

1. Air Quality and Health Risk Significance Thresholds

1.1. Regional Significance Thresholds

The SCAQMD has established regional significance thresholds for NO_x, SO_x, CO, VOC, PM₁₀, PM_{2.5}. Projects located within the South Coast Air Basin (SoCAB) with construction or operational-related emissions in excess of any of the thresholds presented in the following **Table 1** would be considered significant.

Table 1. SCAQMD Regional Thresholds		
Pollutant	Construction (lbs./day)	Operation (lbs./day)
Oxides of Nitrogen (NO _x)	100	55
Oxides of Sulfur (SO _x)	150	150
Carbon Monoxide (CO)	550	550
Reactive Organic Gasses (VOC)	75	55
Particulate Matter (PM ₁₀)	150	150
Particulate Matter (PM _{2.5})	55	55

Source: South Coast Air Quality Management District, SCAQMD 2019

1.2. Local Significance Thresholds (LSTs)

Local Significance Thresholds (LSTs) have been developed by the SCAQMD, recognizing that criteria pollutants such as CO, NO_x, and PM₁₀ and PM_{2.5} in particular, can have local impacts as well as regional impacts. The evaluation of localized air quality impacts determines the potential of the Project to violate any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. LSTs, defined separately for construction and operational activities, represent the maximum emissions or air concentrations from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard at any nearby sensitive or worker receptor.

A sensitive receptor is defined by SCAQMD as any residence including private homes, condominiums, apartments, and living quarters, schools as defined under paragraph (b)(57), preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

For projects of 5 acres or less where emissions would occur, the SCAQMD has developed a series of look up tables that provide estimates of daily construction or operational emissions above which a project's emissions are determined to have a significant air quality impact. These LSTs are provided for each combination of pollutants (CO, NO₂, PM₁₀, and PM_{2.5}), Source-Receptor Area (SRA), size of the project emission area, and distance to the nearest sensitive receptor. The Coachella Valley SRA for this Project is listed as number 30. The project size is generally represented as the maximum area disturbed during a day from which emissions are calculated.

1.2.1. Construction

For construction activities, the highest level of on-site emissions generally occurs during the mass grading activities. The California Emissions Estimator Model (CalEEMod) which is used to estimate

emissions from various land use projects, identifies various kinds of equipment and the acreage disturbed in an 8-hour day. Based on the construction equipment inventory to be provided in **Table 6** below, a maximum area of less than five (5) acres would be disturbed in a day. For purposes of this LST assessment of construction emissions, the emissions from the project were compared to the LST emission significance thresholds for a 5-acre area in the SCAQMD lookup tables.

There are two (2) existing occupied structures close to the project as described in **Table 2**.

Table 2. Location of Sensitive Receptors		
Receptor Address	Location Relative to Project¹	Type of Receptor
9160 Whitewater Canyon Road, Whitewater, CA 92282	125 meters northeast	District Ranger Residence
9160 Whitewater Canyon Road, Whitewater, CA 92282	195 meters northeast	Ranger Station/Visitor Center
Note: ¹ Relative straight-line distance from existing sensitive receptor structures to the nearest Project property boundary.		

Based on a review of the existing information, the nearest sensitive receptor is District Ranger Residence northeast of the Project site. A workshop is located approximately 15 meters northwest of the residence and is occupied intermittently during normal working hours.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. The CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment. The information in **Table 6** below is used to determine the maximum daily disturbed acreage for comparison to LSTs. Based on the above disturbance rate, the project would result in a maximum of less than five (5) acres disturbed during peak construction activity on any given day. The SCAQMD LST mass emission table provides construction emission significance thresholds for a disturbed area of less than five (5) acres, and was used in the assessment.¹ This estimate is based on the construction equipment assumptions embedded in the CalEEMod defaults and represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Site-specific construction fleet may vary, due to specific project needs at the time of construction.

Based on the project’s location, daily construction emission area, and distance to nearest sensitive receptor, the relevant construction significance thresholds for a less than 5-acre area in the SCAQMD lookup tables for the project are summarized in **Table 3** below.

¹ The values of the LSTs are proportional to the size of the disturbed area. The larger the disturbed area, the higher the value of the LST.

Table 3. SCAQMD Localized Significance Thresholds for Construction	
Pollutant¹	Daily Emission Limit (lbs./day)²
NOx	425
CO	5,331
PM ₁₀	67
PM _{2.5}	19
Notes: ¹ SCAQMD has defined LSTs only for these pollutants ² LSTs defined for SRA 30, less than 5-acre disturbed area and a 100-meter distance to the nearest sensitive receptor Source: SCAQMD 2009	

1.2.2. Operation

For Project operations, the LST operational assessment was accomplished by comparison to the LST emission significance thresholds for a less than 5-acre area in the SCAQMD lookup tables. If the total air quality impact exceeds the values for the listed pollutants, then the project would be considered to have a significant air quality impact. **Table 4** below provides a summary of the project’s operational LSTs.

Table 4. SCAQMD Localized Significance Thresholds for Operations	
Pollutant¹	Daily Emission Limit (lbs./day)²
NOx	425
CO	5,331
PM ₁₀	16
PM _{2.5}	5
Notes: ¹ SCAQMD has defined LSTs only for these pollutants ² LSTs defined for SRA 30, less than 5-acre disturbed area and a 100-meter distance to the nearest sensitive receptor Source: SCAQMD 2009	

The SCAQMD has also defined localized significance thresholds for sulfur dioxide, sulfate, and lead. The Project, however, is not expected to emit insignificant amounts of these pollutants.

1.3. Health Risk Significance Thresholds

In addition to the thresholds established above for pollutants, the SCAQMD has also defined health risk thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to toxic air contaminant (TAC)s. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of 70 years for sensitive receptors. Thus, an individual located in an area with a cancer risk of one would experience a one chance out of a population of one million of

contracting cancer over a 70-year time period, assuming that individual lives in that area continuously for the entire 70-year time period.

TACs can also cause chronic (long-term) related non-cancer illnesses such as reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system effects, birth defects, or other adverse environmental effects. Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the Reference Exposure Level (REL). The SCAQMD has established the following health risk thresholds.

1.3.1. Project-Level Health Risk Significance Thresholds

The SCAQMD has established the following project-specific health risk significance thresholds (SCAQMD 2012):

- Maximum Incremental Cancer Risk: ≥ 10 in 1 million.
- Hazard Index (project increment) ≥ 1.0 .

A significant impact would occur if a project's impacts exceeded any of these thresholds.

1.3.2. Cumulative Health Risk Significance Thresholds

The AQMD (SCAQMD 2003) uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is $HI > 1.0$ while the cumulative (facility-wide) is $HI > 3.0$. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

1.4. CO "Hotspot" Thresholds

The largest contributor of CO emissions during project operations is typically from motor vehicles. A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. The CO hotspot thresholds are represented by the most restricted state or federal CO ambient air quality standards:

- 1-hour CO standard: 20 ppm; and
- 8-hour CO standard: 9 ppm.

If the CO contributed by the Project in combination with CO produced by non-project traffic exceeds the above standards, then the Project would have a significant impact.

2. Air Quality and Health Risk Modeling Parameters and Assumptions

2.1. Model Selection

Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors represent the emission rate of a pollutant given the activity over time. The California Air Resources Board (CARB) has published emission factors for on-road mobile vehicles/trucks in the Emission Factors (EMFAC) mobile source emissions model (CARB 2014), and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the various levels of activity, and outputs the emissions for the various pieces of equipment.

Project emissions were estimated using CalEEMod version 2016.3.2 that was developed in cooperation with the SCAQMD and other air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with construction and operation from a variety of land uses.

2.2. Construction

2.2.1. Emission Assumptions

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Additionally, paving operations and application of architectural coatings would release ROG emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM₁₀ and PM_{2.5}).

Construction equipment operating hours and numbers represent the average equipment activity over the phase. Most equipment is not expected to operate throughout the entire building construction phase; therefore, activity has been assumed to be evenly distributed over the entire phase in this analysis. Portions of the site would be paved to provide parking spaces. A conceptual construction schedule is provided in **Table 5**.

The construction equipment list shown in **Table 6** was derived from the default equipment assumptions contained in the CalEEMod model for an automobile Care Center project and default construction schedule. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

Table 5. Conceptual Construction Schedule			
Construction Phase	Start Date	End Date	Duration (days)
Site Preparation	9/1/2020	9/14/2020	10
Grading	9/8/2020	4/19/2021	160
Source: Site preparation schedule input into CalEEMod using estimates from Project Description (see Appendix A)			

Table 6. Construction Equipment Assumptions					
Activity	Equipment	Number	Hours per Day	Horsepower	Load Factor
Site Preparation	Scrapers	1	8	97	0.37
	Crawler Tractors	1	8	247	0.40
	Tractors/Loaders/Backhoes	3	8	97	0.37
	Rubber Tired Dozers	4	8	247	0.40
Grading	Scrapers	1	8	97	0.37
	Crawler Tractors	1	8	247	0.40
	Graders	1	8	187	0.41
	Rubber Tired Dozers	1	8	247	0.40
	Excavator	1	8	158	0.38
	Tractors/Loaders/Backhoes	3	8	97	0.37
	Off-Highway Trucks	5	8	97	0.37
Not The equipment inventory for site preparation and grading activities were user input into CalEEMod, using a combination of default and those listed in the Project Description. Source: Appendix A.					

2.2.1.1. Equipment Tiers and Emission Factors

Equipment tiers refer to a generation of emission standards established by the US EPA and ARB that apply to diesel engines in off-road equipment. The “tier” of an engine depends on the model year and horsepower rating; generally, the newer a piece of equipment is, the greater the tier it is likely to have. Excluding engines greater than 750 horsepower, Tier 1 engines were manufactured generally between 1996 and 2003. Tier 2 engines were manufactured between 2001 and 2007. Tier 3 engines were manufactured between 2006 and 2011. Tier 4 engines are the newest and some incorporate hybrid electric technology; they were manufactured after 2007 (SCAQMD 2011).

CalEEMod contains an inventory of construction equipment that incorporates estimates of the number of equipment, their age, their horsepower, and equipment tier from which rates of emissions are developed. The CalEEMod default tier mix was used in this analysis for the estimation of emissions from on-site construction equipment for the unmitigated scenario.

CalEEMod’s off-road emission factors are based on the equipment populations from the OFFROAD2011 model. For the unmitigated scenario, emission factors for the applicable year of each construction phase were used.

2.2.1.2. Fugitive Dust

SCAQMD Rule 403 requires fugitive dust generating activities follow best available control measures to reduce emissions of fugitive dust. These measures are accounted for in CalEEMod as “mitigation” because the model categorizes the measures as “mitigation,” even though they are technically not mitigation. The best available control measures and the associated measure in CalEEMod are displayed in **Table 7**.

Table 7. Best Available Control Measures	
Best Available Control Measure¹	Associated Measure in CalEEMod²
Clearing and Grubbing	
02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing.	Water exposed surfaces three times per day
02-2 Stabilize soil during clearing and grubbing activities.	
02-3 Stabilize soil immediately after clearing and grubbing activities.	
Earth Moving Activities	
08-1 Pre-apply water to depth of proposed cuts	Pre-water to 12 percent
08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction	
08-3 Stabilize soils once earth-moving activities are complete	
Staging Areas	
13-1 Stabilize staging areas during use by limiting vehicle speeds to 15 miles per hour.	Reduce speed on unpaved roads to 15 miles per hours.
Traffic Areas for Construction Activities	
15-1 Stabilize all off-road traffic and parking areas.	Water exposed surfaces three times per day.
15-2 Stabilize all haul routes.	
15-3 Direct construction traffic over established haul routes.	
1 SCAQMD Rule 403	
2 Applied in CalEEMod output in Appendix A	

2.2.1.3. Construction Off-site Trips

CalEEMod default values for worker trip generation, trip length, and vehicle fleet were used in this analysis. A summary of the construction related trips is shown in **Table 8**. The total number of off-site construction trips would not necessarily occur on the same day since the various construction activities would vary each day.

Table 8. Construction Off-site Trips			
Construction Phase	Worker Trip Number	Vendor Trip Number	Haul Trip Number
Site Preparation	5	0	0
Grading	18	0	0
Source: CalEEMod, Appendix A			

2.2.2. Localized Analysis Methodology

As noted in previous Section 1.1, the assessment of localized air quality impacts during construction employed the SCAQMD’s daily emission LST tables based on the location of the project, the construction area where the emissions would be generated, and the distance to the nearest sensitive receptor.

2.3. Operation

Operational emissions are those emissions that occur during operation of the Project. However, once constructed, there will be little to no vehicle traffic associated with its operation, with the possible exception of repairs following a major storm event. Therefore, emissions associated with operation of the project are considered de minimis.

2.3.1. Other Emission Sources

2.3.1.1. Architectural Coatings (Painting)

Paints release VOC emissions. However, there are no architectural coatings associated with the project.

2.3.1.2. Consumer Products

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. However, there are no architectural coatings associated with the project.

2.3.1.3. Landscape Equipment

There is no landscape equipment associated with the project.

2.3.1.4. Electricity

There would be no emissions from power plants that would generate electricity to be used by the project.

2.3.1.5. Natural Gas

There would be no emissions from the combustion of natural gas used for the project.

2.3.1.6. Water and Wastewater

There would be no GHG emissions from the use of electricity to pump water to the project and to treat wastewater.

2.3.1.7. Solid Waste

Greenhouse gas emissions would not be generated from the decomposition of solid waste generated by the project.

2.3.1.8. Vegetation

The Project would clear and grub portions of the site potentially reducing potential carbon sequestration. However, the amount of existing vegetation removed is considered de Minimis. Therefore, sequestration benefits were not quantified in CalEEMod, as project specific details of vegetation types and quantities, if any, were not available.

2.3.1.9. Other Support Equipment

The use and operation of other support equipment following levee construction is not expected and considered de Minimis. Therefore, this equipment is not included in the GHG emissions assessment.

2.3.2. Localized Operational Emission Assumptions

The predominant sources of local operational emissions are the motor vehicles that would access the Project site. Such emissions result from the periodic delivery truck traffic that arrives, unloads, and departs the project site, and from the daily worker and visitor traffic accessing the Project's parking lot and surrounding recreational area. However, the project would not result in any net increase in operational emissions and is considered de Minimis.

3. Summary of Findings

The County of Riverside Climate Action Plan (CAP) includes measures developed to reduce 4,288,863 Metric Tons of Carbon Dioxide Equivalents (MTCO_{2e}) per year from new development by 2020 as compared to the 2020 unmitigated conditions (County of Riverside 2018).

According to the CAP, mitigation of GHG emissions impacts during the development review process of projects provides a cost-effective way of implementing the GHG reduction strategies for reducing community-wide emissions associated with new development. A threshold level above 3,000 MTCO_{2e} per year is used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. The 3,000 MTCO_{2e} per year value is used in defining small projects that, when combined with the modest efficiency measures shown in the bullet points below are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis. The efficiency measures required of small projects include:

- Energy efficiency of at least five percent greater than 2010 Title 24 requirements, and
- Water conservation measures that matches the California Green Building Code in effect as of January 2011.

3.1. Construction Impacts

3.1.1. Equipment Exhausts and Related Construction Activities

The emission values provided in the tables below (**Table 9**) are from the CalEEMod output tables, unmitigated.

Table 9. Estimated Construction Emissions						
Construction Phase	Total Daily Maximum Pollutant Emissions (lbs/day)					
	NOx	SOx	CO	ROG (VOC)	PM₁₀	PM_{2.5}
2020 Year						
Site Preparation	1.4998	0.0014	0.7432	0.1416	0.5889	0.3452
Grading	9.2722	0.0105	5.0548	0.8439	1.8668	1.1590
2021 Year						
Grading	7.9453	0.0098	4.5682	0.7307	1.6953	1.0405
Peak Daily	9.2722	0.0105	5.0548	0.8439	1.8668	1.1590
SCAQMD Thresholds	100	150	550	75	150	55
Significant Emissions?	No	No	No	No	No	No

Because no exceedances of any threshold for criteria pollutants are expected, no significant impacts would occur for project construction. Details of the emission factors and other assumptions are included in **Appendix A**.

1.1.1. Localized Impacts Analysis

The SCAQMD has issued guidance on applying CalEEMod results to localized impacts analyses. The sensitive receptors, residences and corresponding distance from the Project site are identified in **Table 2**. Peak day construction emissions would result in concentrations of pollutants at the

nearest residence (District Ranger approximately 125 meters northeast) below the SCAQMD thresholds of significance (**Table 10**).

Emissions Sources	NOx	CO	PM₁₀	PM_{2.5}
On-Site Emissions (lbs/day)	9.2722	5.0548	1.8668	1.1590
LST Thresholds (lbs/day)	425	5,331	67	19
Significant Emissions?	No	No	No	No

1.2. Regional Air Quality Impacts

1.2.1. Project Operational Emissions

Operational air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes. Typical area-source emissions from a project may come from natural gas use, landscaping equipment, and/or solid waste disposal. Mobile source emissions may come from patron and employee vehicles and supply and delivery trucks. However, the Project is the construction of a levee with little or no subsequent associated operational emissions and is therefore considered de Minimis.

1.3. Greenhouse Gas Emissions

1.3.1. Construction Greenhouse Gas Emissions

Construction activities produce combustion emissions from various sources (e.g., demolition, site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew). Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. The annual CO₂ emissions for each of the planned construction phases (see Appendix A for details) is provided in **Table 11**.

Construction Phase	Peak Annual Emissions (MT/yr)				Total Emissions/Year (MTCO₂e)
	CO₂	CH₄	N₂O	Total CO₂e	
2020					
Site Preparation	22.17	<0.01	0.00	22.35	171.77
Grading	170.46	0.05	0.00	171.77	
2021					
Grading	157.83	0.048	0.00	159.04	159.04
Total Construction Emissions					330.81
Total Construction Emissions Amortized Over 30 years					11.03

1.3.2. Operational Greenhouse Gas Emissions

Operation of the proposed Project would not generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption and are considered de Minimis.

References

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APPENDIX A

Whitewater Levee Project - South Coast Air Basin, Annual

Whitewater Levee Project
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1,000.00	User Defined Unit	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Whitewater Levee Project - South Coast Air Basin, Annual

Project Characteristics -

Land Use - Levee construction

Construction Phase - Construction of levee using mostly site materials; no demolition of pre-existing structures, no buildings, paving or architectural coatings required

Off-road Equipment - No pre-existing structures are required to be moved

Grading - Area of site preparation roughly equivalent to levee construction area

Trips and VMT - Project is for the construction of a levee only; no site demolition, building construction, paving or architectural coatings required.

Construction Off-road Equipment Mitigation -

Off-road Equipment - Clearing and preping existing ground surface for levee construction

Land Use Change -

Sequestration -

Off-road Equipment - Equipment requirements from Project Description

Whitewater Levee Project - South Coast Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	160.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/17/2020	4/19/2021
tblConstructionPhase	PhaseEndDate	9/7/2020	9/14/2020
tblGrading	AcresOfGrading	320.00	5.00
tblGrading	AcresOfGrading	15.00	5.00
tblLandUse	LandUseSquareFeet	0.00	217,800.00
tblLandUse	LotAcreage	0.00	5.00
tblOffRoadEquipment	HorsePower	367.00	187.00
tblOffRoadEquipment	HorsePower	402.00	97.00
tblOffRoadEquipment	HorsePower	367.00	97.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	LoadFactor	0.48	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.48	0.37
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	23.00	5.00
tblTripsAndVMT	WorkerTripNumber	33.00	18.00

Whitewater Levee Project - South Coast Air Basin, Annual

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					
2020	0.1799	1.9659	1.0582	2.1900e-003	0.3570	0.0912	0.4482	0.1906	0.0839	0.2745	0.0000	192.6343	192.6343	0.0593	0.0000	194.1165
2021	0.1333	1.4501	0.8337	1.7900e-003	0.2447	0.0646	0.3094	0.1305	0.0595	0.1899	0.0000	157.8275	157.8275	0.0484	0.0000	159.0377
Maximum	0.1799	1.9659	1.0582	2.1900e-003	0.3570	0.0912	0.4482	0.1906	0.0839	0.2745	0.0000	192.6343	192.6343	0.0593	0.0000	194.1165

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					
2020	0.1799	1.9659	1.0582	2.1900e-003	0.3570	0.0912	0.4482	0.1906	0.0839	0.2745	0.0000	192.6341	192.6341	0.0593	0.0000	194.1162
2021	0.1333	1.4501	0.8337	1.7900e-003	0.2447	0.0646	0.3094	0.1305	0.0595	0.1899	0.0000	157.8273	157.8273	0.0484	0.0000	159.0375
Maximum	0.1799	1.9659	1.0582	2.1900e-003	0.3570	0.0912	0.4482	0.1906	0.0839	0.2745	0.0000	192.6341	192.6341	0.0593	0.0000	194.1162

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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2020	11-30-2020	1.6343	1.6343
2	12-1-2020	2-28-2021	1.3594	1.3594
3	3-1-2021	5-31-2021	0.7344	0.7344
		Highest	1.6343	1.6343

2.2 Overall Operational

Unmitigated Operational

	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					
Area	0.8892	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265
Energy	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
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.8892	1.2000e-004	0.0128	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265

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2.2 Overall Operational

Mitigated Operational

	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					
Area	0.8892	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265
Energy	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
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.8892	1.2000e-004	0.0128	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265

	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	0.00	0.00	0.00	0.00	0.00	0.00	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	9/1/2020	9/14/2020	5	10	
2	Grading	Grading	9/8/2020	4/19/2021	5	160	

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Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Scrapers	1	8.00	187	0.41
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Scrapers	1	8.00	97	0.37
Site Preparation	Crawler Tractors	1	8.00	247	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
Site Preparation	9	5.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site Preparation - 2020

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					0.0930	0.0000	0.0930	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0257	0.2736	0.1344	2.5000e-004		0.0141	0.0141		0.0130	0.0130	0.0000	21.8424	21.8424	7.0600e-003	0.0000	22.0190
Total	0.0257	0.2736	0.1344	2.5000e-004	0.0930	0.0141	0.1071	0.0499	0.0130	0.0629	0.0000	21.8424	21.8424	7.0600e-003	0.0000	22.0190

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	1.1000e-004	1.2400e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3311	0.3311	1.0000e-005	0.0000	0.3314
Total	1.4000e-004	1.1000e-004	1.2400e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3311	0.3311	1.0000e-005	0.0000	0.3314

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3.2 Site Preparation - 2020

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					0.0930	0.0000	0.0930	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0257	0.2736	0.1344	2.5000e-004		0.0141	0.0141		0.0130	0.0130	0.0000	21.8424	21.8424	7.0600e-003	0.0000	22.0190
Total	0.0257	0.2736	0.1344	2.5000e-004	0.0930	0.0141	0.1071	0.0499	0.0130	0.0629	0.0000	21.8424	21.8424	7.0600e-003	0.0000	22.0190

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	1.1000e-004	1.2400e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3311	0.3311	1.0000e-005	0.0000	0.3314
Total	1.4000e-004	1.1000e-004	1.2400e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3311	0.3311	1.0000e-005	0.0000	0.3314

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3.3 Grading - 2020

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					0.2526	0.0000	0.2526	0.1377	0.0000	0.1377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1498	1.6888	0.8855	1.8300e-003		0.0770	0.0770		0.0708	0.0708	0.0000	160.5668	160.5668	0.0519	0.0000	161.8651
Total	0.1498	1.6888	0.8855	1.8300e-003	0.2526	0.0770	0.3296	0.1377	0.0708	0.2085	0.0000	160.5668	160.5668	0.0519	0.0000	161.8651

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	4.2200e-003	3.3700e-003	0.0370	1.1000e-004	0.0110	8.0000e-005	0.0111	2.9300e-003	8.0000e-005	3.0100e-003	0.0000	9.8940	9.8940	2.8000e-004	0.0000	9.9010
Total	4.2200e-003	3.3700e-003	0.0370	1.1000e-004	0.0110	8.0000e-005	0.0111	2.9300e-003	8.0000e-005	3.0100e-003	0.0000	9.8940	9.8940	2.8000e-004	0.0000	9.9010

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3.3 Grading - 2020

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					0.2526	0.0000	0.2526	0.1377	0.0000	0.1377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1498	1.6888	0.8855	1.8300e-003		0.0770	0.0770		0.0708	0.0708	0.0000	160.5666	160.5666	0.0519	0.0000	161.8649
Total	0.1498	1.6888	0.8855	1.8300e-003	0.2526	0.0770	0.3296	0.1377	0.0708	0.2085	0.0000	160.5666	160.5666	0.0519	0.0000	161.8649

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	4.2200e-003	3.3700e-003	0.0370	1.1000e-004	0.0110	8.0000e-005	0.0111	2.9300e-003	8.0000e-005	3.0100e-003	0.0000	9.8940	9.8940	2.8000e-004	0.0000	9.9010
Total	4.2200e-003	3.3700e-003	0.0370	1.1000e-004	0.0110	8.0000e-005	0.0111	2.9300e-003	8.0000e-005	3.0100e-003	0.0000	9.8940	9.8940	2.8000e-004	0.0000	9.9010

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3.3 Grading - 2021

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					0.2345	0.0000	0.2345	0.1277	0.0000	0.1277	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1297	1.4472	0.8021	1.6900e-003		0.0646	0.0646		0.0594	0.0594	0.0000	148.9457	148.9457	0.0482	0.0000	150.1500
Total	0.1297	1.4472	0.8021	1.6900e-003	0.2345	0.0646	0.2991	0.1277	0.0594	0.1871	0.0000	148.9457	148.9457	0.0482	0.0000	150.1500

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	3.6600e-003	2.8100e-003	0.0316	1.0000e-004	0.0102	8.0000e-005	0.0103	2.7200e-003	7.0000e-005	2.7900e-003	0.0000	8.8818	8.8818	2.4000e-004	0.0000	8.8877
Total	3.6600e-003	2.8100e-003	0.0316	1.0000e-004	0.0102	8.0000e-005	0.0103	2.7200e-003	7.0000e-005	2.7900e-003	0.0000	8.8818	8.8818	2.4000e-004	0.0000	8.8877

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3.3 Grading - 2021

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					0.2345	0.0000	0.2345	0.1277	0.0000	0.1277	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1297	1.4472	0.8021	1.6900e-003		0.0646	0.0646		0.0594	0.0594	0.0000	148.9455	148.9455	0.0482	0.0000	150.1498
Total	0.1297	1.4472	0.8021	1.6900e-003	0.2345	0.0646	0.2991	0.1277	0.0594	0.1871	0.0000	148.9455	148.9455	0.0482	0.0000	150.1498

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	3.6600e-003	2.8100e-003	0.0316	1.0000e-004	0.0102	8.0000e-005	0.0103	2.7200e-003	7.0000e-005	2.7900e-003	0.0000	8.8818	8.8818	2.4000e-004	0.0000	8.8877
Total	3.6600e-003	2.8100e-003	0.0316	1.0000e-004	0.0102	8.0000e-005	0.0103	2.7200e-003	7.0000e-005	2.7900e-003	0.0000	8.8818	8.8818	2.4000e-004	0.0000	8.8877

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	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	0.0000	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
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	0.0000	0.0000

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Recreational	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

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5.0 Energy Detail

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

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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

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

Whitewater Levee Project - South Coast Air Basin, Annual

	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	0.8892	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265
Unmitigated	0.8892	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265

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	0.1010					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7870					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265
Total	0.8892	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265

Whitewater Levee Project - South Coast Air Basin, Annual

6.2 Area by SubCategory

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					
Architectural Coating	0.1010					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7870					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-003	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265
Total	0.8892	1.2000e-004	0.0128	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0248	0.0248	7.0000e-005	0.0000	0.0265

7.0 Water Detail

7.1 Mitigation Measures Water

Whitewater Levee Project - South Coast Air Basin, Annual

	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

Whitewater Levee Project - South Coast Air Basin, Annual

7.2 Water by Land Use

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

Whitewater Levee Project - South Coast Air Basin, Annual

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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Whitewater Levee Project - South Coast Air Basin, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Whitewater Levee Project - South Coast Air Basin, Summer

Whitewater Levee Project
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1,000.00	User Defined Unit	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Whitewater Levee Project - South Coast Air Basin, Summer

Project Characteristics -

Land Use - Levee construction

Construction Phase - Construction of levee using mostly site materials; no demolition of pre-existing structures, no buildings, paving or architectural coatings required

Off-road Equipment - No pre-existing structures are required to be moved

Grading - Area of site preparation roughly equivalent to levee construction area

Trips and VMT - Project is for the construction of a levee only; no site demolition, building construction, paving or architectural coatings required.

Construction Off-road Equipment Mitigation -

Off-road Equipment - Clearing and preping existing ground surface for levee construction

Land Use Change -

Sequestration -

Off-road Equipment - Equipment requirements from Project Description

Whitewater Levee Project - South Coast Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	160.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/17/2020	4/19/2021
tblConstructionPhase	PhaseEndDate	9/7/2020	9/14/2020
tblGrading	AcresOfGrading	320.00	5.00
tblGrading	AcresOfGrading	15.00	5.00
tblLandUse	LandUseSquareFeet	0.00	217,800.00
tblLandUse	LotAcreage	0.00	5.00
tblOffRoadEquipment	HorsePower	367.00	187.00
tblOffRoadEquipment	HorsePower	402.00	97.00
tblOffRoadEquipment	HorsePower	367.00	97.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	LoadFactor	0.48	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.48	0.37
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	23.00	5.00
tblTripsAndVMT	WorkerTripNumber	33.00	18.00

Whitewater Levee Project - South Coast Air Basin, Summer

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					
2020	8.8869	95.5014	49.4495	0.0972	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,432.8740	9,432.8740	2.9468	0.0000	9,506.5443
2021	3.4629	37.6552	21.7213	0.0467	6.3262	1.6791	8.0052	3.3857	1.5447	4.9304	0.0000	4,531.5076	4,531.5076	1.3864	0.0000	4,566.1664
Maximum	8.8869	95.5014	49.4495	0.0972	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,432.8740	9,432.8740	2.9468	0.0000	9,506.5443

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					
2020	8.8869	95.5014	49.4495	0.0972	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,432.8739	9,432.8739	2.9468	0.0000	9,506.5442
2021	3.4629	37.6552	21.7213	0.0467	6.3262	1.6791	8.0052	3.3857	1.5447	4.9304	0.0000	4,531.5076	4,531.5076	1.3864	0.0000	4,566.1663
Maximum	8.8869	95.5014	49.4495	0.0972	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,432.8739	9,432.8739	2.9468	0.0000	9,506.5442

Whitewater Levee Project - South Coast Air Basin, Summer

2.2 Overall Operational

Unmitigated Operational

	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					
Area	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Energy	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
Mobile	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	4.8752	9.4000e-004	0.1025	1.0000e-005	0.0000	3.7000e-004	3.7000e-004	0.0000	3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004	0.0000	0.2334

Mitigated Operational

	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					
Area	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Energy	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
Mobile	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	4.8752	9.4000e-004	0.1025	1.0000e-005	0.0000	3.7000e-004	3.7000e-004	0.0000	3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004	0.0000	0.2334

Whitewater Levee Project - South Coast Air Basin, Summer

	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	0.00	0.00	0.00	0.00	0.00	0.00	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	9/1/2020	9/14/2020	5	10	
2	Grading	Grading	9/8/2020	4/19/2021	5	160	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

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

OffRoad Equipment

Whitewater Levee Project - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Scrapers	1	8.00	187	0.41
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Scrapers	1	8.00	97	0.37
Site Preparation	Crawler Tractors	1	8.00	247	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
Site Preparation	9	5.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Whitewater Levee Project - South Coast Air Basin, Summer

3.2 Site Preparation - 2020

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					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	5.1475	54.7155	26.8801	0.0497		2.8245	2.8245		2.5985	2.5985		4,815.4235	4,815.4235	1.5574		4,854.3586
Total	5.1475	54.7155	26.8801	0.0497	18.5965	2.8245	21.4210	9.9879	2.5985	12.5865		4,815.4235	4,815.4235	1.5574		4,854.3586

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	0.0283	0.0199	0.2677	7.7000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		76.6348	76.6348	2.1800e-003		76.6894
Total	0.0283	0.0199	0.2677	7.7000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		76.6348	76.6348	2.1800e-003		76.6894

Whitewater Levee Project - South Coast Air Basin, Summer

3.2 Site Preparation - 2020

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					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	5.1475	54.7155	26.8801	0.0497		2.8245	2.8245		2.5985	2.5985	0.0000	4,815.423 4	4,815.423 4	1.5574		4,854.358 6
Total	5.1475	54.7155	26.8801	0.0497	18.5965	2.8245	21.4210	9.9879	2.5985	12.5865	0.0000	4,815.423 4	4,815.423 4	1.5574		4,854.358 6

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	0.0283	0.0199	0.2677	7.7000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		76.6348	76.6348	2.1800e-003		76.6894
Total	0.0283	0.0199	0.2677	7.7000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		76.6348	76.6348	2.1800e-003		76.6894

Whitewater Levee Project - South Coast Air Basin, Summer

3.3 Grading - 2020

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.6094	40.6942	21.3379	0.0440		1.8551	1.8551		1.7067	1.7067		4,264.9303	4,264.9303	1.3794		4,299.4144
Total	3.6094	40.6942	21.3379	0.0440	6.0552	1.8551	7.9104	3.3138	1.7067	5.0205		4,264.9303	4,264.9303	1.3794		4,299.4144

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	0.1017	0.0717	0.9637	2.7700e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		275.8854	275.8854	7.8600e-003		276.0818
Total	0.1017	0.0717	0.9637	2.7700e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		275.8854	275.8854	7.8600e-003		276.0818

Whitewater Levee Project - South Coast Air Basin, Summer

3.3 Grading - 2020

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.6094	40.6942	21.3379	0.0440		1.8551	1.8551		1.7067	1.7067	0.0000	4,264.9303	4,264.9303	1.3794		4,299.4144
Total	3.6094	40.6942	21.3379	0.0440	6.0552	1.8551	7.9104	3.3138	1.7067	5.0205	0.0000	4,264.9303	4,264.9303	1.3794		4,299.4144

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	0.1017	0.0717	0.9637	2.7700e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		275.8854	275.8854	7.8600e-003		276.0818
Total	0.1017	0.0717	0.9637	2.7700e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		275.8854	275.8854	7.8600e-003		276.0818

Whitewater Levee Project - South Coast Air Basin, Summer

3.3 Grading - 2021

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.3679	37.5906	20.8330	0.0440		1.6771	1.6771		1.5429	1.5429		4,264.533 3	4,264.533 3	1.3792		4,299.014 2
Total	3.3679	37.5906	20.8330	0.0440	6.0552	1.6771	7.7323	3.3138	1.5429	4.8567		4,264.533 3	4,264.533 3	1.3792		4,299.014 2

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	0.0950	0.0646	0.8883	2.6800e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		266.9742	266.9742	7.1200e-003		267.1521
Total	0.0950	0.0646	0.8883	2.6800e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		266.9742	266.9742	7.1200e-003		267.1521

Whitewater Levee Project - South Coast Air Basin, Summer

3.3 Grading - 2021

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.3679	37.5906	20.8330	0.0440		1.6771	1.6771		1.5429	1.5429	0.0000	4,264.533 3	4,264.533 3	1.3792		4,299.014 2
Total	3.3679	37.5906	20.8330	0.0440	6.0552	1.6771	7.7323	3.3138	1.5429	4.8567	0.0000	4,264.533 3	4,264.533 3	1.3792		4,299.014 2

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	0.0950	0.0646	0.8883	2.6800e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		266.9742	266.9742	7.1200e-003		267.1521
Total	0.0950	0.0646	0.8883	2.6800e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		266.9742	266.9742	7.1200e-003		267.1521

4.0 Operational Detail - Mobile

Whitewater Levee Project - South Coast Air Basin, Summer

4.1 Mitigation Measures Mobile

	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	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
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

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Recreational	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

Whitewater Levee Project - South Coast Air Basin, Summer

5.0 Energy Detail

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

Whitewater Levee Project - South Coast Air Basin, Summer

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

Whitewater Levee Project - South Coast Air Basin, Summer

	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	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Unmitigated	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334

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	0.5532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5700e-003	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Total	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334

Whitewater Levee Project - South Coast Air Basin, Summer

6.2 Area by SubCategory

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					
Architectural Coating	0.5532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5700e-003	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Total	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334

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 Stationary Equipment

Fire Pumps and Emergency Generators

Whitewater Levee Project - South Coast Air Basin, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Whitewater Levee Project - South Coast Air Basin, Winter

Whitewater Levee Project
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1,000.00	User Defined Unit	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Whitewater Levee Project - South Coast Air Basin, Winter

Project Characteristics -

Land Use - Levee construction

Construction Phase - Construction of levee using mostly site materials; no demolition of pre-existing structures, no buildings, paving or architectural coatings required

Off-road Equipment - No pre-existing structures are required to be moved

Grading - Area of site preparation roughly equivalent to levee construction area

Trips and VMT - Project is for the construction of a levee only; no site demolition, building construction, paving or architectural coatings required.

Construction Off-road Equipment Mitigation -

Off-road Equipment - Clearing and preping existing ground surface for levee construction

Land Use Change -

Sequestration -

Off-road Equipment - Equipment requirements from Project Description

Whitewater Levee Project - South Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	160.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	9/17/2020	4/19/2021
tblConstructionPhase	PhaseEndDate	9/7/2020	9/14/2020
tblGrading	AcresOfGrading	320.00	5.00
tblGrading	AcresOfGrading	15.00	5.00
tblLandUse	LandUseSquareFeet	0.00	217,800.00
tblLandUse	LotAcreage	0.00	5.00
tblOffRoadEquipment	HorsePower	367.00	187.00
tblOffRoadEquipment	HorsePower	402.00	97.00
tblOffRoadEquipment	HorsePower	367.00	97.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	LoadFactor	0.48	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.48	0.37
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	23.00	5.00
tblTripsAndVMT	WorkerTripNumber	33.00	18.00

Whitewater Levee Project - South Coast Air Basin, Winter

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					
2020	8.9016	95.5104	49.3260	0.0970	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,410.9214	9,410.9214	2.9462	0.0000	9,484.5750
2021	3.4739	37.6615	21.6310	0.0465	6.3262	1.6791	8.0052	3.3857	1.5447	4.9304	0.0000	4,514.8689	4,514.8689	1.3859	0.0000	4,549.5157
Maximum	8.9016	95.5104	49.3260	0.0970	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,410.9214	9,410.9214	2.9462	0.0000	9,484.5750

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					
2020	8.9016	95.5104	49.3260	0.0970	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,410.9213	9,410.9213	2.9462	0.0000	9,484.5749
2021	3.4739	37.6615	21.6310	0.0465	6.3262	1.6791	8.0052	3.3857	1.5447	4.9304	0.0000	4,514.8689	4,514.8689	1.3859	0.0000	4,549.5157
Maximum	8.9016	95.5104	49.3260	0.0970	24.9979	4.6822	29.6802	13.3936	4.3077	17.7012	0.0000	9,410.9213	9,410.9213	2.9462	0.0000	9,484.5749

Whitewater Levee Project - South Coast Air Basin, Winter

2.2 Overall Operational

Unmitigated Operational

	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					
Area	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Energy	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
Mobile	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	4.8752	9.4000e-004	0.1025	1.0000e-005	0.0000	3.7000e-004	3.7000e-004	0.0000	3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004	0.0000	0.2334

Mitigated Operational

	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					
Area	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Energy	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
Mobile	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	4.8752	9.4000e-004	0.1025	1.0000e-005	0.0000	3.7000e-004	3.7000e-004	0.0000	3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004	0.0000	0.2334

Whitewater Levee Project - South Coast Air Basin, Winter

	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	0.00	0.00	0.00	0.00	0.00	0.00	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	9/1/2020	9/14/2020	5	10	
2	Grading	Grading	9/8/2020	4/19/2021	5	160	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

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

OffRoad Equipment

Whitewater Levee Project - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Scrapers	1	8.00	187	0.41
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Scrapers	1	8.00	97	0.37
Site Preparation	Crawler Tractors	1	8.00	247	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
Site Preparation	9	5.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Whitewater Levee Project - South Coast Air Basin, Winter

3.2 Site Preparation - 2020

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					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	5.1475	54.7155	26.8801	0.0497		2.8245	2.8245		2.5985	2.5985		4,815.4235	4,815.4235	1.5574		4,854.3586
Total	5.1475	54.7155	26.8801	0.0497	18.5965	2.8245	21.4210	9.9879	2.5985	12.5865		4,815.4235	4,815.4235	1.5574		4,854.3586

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	0.0315	0.0219	0.2409	7.2000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		71.8625	71.8625	2.0400e-003		71.9135
Total	0.0315	0.0219	0.2409	7.2000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		71.8625	71.8625	2.0400e-003		71.9135

Whitewater Levee Project - South Coast Air Basin, Winter

3.2 Site Preparation - 2020

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					18.5965	0.0000	18.5965	9.9879	0.0000	9.9879			0.0000			0.0000
Off-Road	5.1475	54.7155	26.8801	0.0497		2.8245	2.8245		2.5985	2.5985	0.0000	4,815.4234	4,815.4234	1.5574		4,854.3586
Total	5.1475	54.7155	26.8801	0.0497	18.5965	2.8245	21.4210	9.9879	2.5985	12.5865	0.0000	4,815.4234	4,815.4234	1.5574		4,854.3586

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	0.0315	0.0219	0.2409	7.2000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		71.8625	71.8625	2.0400e-003		71.9135
Total	0.0315	0.0219	0.2409	7.2000e-004	0.0753	5.6000e-004	0.0758	0.0200	5.2000e-004	0.0205		71.8625	71.8625	2.0400e-003		71.9135

Whitewater Levee Project - South Coast Air Basin, Winter

3.3 Grading - 2020

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.6094	40.6942	21.3379	0.0440		1.8551	1.8551		1.7067	1.7067		4,264.9303	4,264.9303	1.3794		4,299.4144
Total	3.6094	40.6942	21.3379	0.0440	6.0552	1.8551	7.9104	3.3138	1.7067	5.0205		4,264.9303	4,264.9303	1.3794		4,299.4144

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	0.1132	0.0788	0.8671	2.6000e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		258.7051	258.7051	7.3400e-003		258.8885
Total	0.1132	0.0788	0.8671	2.6000e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		258.7051	258.7051	7.3400e-003		258.8885

Whitewater Levee Project - South Coast Air Basin, Winter

3.3 Grading - 2020

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.6094	40.6942	21.3379	0.0440		1.8551	1.8551		1.7067	1.7067	0.0000	4,264.9303	4,264.9303	1.3794		4,299.4144
Total	3.6094	40.6942	21.3379	0.0440	6.0552	1.8551	7.9104	3.3138	1.7067	5.0205	0.0000	4,264.9303	4,264.9303	1.3794		4,299.4144

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	0.1132	0.0788	0.8671	2.6000e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		258.7051	258.7051	7.3400e-003		258.8885
Total	0.1132	0.0788	0.8671	2.6000e-003	0.2709	2.0300e-003	0.2730	0.0719	1.8700e-003	0.0737		258.7051	258.7051	7.3400e-003		258.8885

Whitewater Levee Project - South Coast Air Basin, Winter

3.3 Grading - 2021

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.3679	37.5906	20.8330	0.0440		1.6771	1.6771		1.5429	1.5429		4,264.533 3	4,264.533 3	1.3792		4,299.014 2
Total	3.3679	37.5906	20.8330	0.0440	6.0552	1.6771	7.7323	3.3138	1.5429	4.8567		4,264.533 3	4,264.533 3	1.3792		4,299.014 2

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	0.1060	0.0710	0.7980	2.5100e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		250.3356	250.3356	6.6400e-003		250.5015
Total	0.1060	0.0710	0.7980	2.5100e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		250.3356	250.3356	6.6400e-003		250.5015

Whitewater Levee Project - South Coast Air Basin, Winter

3.3 Grading - 2021

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					6.0552	0.0000	6.0552	3.3138	0.0000	3.3138			0.0000			0.0000
Off-Road	3.3679	37.5906	20.8330	0.0440		1.6771	1.6771		1.5429	1.5429	0.0000	4,264.5333	4,264.5333	1.3792		4,299.0142
Total	3.3679	37.5906	20.8330	0.0440	6.0552	1.6771	7.7323	3.3138	1.5429	4.8567	0.0000	4,264.5333	4,264.5333	1.3792		4,299.0142

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	0.1060	0.0710	0.7980	2.5100e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		250.3356	250.3356	6.6400e-003		250.5015
Total	0.1060	0.0710	0.7980	2.5100e-003	0.2709	1.9700e-003	0.2729	0.0719	1.8100e-003	0.0737		250.3356	250.3356	6.6400e-003		250.5015

4.0 Operational Detail - Mobile

Whitewater Levee Project - South Coast Air Basin, Winter

4.1 Mitigation Measures Mobile

	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	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
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

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Recreational	0.551391	0.043400	0.201050	0.120272	0.016162	0.005864	0.021029	0.030512	0.002059	0.001866	0.004766	0.000706	0.000924

Whitewater Levee Project - South Coast Air Basin, Winter

5.0 Energy Detail

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

Whitewater Levee Project - South Coast Air Basin, Winter

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

Whitewater Levee Project - South Coast Air Basin, Winter

	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	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Unmitigated	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334

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	0.5532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5700e-003	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Total	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334

Whitewater Levee Project - South Coast Air Basin, Winter

6.2 Area by SubCategory

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					
Architectural Coating	0.5532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5700e-003	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334
Total	4.8752	9.4000e-004	0.1025	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2189	0.2189	5.8000e-004		0.2334

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 Stationary Equipment

Fire Pumps and Emergency Generators

Whitewater Levee Project - South Coast Air Basin, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Whitewater Levee Project
South Coast Air Basin, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Crawler Tractors	Diesel	No Change	0	2	No Change	0.00
Off-Highway Trucks	Diesel	No Change	0	5	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	7	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Crawler Tractors	4.82400E-002	6.16100E-001	2.10500E-001	6.70000E-004	2.32000E-002	2.13400E-002	0.00000E+000	5.87682E+001	5.87682E+001	1.90100E-002	0.00000E+000	5.92434E+001
Excavators	1.89900E-002	1.83030E-001	2.61580E-001	4.10000E-004	8.87000E-003	8.16000E-003	0.00000E+000	3.62986E+001	3.62986E+001	1.17400E-002	0.00000E+000	3.65921E+001
Graders	3.71900E-002	4.90610E-001	1.43340E-001	5.30000E-004	1.56200E-002	1.43700E-002	0.00000E+000	4.66090E+001	4.66090E+001	1.50700E-002	0.00000E+000	4.69859E+001
Rubber Tired Dozers	1.01280E-001	1.06267E+000	3.88890E-001	8.10000E-004	5.18600E-002	4.77100E-002	0.00000E+000	7.13028E+001	7.13028E+001	2.30600E-002	0.00000E+000	7.18794E+001
Scrapers	4.75900E-002	5.34070E-001	2.27220E-001	5.40000E-004	2.39900E-002	2.20700E-002	0.00000E+000	4.74208E+001	4.74208E+001	1.53400E-002	0.00000E+000	4.78042E+001
Tractors/Loaders/Backhoes	5.19000E-002	5.23160E-001	5.90470E-001	8.10000E-004	3.21500E-002	2.95700E-002	0.00000E+000	7.09555E+001	7.09555E+001	2.29500E-002	0.00000E+000	7.15292E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Crawler Tractors	4.82400E-002	6.16100E-001	2.10500E-001	6.70000E-004	2.32000E-002	2.13400E-002	0.00000E+000	5.87682E+001	5.87682E+001	1.90100E-002	0.00000E+000	5.92433E+001
Excavators	1.89900E-002	1.83030E-001	2.61580E-001	4.10000E-004	8.87000E-003	8.16000E-003	0.00000E+000	3.62985E+001	3.62985E+001	1.17400E-002	0.00000E+000	3.65920E+001
Graders	3.71900E-002	4.90610E-001	1.43340E-001	5.30000E-004	1.56200E-002	1.43700E-002	0.00000E+000	4.66090E+001	4.66090E+001	1.50700E-002	0.00000E+000	4.69858E+001
Rubber Tired Dozers	1.01280E-001	1.06267E+000	3.88890E-001	8.10000E-004	5.18600E-002	4.77100E-002	0.00000E+000	7.13027E+001	7.13027E+001	2.30600E-002	0.00000E+000	7.18793E+001
Scrapers	4.75900E-002	5.34060E-001	2.27220E-001	5.40000E-004	2.39900E-002	2.20700E-002	0.00000E+000	4.74208E+001	4.74208E+001	1.53400E-002	0.00000E+000	4.78042E+001
Tractors/Loaders/Backhoes	5.19000E-002	5.23160E-001	5.90470E-001	8.10000E-004	3.21500E-002	2.95700E-002	0.00000E+000	7.09554E+001	7.09554E+001	2.29500E-002	0.00000E+000	7.15291E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Crawler Tractors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19112E-006	1.19112E-006	0.00000E+000	0.00000E+000	1.18157E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10197E-006	1.10197E-006	0.00000E+000	0.00000E+000	1.36642E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07275E-006	1.07275E-006	0.00000E+000	0.00000E+000	1.27698E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26222E-006	1.26222E-006	0.00000E+000	0.00000E+000	1.25210E-006
Scrapers	0.00000E+000	1.87241E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26527E-006	1.26527E-006	0.00000E+000	0.00000E+000	1.25512E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12747E-006	1.12747E-006	0.00000E+000	0.00000E+000	1.11842E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Grading	Fugitive Dust	0.49	0.27	0.49	0.27	0.00	0.00
Grading	Roads	0.02	0.01	0.02	0.01	0.00	0.00
Site Preparation	Fugitive Dust	0.09	0.05	0.09	0.05	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
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No	Land Use	Increase Density	0.00		
No	Land Use	Increase Diversity	-0.01	0.13	
No	Land Use	Improve Walkability Design	0.00		
No	Land Use	Improve Destination Accessibility	0.00		
No	Land Use	Increase Transit Accessibility	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00		
	Land Use	Land Use SubTotal	0.00		
No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			

No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00	2.00	
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	