwestern San Bernardino County. The proposed project limits are from the Pacific Electric Inland Empire Trail in the City of Fontana to Banyan Street in the City of Rancho Cucamonga. Of the total 1.25-mile proposed project alignment length, approximately 0.30 miles are within Fontana's city limits and approximately 0.95 miles are within Rancho Cucamonga's city limits. Figure 1 shows the vicinity of the proposed project, and Figure 2 identifies the proposed project's location.

1.1.2. Existing Site Conditions

The proposed project site is located within a disturbed dirt and partially paved flood control maintenance road that parallels the San Sevaine flood control channel. The areas immediately surrounding the maintenance road consist largely of undeveloped native habitat areas, two freeways (Interstate [I] 210 and I-15), the San Sevaine flood control channel, and two urbanized residential areas. The flood control channel is an approximately 25-foot wide concrete box channel. The channel is fenced from surrounding areas and incorporates several undercrossings where it intersects with city streets and the freeways.

The proposed project site is adjacent to dense residential neighborhoods, as well as several community facilities, including the Etiwanda Creek Community and Dog Park located 0.5 miles west of the proposed project's northerly limits; a skating rink located 0.65 miles southwest of the proposed project's southerly limits; and four public high schools containing a combined student population of approximately 5,900 students within a 2-mile radius of the proposed project site. In addition, the Victoria Street Park and Ride is located immediately east of the southerly portion of the proposed project site, from which approximately 1,000 residents connect to the Metrolink station daily.

The proposed project site is within an area designated by the City of Fontana General Plan to have the potential to house sensitive species including raptors and shrikes, and there is mapped critical habitat for the San Bernardino kangaroo rat (SBKR) along a portion of the trail alignment, between I-210 and Banyon Street.

1.1.3. Proposed Improvements

Implementation of the proposed project would involve the construction of a 1.25-mile-long new asphalt trail for use by bicyclists and pedestrians within the San Sevaine flood control channel right-of-way. The trail alignment would run parallel to the existing flood control channel as it would utilize the existing flood control maintenance road that currently runs parallel to the flood control channel. The new segment of the San Sevaine Trail is planned to be a continuous 12-foot-wide asphalt path with 4-foot decomposed granite shoulders, and would include four granite block benches, LED-lighted bollards, directional and interpretive trail signage, a chain link fence, potable water connection, and striping and pavement legend to alert users of the bike lane.

The proposed trail would be completely separate from major roadways and would be classified as a Class I bicycle and pedestrian path. However, the trail alignment would cross two freeway underpass structures (I-210 and I-15) and one major roadway (Victoria Street), as described below.

I-210 and I-15: The existing flat surface on the west side of the San Sevaine channel would be paved to cross under the I-15 abutment wall. In addition, under bridge clearances on both the south and northbound I-15 undercrossing along the channel, excavation and construction of retaining walls would be required. This work would be coordinated with California Department of Transportation (Caltrans) District 8, including the procurement of encroachment permits.

Victoria Street: A signalized mid-block crossing would be installed to connect south across Victoria Street to the east bank of the San Sevaine channel. This would include two options; one would follow the trail along the west side of the channel, and the other would follow the trail along the east side of the channel south, to connect with the existing Pacific Electric Inland Empire Trail. To increase trail user safety, a road diet may also be a component of the proposed crossing design at Victoria Street, which would involve a potential roadway lane width reduction or re-channelization and installation of a pedestrian safety island.

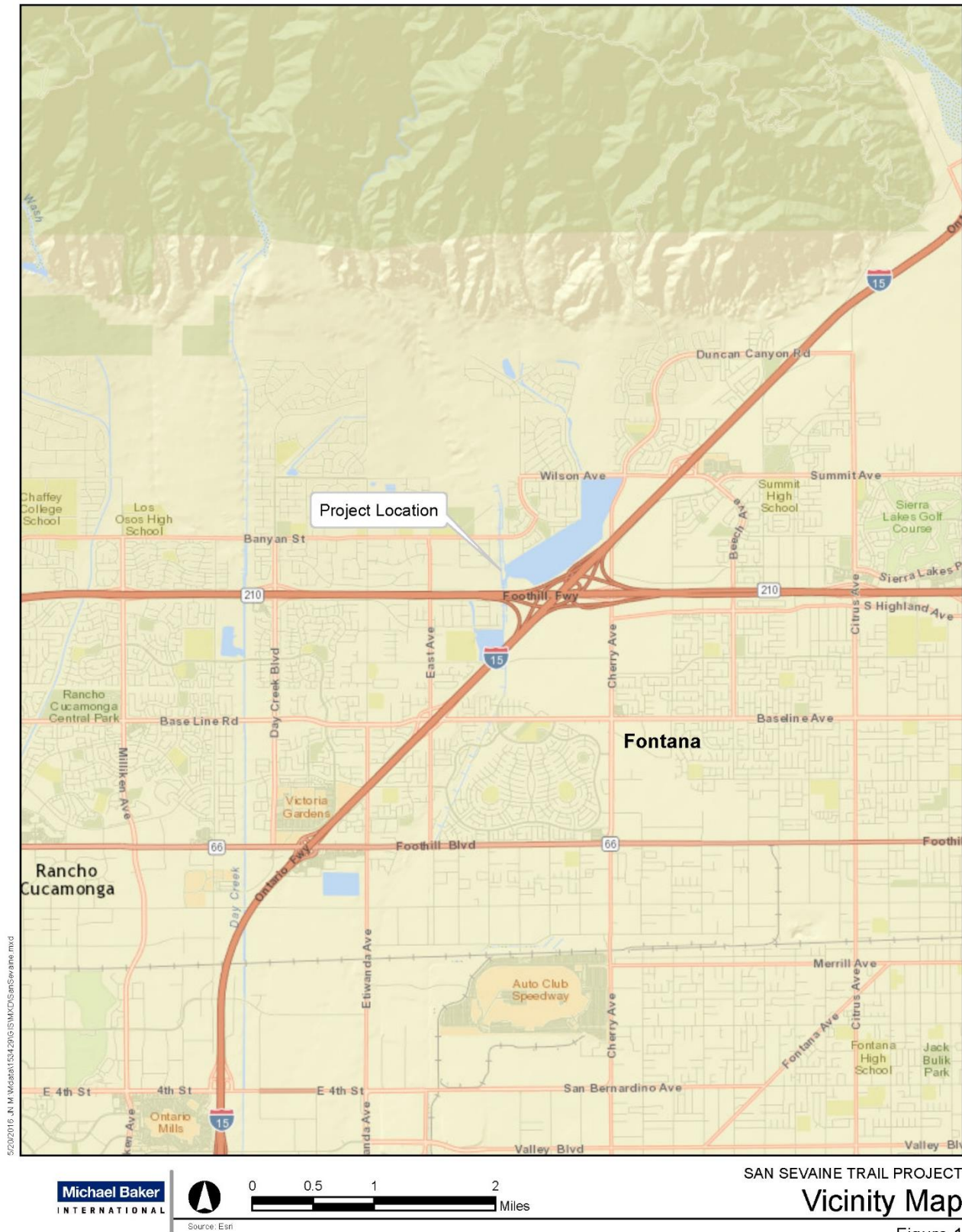


Figure 1: Vicinity Map

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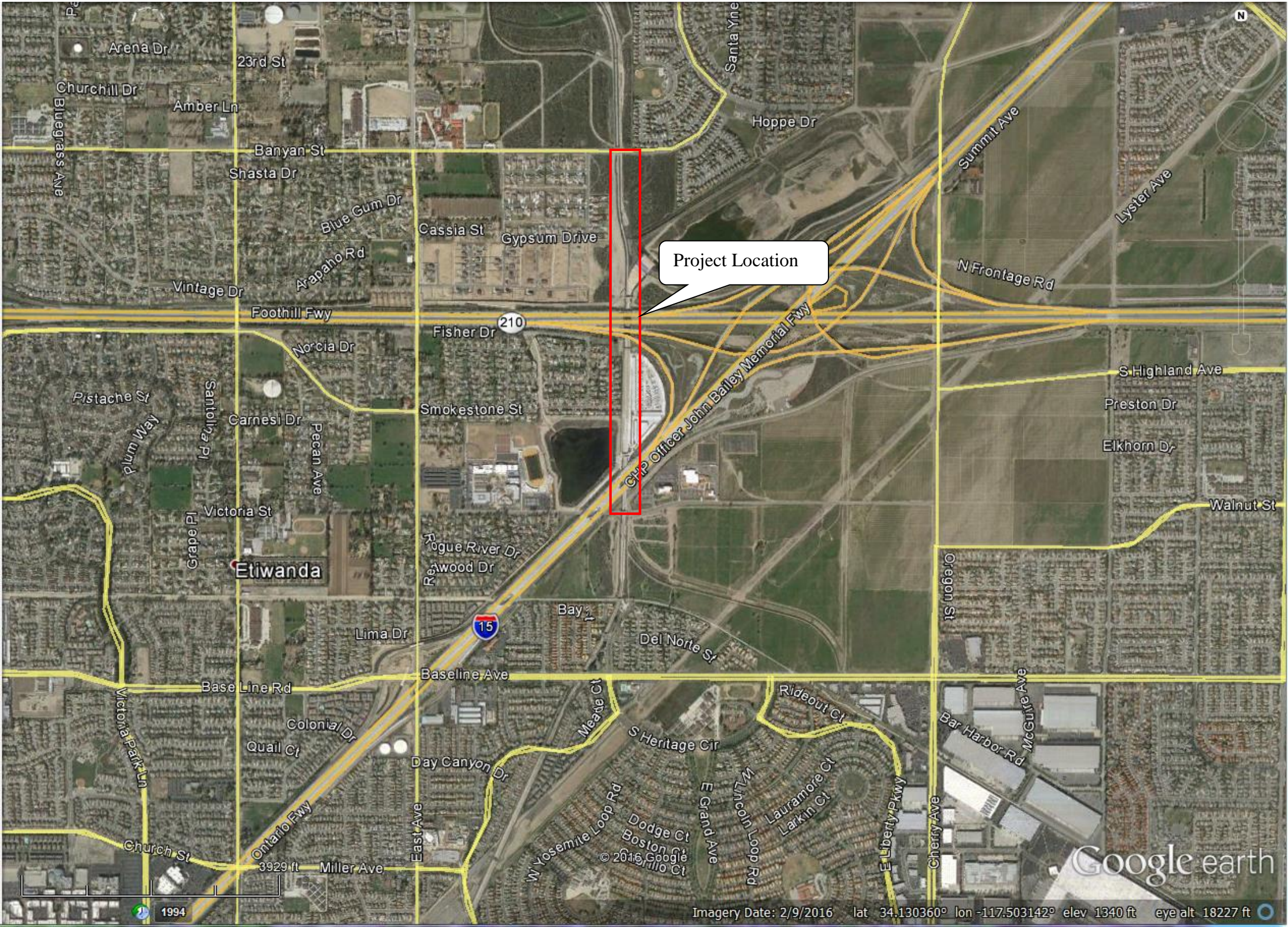


Figure 2: Project Location Map

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2.0 General Conditions

2.1.1. Existing Drainage Conditions and Facilities

The existing topography within the proposed project boundary gently slopes from the north to the south, along the Etiwanda Creek Channel and San Sevaine Channel. These channels are located within the Santa Ana River watershed, and discharge to Reach 3 in the City of Jurupa Valley, approximately 10 miles south of the proposed project. The surface drainage within the proposed project area just south of Banyan Street to the meeting of San Sevaine and Etiwanda Creek channels flows freely until it is captured by an underground storm drain system. Throughout the rest of the proposed project area, surface drainage sheet flows into the channels and pervious areas.

2.1.2. Regional and Local Hydrology

The proposed project is located in the San Bernardino County portion of the Santa Ana River Watershed, which is located in the Santa Ana Regional Water Quality Control Board's (RWQCB) jurisdiction. Runoff in the region flows from the San Gabriel Mountains north of the proposed project and south to the Santa Ana River. The Santa Ana River Reach 3 flows southwest to Prado Dam in Riverside County. Rainfall at a weather station in the City of Ontario, located approximately nine miles southwest of the proposed project, averages 15 inches per year (National Oceanic and Atmospheric Association National Climatic Data Center). The rainfall erosivity factor (R factor) was estimated using the United States Environmental Protection Agency (U.S. EPA) Rainfall Erosivity Factor Calculator. The R factor for the area is estimated to be 31.85. This factor represents the total storm kinetic energy times the maximum 30-minute intensity and is directly proportional to the soil loss, when factors other than rainfall are held constant. Since the rainfall erosivity factor determined for the proposed project is more than 5.0, the proposed project is not eligible for a waiver from the CGP's requirements.

2.1.3. Floodplains

The proposed project is located in areas designated as the following:

- Zone X – areas of 0.2 percent annual chance of flood
- Zone AE – areas of 1 percent annual chance of flood using detailed methodologies
- Zone A – areas of 1 percent annual chance of flood using approximate methodologies

Source: Federal Emergency Management Agency (FEMA), Flood Insurance Rate Maps (FIRM), September 26, 2014, Map Numbers 06071C7895J and 06071C8635J

The proposed project will not impact or encroach on the 100-year floodplain or floodway.

2.1.4. Groundwater Resources

The proposed project is located within the Chino Subbasin of the Upper Santa Ana Valley Groundwater Basin, which covers an area of approximately 240 square miles and is located in the South Coast Hydrologic Region. The Upper Santa Ana Valley Groundwater Basin underlies an inland plain in southwestern San Bernardino County. Data collected from a well in the vicinity of the proposed project indicates that groundwater depth is 581 feet in 2015 (<http://www.water.ca.gov>). The treatment BMPs selected for the proposed project will consider groundwater conditions.

2.1.5. Soils/Erosion Potential

The Soil Erodibility Factor (K factor) for the proposed project area is 0.05 according to Natural Resources Conservation Service (NRCS) soil survey data. Generally, this equates to a low potential for erosion within the proposed project area characterized by particles resistant to detachment. However, this is a planning-level tool, so a detailed site-specific survey is still required for design-level analysis.

2.2. Water Quality/Clean Water Act Requirements

2.2.1. Overview

The CWA, as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality, which was enacted “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Important sections of the CWA include:

- Sections 303 and 304 – provide for water quality standards, criteria, and guidelines; and
- Section 402 – establishes the NPDES system, a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States. This permitting program is administered by the California RWQCBs.

The permits associated with these sections of the CWA typically include additional site-specific requirements. The desktop survey indicated that no permits are anticipated under the CWA to develop this site.

2.2.2. Beneficial Uses and Water Quality Objectives

The RWQCB is responsible for the protection of beneficial uses of water resources within its jurisdiction and uses planning, permitting, and enforcement authorities to meet this responsibility. Every water body within the jurisdiction of the Santa Ana RWQCB is designated a set of beneficial uses that are protected by appropriate water quality objectives and identified in the Santa Ana RWQCB’s *Water Quality Control Plan for the Santa Ana River Basin* (Basin Plan). Per the Basin Plan, this proposed project drains to the Chino-North “maximum benefit” Groundwater Basin, and San Sevaine Channel. The Basin Plan does not identify beneficial uses for San Sevaine Channel. However, drainage from this project will also discharge to East Etiwanda Creek. The Basin Plan classifies this water body as the Valley Reach of East Etiwanda Creek in the San Gabriel Subarea. San Sevaine Channel and East Etiwanda Creek Channel meet near the intersection of I-15 and Victoria Street and flow adjacently south through the proposed project area. The table below summarizes the beneficial uses of the receiving waterbodies as identified in the Basin Plan.

Beneficial Use Type	Groundwater Beneficial Uses	East Etiwanda Creek Beneficial Uses
Municipal and Domestic Supply (MUN) – Includes uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.	✓	✓
Agricultural Supply (AGR) – Includes uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.	✓	-
Industrial Service Supply (IND) – Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.	✓	-
Industrial Process Supply (PROC) – Includes uses of water for industrial activities that depend primarily on water quality. These uses may include, but are not limited to, process water supply and all uses of water related to product manufacture or food preparation.	✓	✓
Groundwater Recharge (GWR) – Includes uses of water for natural or artificial recharge of groundwater for purposes that include, but are not limited to, future extraction, maintaining water quality or halting saltwater intrusion into freshwater aquifers.	-	✓

Beneficial Use Type	Groundwater Beneficial Uses	East Etiwanda Creek Beneficial Uses
Contact Water Recreation (REC-1) – Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.	-	✓
Non-contact Water Recreation (REC-2) – Includes the uses of water for recreational activities involving proximity to water, but not normally involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.	-	✓
Cold Freshwater Habitat (COLD) – Includes uses of water that support coldwater ecosystems that may include, but are not limited to, preservations and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.	-	✓
Wildlife Habitat (WILD) – Includes uses of water that support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.	-	✓
Rare, Threatened, or Endangered Species (RARE) – Includes uses of water that support the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered.	-	✓

2.2.3. Impaired Waterbodies

Section 303 of the CWA requires that the state adopt water quality objectives for surface waters. The Basin Plan contains water quality objectives that are considered necessary to protect the specific beneficial uses it identifies for surface waters. Section 303(d) of the CWA specifically requires the state to develop a list of impaired water bodies and Total Maximum Daily Loads (TMDLs), plans to determine the maximum allowable pollutant load that a water body can receive and continue to meet the designated beneficial uses. East Etiwanda Creek and San Sevaine Channel are not listed on the 2012 Integrated Report (Clean Water Act Section 303(d) List/305(b) Report) nor has a TMDL been developed in either water body.

2.3. NPDES Permit

2.3.1. NPDES Municipal Permit Requirements

The proposed project is located within the urban Municipal Separate Storm Sewer System (MS4) NPDES permitted area (NPDES Order R8-2010-0036) in San Bernardino County. Drainage from the proposed project drains to channels in the San Bernardino County Flood Control District's jurisdiction, which is the principal permittee in the NPDES permit. A Municipal Stormwater Management Plan (MSWMP) was developed for the San Bernardino County Flood Control District, the County of San Bernardino and the 18 incorporated cities (collectively called "permittees"), including the cities of Fontana and Rancho Cucamonga. It describes the responsibilities, procedures, and practices the permittees use to protect water quality by reducing or eliminating pollutants discharged from storm drainage systems they own or operate, including the selection and implementation of source control and treatment control BMPs. The proposed project will meet the requirements of the MSWMP where technically feasible.

The County of San Bernardino Stormwater Program's *Technical Guidance Document for Water Quality Management Plans* was developed to assist project proponents with developing Water Quality Management Plans that comply with the NPDES Permit requirements applicable to private or public development activities. It requires priority projects, such as this one, to implement where feasible and applicable, site design Low Impact Development (LID), source control, and treatment control BMPs because it will add or replace 5,000 or more square feet in impervious surface on an already-developed site, which is anticipated to increase flows and pollutant loading to downstream facilities. The proposed project includes approximately 105,600 square feet of new impervious area. Structural treatment control and non-structural source control BMPs should be incorporated into the proposed project to collect and treat the stormwater runoff volume from an 85th percentile 24-hour runoff event, as determined by the County of San Bernardino's 85th Percentile Precipitation Isopluvial Map, or the stormwater runoff flow from a rainfall intensity of 0.2 inch of rainfall per hour, as stated in the requirements of NPDES Order Number R8-2010-0036. In addition, Low Impact Development (LID) BMPs will be included in the proposed project's design where technically feasible. During the proposed project design phase, the increase in flows and pollutant loading will be addressed through the hydrology and Water Quality Management Plan analyses.

2.3.2. Construction General Permit

The *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit and/or CGP), Order 2009-0009-DWQ, requires coverage for any construction project disturbing more than one acre of land, for any size parcel that is part of a larger common plan of development, or for any site that the Santa Ana RWQCB requires coverage. The CGP generally requires the following:

1. Assessment of the Site Risk (Risk Level 1, 2, 3, from low risk to high risk)
2. Enrollment under the CGP through the State Water Resource Control Board (SWRCB)
3. Development and implementation of a Storm Water Pollution Prevention Plan (SWPPP)
4. Sampling of stormwater and potential sampling of receiving water (depending on project risk)
5. Reporting requirements

Based on the information currently available and if the CGP applies to the proposed project, the Site Risk for this proposed project is anticipated to be low, which means visual monitoring is required and effluent monitoring may be conducted as necessary.

2.4. Best Management Practices

2.4.1. Post-Construction BMPs and Runoff Reduction Measures

Post construction (structural and non-structural) BMPs and runoff reduction measures applicable to the proposed project site may include, but are not limited to the following:

- Implement minimum BMPs as applicable to the proposed project
- Site design BMPs
- Preservation of existing flow patterns
- Preservation of drainage density
- Infiltration BMPs (where technically feasible)
- Biotreatment BMPs (where technically feasible)

2.4.2. Temporary Construction BMPs

Temporary construction BMPs applicable to the proposed project site may include, but are not limited to the following:

- Site Management BMPs
- Non-stormwater BMPs (control of non-stormwater discharges)
- Erosion Control BMPs
 - Implement wind erosion controls
 - Provide effective soil cover for inactive areas
 - Limit use of plastic materials
 - Ensure soil loss during each phase is equivalent or less than preconstruction soil loss
- Sediment Control BMPs
 - Effective perimeter controls
 - Stabilize construction entrances/exits
 - Implement appropriate erosion control in conjunction with sediment control
 - Linear slope controls
 - Access Road controls

2.5. Regulatory Requirement Summary

The table below summarizes the regulatory requirements that must be met to construct this proposed project.

Regulatory Requirement	Mitigation to Address Requirement
Municipal NPDES Permit	Design and install site design, structural treatment control BMPs, and LID BMPs (if feasible) to address anticipated pollutants. Conduct geotechnical investigations to determine current groundwater conditions, and consider the results when evaluating structural treatment control BMPs. Evaluate during the proposed project design phase, through the hydrology and Water Quality Management Plan analyses.
Construction General Permit	Develop and implement a SWPPP. Implement temporary erosion and sediment control BMPs during the construction of the proposed project. Implement requirements of the Statewide Construction General Permit.
Temporary Construction BMPs	Temporary BMPs such as stabilized construction entrances/exits, erosion control blankets, and other minimum construction BMPs will be implemented consistent with the SWPPP.

3.0 References

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- California Regional Water Quality Control Board, Santa Ana Region, *Waste Discharge Requirements for the San Bernardino County Flood Control District, the County of San Bernardino, and the Incorporated Cities of San Bernardino within the Santa Ana Region Area-wide Urban Storm Water Runoff Management Program*, Order Number R8-2010-0036, NPDES Number
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2016 at: <https://www.epa.gov/waterdata/rainfall-erosivity-factor-calculator>
- National Oceanic and Atmospheric Association National Climatic Data Center, Annual Precipitation
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<http://www.ncdc.noaa.gov/>