Draft

Supplemental Environmental Impact Report

Southport Sacramento River Early Implementation Project

Prepared for:

West Sacramento Area Flood Control Agency

CITY OF WEST SACRAMENTO

September 2019

Prepared by:

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Draft
Supplemental Environmental Impact Report

Southport Sacramento River Early Implementation Project

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Abbreviations and Acronyms

2014 EIR	Southport Sacramento River EIP Final EIR certified in August 2014
AB	Assmbly Bill
ACHP	Advisory Council on Historic Preservation
ADT	averge daily trips
APE	Area of Potential Effects
BAAQMD	Bay Area Air Quality Management District
CAFE	Corporate Average Fuel Economy
CAP	Climate Action Plan
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CO2e	carbon dioxide equivalents
CRHR	California Register of Historical Resources-
CY	cubic yards
ECs	Environmental Commitments
EIP	Early Implementation Project
EIR	Environmental Impact Report
EOP	Emergency Operations Plan
ESA	Endangered Species Act
FHSZ	fire hazard severity zones
GHG	greenhouse gases
HSC	Health and Safety Code
I/BR-80	Interstate/Business Route-80
I-5	Interstate-5
M	metric tons
MM	million metric tons
MMT	million metric tons
MT	metric tons
NAHC	California Native American Heritage Commission
NOP	Notice of Preparation
NO_x	nitrous oxides
OPR	Office of Planning and Research
PM	particulate matter
PM_{10}	PM less than 10 microns in diameter

$PM_{2.5}$	less than 2.5 microns in diameter
PPU	Preserve Planning Unit
PRC	Public Resources Code
proposed project	use of the SRWTP Borrow Site
restoration sites	approximately 89.1 acres of Southport Sacramento River EIP borrow sites restored by the proposed project
SacOES	Sacramento Office of Emergency Services
SMAQMD	Sacarmento Metropolitan Air Quality Management District
SPCCP	Spill Prevention, Control, and Countermeasure Plan
SRCSD	Sacramento County Regional Sanitation District
SREL	North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSHCP	*South Sacramento Habitat Conservation Plan*
Supplemental EIR	Supplemental EIR for the use of the SRWTP Borrow Site contained within this document
SVAB	Sacramento Valley Air Basin
SWPPP	Stormwater Pollution Prevention Plan
UAIC	United Auburn Indian Community
VMT	vehicle miles travelled
WSAFCA	West Sacramento Area Flood Control Agency
YDWN	Yocha Dehe Wintun Nation
YSAQMD	Yolo-Solano Air Quality Management District

Executive Summary

ES.1. Project Summary

Background

The West Sacramento Area Flood Control Agency's (WSAFCA's) Southport Sacramento River Early Implementation Project (EIP) implements flood risk-reduction measures along the Sacramento River South Levee in the City of West Sacramento, Yolo County, California. The study area encompasses the area of levee risk-reduction measure construction along the river corridor, roadway construction and/or relocation, and potential soil borrow sites. The project brings the levee up to standard with Federal and State flood protection criteria, as well as providing opportunities for ecosystem restoration and public recreation. WSAFCA prepared an Environmental Impact Report (EIR) for the Southport Sacramento River EIP, which was certified in August 2014 (2014 EIR) (WSAFCA 2014). WSAFCA also prepared a Subsequent EIR for use of the Borrow One Site, to provide an additional location for sourcing borrow material during project construction, which was certified in April 2016 (WSAFCA 2016).

Construction of the Southport Sacramento River EIP features was substantially completed in 2018. Construction included excavation of borrow material from sites identified in the 2014 EIR in the City of West Sacramento to supply fill materials. WSAFCA has identified the need to import up to 600,000 cubic yards (CY) of material to restore approximately 89.1 acres of borrow sites excavated for the project to desired elevations and contours. Since construction of the project was completed in 2018, the borrow sites are currently disturbed and restoration as soon as possible is desired for many reasons, including erosion control and planned future uses of the sites.

Restoration of borrow sites is identified as a project activity in the 2014 EIR; however, potential borrow sites identified in the 2014 EIR were either subsequently used for project construction or are not currently available for sourcing fill material. Accordingly, fill material for restoration of the project borrow sites is proposed by WSAFCA to be sourced from surplus soil stockpiles at the Sacramento Regional Wastewater Treatment Plant (SRWTP; referred to as the SRWTP Borrow Site). WSAFCA has confirmed that the stockpiled soil there is of suitable quality for the proposed project and the quantity of material needed for the proposed project–up to 600,000 CY–is available. Use of the SRWTP Borrow Site (proposed project) was not specifically identified in the Southport Sacramento River EIP EIR or Subsequent EIR and is the subject of this Supplemental EIR.

Intended Uses and Purpose of the Supplemental EIR

The California Environmental Quality Act (CEQA) Guidelines state that the environmental analysis in an EIR must evaluate impacts associated with all phases of a proposed project, including construction and operation, and identify feasible mitigation measures that could minimize any potentially significant adverse impacts. These measures are to be fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines Section 15126.4[a]). Mitigation measures are not required for impacts that are found to be less than significant. CEQA Guidelines Section 15163 states that a lead agency may choose to prepare a Supplemental EIR when only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. The Supplemental EIR need contain only the information necessary to make the previous EIR adequate

for the project as revised. This Supplemental EIR revisits each resource topic from the 2014 EIR, including cumulative effects, to determine if the proposed project would result in new or substantially more severe significant effects that were not analyzed in the 2014 EIR. As necessary, this document updates or expands upon impact discussions in the 2014 EIR to evaluate inclusion of the proposed project and describes any new impacts attributable to the proposed project. When WSAFCA decides whether to approve the project, the Board shall consider the 2014 EIR as revised by the Supplemental EIR. Therefore, the WSAFCA Board will ultimately consider the Supplemental EIR in combination with the 2014 EIR.

Objectives

The proposed project objectives are to:

- Restore the Southport Sacramento River EIP borrow sites to land elevations and contours desired by the landowners.
- Restore the Southport Sacramento River EIP borrow sites as soon as possible to fulfill previously executed landowner agreements.
- Source borrow material of suitable quality, condition, and quantity to restore the Southport Sacramento River EIP borrow sites.
- Avoid or minimize to the extent possible additional land disturbances and restoration requirements for sourcing of new borrow material.

The project objectives are focused on completing restoration of areas disturbed by the Southport Sacramento River EIP to satisfy commitments to landowners. Since construction of the project was completed in 2018, the borrow sites are currently disturbed and restoration is desired as soon as possible for several reasons, including landowner commitments, erosion control, site safety, and planned future uses of the sites.

Proposed Project

Project Location

The SRWTP Borrow Site is located approximately 1.5 miles east of Interstate 5 (I-5) at the intersections of Dwight Road and Simms Road in unincorporated Sacramento County, California. This borrow site consists of approximately 40 acres of surplus soil stockpiles at the southeast end of the SRWTP property. Soil from the SRWTP Borrow Site would be transported approximately 19.5 miles to the Southport Sacramento River EIP site. The Southport Sacramento River EIP Site consists of areas located along the Sacramento River South Levee and borrow sites east of Jefferson Boulevard in the City of West Sacramento, Yolo County, California, including the approximately 89.1 acres of borrow sites to be restored (referred to as the restoration sites) by the proposed project (Figure ES-1).

Figure ES-1. Southport Sacramento River EIP Site and SRWTP Borrow Site

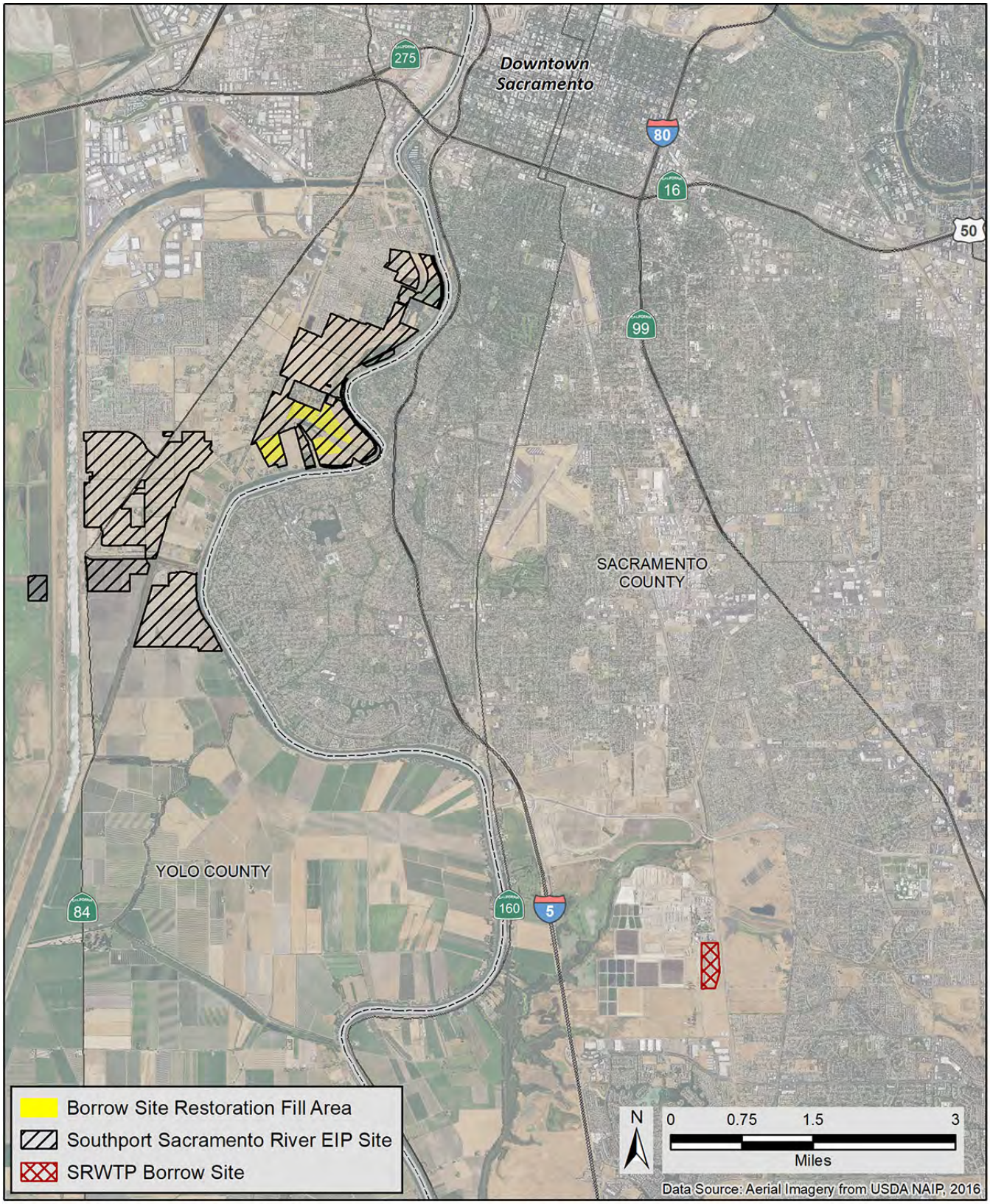

Figure Source: GEI Consultants, Inc. 2019

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Source: GEI Consultants, Inc., 2019

2014 EIR Coverage

WSAFCA has identified the need to import up to 600,000 CY of material to restore borrow sites excavated for the project to desired elevations and contours. The 2014 EIR covered importing up to 2,400,000 CY of fill material and thus no additional material beyond what was previously identified is needed for the proposed project. Grading of fill material to desired elevations and contours will occur within the boundaries of the borrow site parcels identified in the 2014 EIR. The Southport Sacramento River EIP EIR identifies excavation of borrow material from sites within and adjacent to the project site in the City of West Sacramento and from offsite sources up to 20 miles away; however, specific borrow sites were not identified. Without known quantities of material or borrow site locations, the 2014 EIR did not analyze the impacts of sourcing borrow material from offsite sources.

In summary, the following activities associated with the proposed project are covered by the 2014 EIR:

- Disturbance, grading, stockpiling and restoration of topsoil, and revegetation of Southport Sacramento River EIP borrow sites, including the approximately 89.1 acres to be restored by the proposed project.
- Importation of fill material for restoration of Southport Sacramento River EIP borrow sites.
- Truck hauling along 7 miles in the City of West Sacramento, on hauling routes shown on Plate 3.4-1 of the 2014 EIR.

These activities are discussed in the Supplemental EIR where necessary to describe and understand the proposed project. These activities are not considered in Section 3 "Environmental Setting and Impact Analysis" unless noted, such as in Section 3.3.4 "Transportation and Navigation," Section 3.3.6 "Air Quality," and Section 3.3.6 "Climate Change".

Supplemental EIR Scope

The SRWTP Borrow Site is within 20 miles of the Southport Sacramento River EIP; however, the 2014 EIR did not consider use of this specific location and potential impacts from sourcing borrow material at the site and transporting it to the restoration site, which are addressed in this Supplemental EIR. The SRWTP contains approximately 40 acres of surplus soil stockpiles available for use by WSAFCA. The Sacramento County Regional Sanitation District (SRCSD) is stockpiling excess soil excavated from the ongoing EchoWater Project at the SRWTP. Therefore, use of these stockpiles would not result in new ground disturbance. WSAFCA has confirmed soil is of suitable quality for the proposed project and the quantity of material needed for the proposed project–up to 600,000 CY–is available. Use of the SRWTP Borrow Site includes excavation of stockpiled soil, management of stockpiles, and hauling of soil to the Southport Sacramento River EIP borrow sites for restoration.

Construction Activities

This section discusses construction activities for use of the SRWTP Borrow Site and activities associated with use of the restoration sites and covered in the 2014 EIR. Construction activities would consist of: site preparation and mobilization at the SRWTP Borrow Site and restoration sites; hauling, temporary stockpiling, grading and placement of borrow material at the restoration site; hydroseeding and/or other site stabilization after restoration is complete at the restoration sites; and demobilization of equipment at the SRWTP Borrow Site and the restoration site. The SRWTP Borrow Site does not require restoration, just grading to provide proper drainage and site stabilization after removal of the

surplus material, since this area is part of ongoing construction activities at the SRWTP which are overseen by the SRCSD.

WSAFCA has identified an approximately 19.5-mile truck hauling route from the SRWTP to the restoration sites. Trucks would access the SRWTP Borrow Site via I-5, Laguna Boulevard, and Dwight Road in the City of Elk Grove. Haul routes in the City of Elk Grove were determined in coordination with the City of Elk Grove and no other routes are allowed for the proposed project. The restoration sites would then be accessed from I-5, to Interstate/Business Route (I/BR-80), and then Jefferson Boulevard, Gregory Avenue, and Village Parkway in the City of West Sacramento.

Approximately 60 haul trucks will be used to transport the borrow material. At 15 CY per truck load, an estimated 40,000 one-way truck trips are required to haul up to 600,000 CY of fill material. Construction equipment used at the SRWTP Borrow Site for site preparation, soil excavation, stockpile management, and haul truck loading consist of: 1 Excavator, 1 Street Sweeper, and 1 Water Truck, 1 Cat. Crawler Tractor. Construction equipment used at the restoration sites for grading of fill material and other restoration activities consist of: 2 Cat. D6LGP Crawler Tractor, 1 Cat 14H Motor Grader, 1 Street sweeper, and 1 4K water truck. Up to 80 workers will be needed for project activities, each day, including drivers for each of the 60 haul trucks and additional laborers at the SRWTP Borrow Site and restoration sites.

The proposed project would begin in early 2020. Project activities would occur during a 10-hour shift, Monday to Friday, and potentially during an 8-hour shift on Saturdays. On Saturdays, construction would typically occur during daytime hours from 8am to 5pm, and from Monday to Friday, may begin as early as 4 a.m. to 3 p.m. or be conducted at night to avoid peak traffic hours, but would not exceed 10 hours per day. The intensive construction scenario used in this Supplemental EIR assumes construction activities could be completed in 5 months.

Environmental Commitments

Environmental Commitments (ECs) in the 2014 EIR are measures proposed as elements of the project and are considered in the impact analysis and determination of an impacts level of significance before mitigation measures. ECs from the 2014 EIR applicable to the proposed project are identified in **Table ES-1**, along with any amendments to the measures for the proposed project.

Table ES-1. Proposed Project ECs

2014 EIR Section	EC Name
2.4.1	Nesting or Roosting Raptors Survey
2.4.3	Invasive Plant Species Prevention
2.4.4	Noise Reducing Construction Practices
2.4.6	Traffic Control and Road Maintenance Plan
2.4.7	Coordination to Ensure Minimal Overlap in Disturbances to Traffic during Construction
2.4.12	Stormwater Pollution Prevention Plan (SWPPP)
2.4.14	Spill Prevention, Control, and Countermeasure Plan (SPCCP)
n/a - *new EC*	*Basic Construction Emission Control Practices*
n/a - new EC	*Comply with SRWTP Hazardous Waste Management Procedure*

Note: Full text of ECs from the 2014 EIR is provided in Section 2.4 of the 2014 EIR.

The Soil Supply Protection Measures EC in 2014 EIR Section 2.4.17 states that WSAFCA's first choice for borrow material shall be potential borrow sites identified in the 2014 EIR (on EIR Plate 1-5). WSAFCA has determined that borrow sites shown on Plate 1-5 of the 2014 EIR, or the Borrow One Site covered in a 2016 Subsequent EIR, either were used during construction of the Southport Sacramento River EIP features (i.e., the borrow sites restored by the proposed project), do not have suitable fill material, or are otherwise not available. Since borrow material is not available from any of the borrow sites shown on Plate 1-5 of the 2014 EIR, use of the SRWTP Borrow Site is compliant with this EC.

ES.2. Alternatives

As required by CEQA, this EIR considers the No Project Alternative and five alternatives to the proposed project in Chapter 5, "Alternatives Analysis". The 2014 EIR identifies several alternatives to the Southport Sacramento River EIP levee components but does not identify borrow site alternatives. Instead, the 2014 EIR includes large areas of undeveloped lands in the City of West Sacramento as offsite options for potential borrow sites (refer to Plate 1-5 in the 2014 EIR). Furthermore, the 2014 EIR identifies commercial sources within 20 miles as potential offsite sources of borrow material, and as such, it was anticipated in the 2014 EIR that locations such as the SRWTP Borrow Site may be needed to source the quantity of fill material needed for the Southport Sacramento River EIP.

Alternatives Considered:

No Project Alternative

Under the No Project Alternative, the SRWTP would not be used as a source of 600,000 CY of fill material for restoration of the Southport Sacramento River EIP borrow sites. Borrow material that would have been obtained from the SRWTP site would instead need to be sourced from borrow sites identified in the 2014 EIR or from the Borrow One Site, covered in the 2016 Subsequent EIR. These borrow sites either were used during construction of the Southport Sacramento River EIP features (i.e., the borrow sites restored by the proposed project), do not have suitable fill material, or are otherwise not available. The approved Yarbrough project site in the City of West Sacramento is within the borrow areas identified in the 2014 EIR on Plate 1-5. The property owner has speculated that soil beneath the proposed excavation limits of lakes on the project site (greater than 11 feet deep) may be suitable for use as borrow material. However, WSAFCA is not pursuing the Yarbrough property because the presence of suitable soil is speculative and all or a portion of borrow material required for restoration (i.e., 600,000 CY) may still need to be sourced from other locations; and due to the timeline for property approvals, construction, Section 106 compliance, and the potential need to source additional borrow material after excavation of the lakes, pursuing this option would substantially extend the schedule for restoration of the borrow sites and delay satisfying restoration commitments in landowner agreements. Therefore, under the No Project Alternative, the fill material would not be available to complete restoration and the project borrow sites would remain in their present disturbed condition and well below grade of adjacent lands, and WSAFCA would not fulfill commitments with landowners for restoration of these sites.

Daytime Construction Only

This alternative would be the same as the proposed project except construction activities would be limited to daytime hours and use of high-powered lighting at night would not be required at the restoration sites. This alternative would be consistent with the 2014 EIR analysis and implementation of Mitigation Measure VIS-MM-3 from the 2014 EIR which limits construction to the hours of 7 a.m. to 6 p.m. to avoid introducing high-wattage lighting sources near residences. This alternative would meet the basic objectives of the proposed project; however, hauling would not avoid peak traffic hours, and

therefore, it is anticipated fewer hauling trips would be completed each day, resulting in more time needed to complete restoration activities compared to the proposed project. One of the project objectives is to complete restoration as soon as possible to fulfill previously executed landowner agreements. This alternative would satisfy this objective to a lesser extent than the proposed project. This alternative would result in the same potential impacts as the proposed project except for Effect VIS-1, which would be reduced to a less-than-significant level since construction would not occur at night and use of high-powered lighting near sensitive receptors is not required.

Alternatives Considered and Dismissed:

Each of these alternatives is described briefly below, along with the specific reasons for dismissal.

SRWTP Borrow Site Two Daily Hauling Shifts

This alternative would involve use of the SRWTP Borrow Site with two daily 8-hour hauling shifts (16 hours per day total) to conduct the proposed project activities–excavating fill material, hauling material to the Southport Sacramento River EIP borrow sites, and conducting restoration activities. Under this alternative, proposed project activities at the SRWTP, restoration sites, and on haul routes would occur each night. With this alternative, it is anticipated construction activities could be completed in approximately four to five months (compared to five to eight months under the proposed project) and previously executed agreements with landowners to restore borrow sites would be fulfilled sooner.

This alternative was dismissed because it would not avoid or substantially reduce one or more significant impacts of the proposed project, and instead, results in greater significant impacts than the proposed project due to NOx and GHG emissions.

SRWTP Borrow Site Shorter Hauling Route

This alternative would involve use of the SRWTP Borrow Site with one daily 8-hour hauling shift using a shorter hauling route. Most alternative hauling routes use different local roadways and are a similar distance to the route chosen for the proposed project; and therefore, are not substantially different than the proposed project. One shorter route exists, crossing the Sacramento River along the Freeport Bridge and approaching the restoration sites from the south instead of the north. This route is approximately 14.1 miles–5.4 miles (28%) shorter than the route for the proposed project. The Freeport Bridge over the Sacramento River is a moveable bridge designed to be convenient for vessel traffic in the river. The bridge operates from 9am to 5pm between May 1 and October 31 and is subject to open on 4-hours of notice between November 1 and April 30 (Sacramento County 2019a). Therefore, there would likely be periods where the bridge is inaccessible to hauling trucks. Furthermore, in 2016, Sacramento County designated the Freeport Bridge as poor and structurally deficient and requiring “replacement of bridge or other structure because of substandard load carrying capacity or substandard bridge roadway geometry” (Sacramento County 2019b). In addition, South River Road in Yolo County is not in a condition that would be able to handle the large number of truck haul trips required to haul material to and from the borrow restoration sites. Hauling on this roadway could cause impacts requiring road repairs. In past coordination with Yolo County staff for construction of the Southport Sacramento River EIP, WSAFCA was discouraged from use of South River Road as a haul route for material delivery. For these reasons, use of the Freeport Bridge and the shorter hauling route under this alternative was determined to be infeasible.

Nearby Terrestrial Borrow Sites Not Identified in the 2014 EIR

This alternative involves use of terrestrial borrow sites not identified in the 2014 EIR or the Borrow One Site, covered in the 2016 Supplemental EIR. Hauling would occur during a single, 8-hour daily shift, similar to the proposed project. To substantially reduce the significant impacts of the proposed project from hauling, borrow sites under this alternative would need to be located substantially closer to the restoration sites than the SRWTP Borrow Site. The volume of material available from other nearby terrestrial borrow sites is not guaranteed ahead of time; and due to the large quantity of material needed for the proposed project, this alternative is considered speculative and potentially infeasible. Even if feasible, this alternative would take considerable time to develop and would result in new disturbances and potentially restoration requirements and would not meet the basic project objectives.

Use of Dredged Material

This alternative would consist of using materials newly dredged from the Sacramento River Deep Water Ship Channel or other local channels and marinas around the City of West Sacramento during routine maintenance and at new locations. New dredging would likely be needed for this alternative, as it is unlikely previously dredged material of the large quantity needed for the proposed project is available. Hauling would occur during a single, 8-hour daily shift, similar to the proposed project. However, the potential locations for receiving dredged material are closer to the restoration sites than the SRWTP Borrow Site and would likely reduce the hauling distance compared to the proposed project. The volume of material produced during dredging is not guaranteed ahead of time; and due to the large quantity of material needed for the proposed project, this alternative is considered speculative and potentially infeasible. Even if feasible, this alternative would take considerable time to develop and would result in new disturbances and potentially restoration requirements and would not meet the basic project objectives.

Environmentally Superior Alternative

CEQA requires identification of the environmentally superior alternative; that is, the alternative that has the least significant impacts on the environment. As presented in Chapter 2, implementation of the proposed project would result in less than significant environmental impacts with mitigation incorporated. As discussed in Section 5.2, the No Project Alternative would have the least significant impacts on the environment because no material would be borrowed or hauled; however, this alternative does not meet the project objectives. Therefore, because the proposed project would result in fewer environmental impacts than the other infeasible alternatives, and meets all project objectives, it would be the environmentally superior alternative.

ES.3. Issues to be Resolved and Areas of Controversy

Potentially controversial issues that may arise in the development and execution of the project are related to construction activities. As the restoration site is close to residential areas, the large amount of fill material and related hauling actions proposed by the project are likely to result in construction-related effects. These effects include those under the topics of visual resources, noise, air quality, and climate change and are specifically described in Chapter 3.

ES.4. Summary of Project Impacts and Mitigation Measures

Table ES-2 provides a summary of effects and mitigation measures for the proposed project, which are fully analyzed and discussed in Chapter 3, "Environmental Setting and Impact Analysis". Within each section of Chapter 3, as shown in **Table ES-2**, the effects are listed numerically and sequentially throughout each section and are compared to the effect conclusion from the 2014 EIR. An effect statement precedes the discussion of each effect and provides a summary of the effect topic. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant effects accompany each effect discussion.

Similar to the effect descriptions, mitigation measures are listed numerically and sequentially throughout each section. The numbering system provides a mechanism for tracking unique effects and mitigation measures by resource area, using an acronym for each resource (e.g., Air Quality is shortened to AIR Recreation to REC). The effects are identified, for example, as "AIR-1", and the mitigation measures as "AIR-MM-1", etc.

Each effect is accompanied by a finding or conclusion, as required under CEQA, defined below:

No Effect. This effect would cause no discernible change in the environment as measured by the applicable significance criterion; therefore, no mitigation would be required.

Less than Significant. This effect would cause no substantial adverse change in the environment as measured by the applicable significance criterion; therefore, no mitigation would be required under CEQA but there may be mitigation per other environmental regulations.

Significant. This effect would cause a substantial adverse change in the physical conditions of the environment. Effects determined to be significant based on the significance criteria fall into two categories: those for which there is feasible mitigation available that would avoid or reduce the environmental effects to less-than-significant levels and those for which either there is no feasible mitigation available or for which, even with implementation of feasible mitigation measures, there would remain a significant adverse effect on the environment. Those effects that cannot be reduced to a less-than-significant level by mitigation are identified as significant and unavoidable, described below.

Significant and Unavoidable. This effect would cause a substantial adverse change in the environment that cannot be avoided or mitigated to a less-than-significant level if the project is implemented. Even if the effect finding still is considered significant with the application of mitigation, the applicant is obligated to incorporate all feasible measures to reduce the severity of the effect.

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Table ES-2. Summary of Project Impacts and Mitigation Measures

Effect	2014 EIR				Supplemental EIR			
	Impact Findings		With Mitigation	Mitigation measure	Proposed Project Impact Finding		With Mitigation	Mitigation Measure
	Direct	Indirect			Direct	Indirect		
TRA-1: Temporary Increase in Traffic Volumes from Construction-Generated Traffic	Significant and unavoidable	No effect	Not applicable	None	Less Than Significant	No effect	Not applicable	None proposed.
AIR-2: Violate Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation—CEQA	Significant	No effect	Significant and unavoidable	AIR-MM-1: Implement Measures to Reduce Exhaust Emissions of NOX and PM10 AIR-MM-2: Implement Fugitive Dust Control Plan AIR-MM-3: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents AIR-MM-4: Mitigate and Offset Construction-Generated NOX Emissions to Net Zero (0) for Emissions in Excess of General Conformity de Minimis Threshold (Where Applicable) and to Quantities below Applicable YSAQMD and SMAQMD CEQA Thresholds AIR-MM-5: Mitigate and Offset Construction-Generated NOX Emissions to Quantities below Applicable BAAQMD CEQA Thresholds	Potentially Significant	No effect	Less than Significant	AIR-MM-6: Reduce Construction Related Exhaust Emissions in SMAQMD AIR-MM-7: Off-Site NOx Construction Mitigation Fees in SMAQMD
AIR-4: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region is a Non- Attainment Area under NAAQS and CAAQS	Significant	No effect	Significant and unavoidable	AIR-MM-1: Implement Measures to Reduce Exhaust Emissions of NOX and PM10 AIR-MM-2: Implement Fugitive Dust Control Plan AIR-MM-3: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents AIR-MM-4: Mitigate and Offset Construction-Generated NOX Emissions to Net Zero (0) for Emissions in Excess of General Conformity de Minimis Threshold (Where Applicable) and to Quantities below Applicable YSAQMD and SMAQMD CEQA Thresholds AIR-MM-5: Mitigate and Offset Construction-Generated NOX Emissions to Quantities below Applicable BAAQMD CEQA Thresholds	Potentially Significant	No effect	Less than Significant	AIR-MM-6: Reduce Construction Related Exhaust Emissions in SMAQMD AIR-MM-7: Off-Site NOx Construction Mitigation Fees in SMAQMD
AIR-5: Expose Sensitive Receptors to Substantial Fugitive Dust Concentrations	No effect	Significant	Less than significant	AIR-MM-2: Implement Fugitive Dust Control Plan	Less Than Significant	No effect	Not applicable	None proposed.
AIR-6: Expose Sensitive Receptors to Substantial Diesel Particulate Matter Concentrations	No effect	Less than significant	Less than significant	AIR-MM-1: Implement Measures to Reduce Exhaust Emissions of NOX and PM10	Less Than Significant	No effect	Not applicable	None proposed.
CC-1: Generate GHG Emissions That May Have a Significant Effect on the Environment	No effect	Less than significant	Less than significant	CC-MM-1: Implement Measures to Minimize GHG Emissions during Construction	Potentially Significant	No effect	Less than Significant	CC-MM-2: Implement SMAQMD Construction GHG Emissions Reduction Best Management Practices CC-MM-3: Off-Site GHG Construction Mitigation Credits
CC-2: Conflict with an Applicable Plan, Adopted for the Purpose of Reducing GHG Emissions	No effect	Less than significant	Not applicable	None proposed.	Potentially Significant	Potentially Significant	Less than significant	CC-MM-2: Implement SMAQMD Construction GHG Emissions Reduction Best Management Practices CC-MM-3: Off-Site GHG Construction Mitigation Credits

Table ES-2. Summary of Project Impacts and Mitigation Measures

Effect	2014 EIR				Supplemental EIR			
	Impact Findings		With Mitigation	Mitigation measure	Proposed Project Impact Finding		With Mitigation	Mitigation Measure
	Direct	Indirect			Direct	Indirect		
NOI-1: Exposure of Sensitive Receptors to Temporary Construction-Related Noise	Significant	No effect	Significant and Unavoidable	NOI-MM-1: Employ Noise-Reducing Construction Practices	Less Than Significant	No effect	Less Than Significant	None proposed
NOI-2: Exposure of Sensitive Receptors to Temporary Construction-Related Vibration	Significant	No effect	Significant and Unavoidable	NOI-MM-2: Employ Vibration-Reducing Construction Practices	Less Than Significant	No effect	Less Than Significant	None proposed
NOI-3: Exposure of Sensitive Receptors to Traffic Noise from the Extension of Village Parkway	Significant	No effect	Not applicable	M.M. 4-8-1 from the Southport Framework Plan draft EIR.	No Impact	No effect	Not applicable	None proposed
WILD-5: Disturbance or Loss of Western Burrowing Owl and Their Habitat	Significant	No effect	Less than significant	VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel WILD-MM-10: Conduct Preconstruction Surveys for Active Burrowing Owl Burrows and Implement the 2012 California Department of Fish and Game Guidelines for Burrowing Owl Mitigation, If Necessary WILD-MM-11: Coordinate with Resource Agencies and Develop an Appropriate Compensation Plan for Burrowing Owl	Potentially Significant	No effect	Less than significant	VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel WILD-MM-10: Conduct Preconstruction Surveys for Active Burrowing Owl Burrows and Implement the 2012 California Department of Fish and Game Guidelines for Burrowing Owl Mitigation, If Necessary WILD-MM-11: Coordinate with Resource Agencies and Develop an Appropriate Compensation Plan for Burrowing Owl
WILD-6: Loss or Disturbance of Tree-, Shrub-, and Ground- Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors	Significant	Significant	Less than significant	VEG-MM-1: Compensate for the Loss of Woody Riparian Habitat VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel WILD-MM-8: Avoid Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors and Conduct Preconstruction Nesting Bird Surveys	Potentially Significant	No effect	Less than significant	VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel WILD-MM-8: Avoid Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors and Conduct Preconstruction Nesting Bird Surveys
VIS-1: Result in Temporary Visual Effects from Construction	Significant	No effect	Significant and Unavoidable	VIS-MM-1: Use Native Wildflower Species in Erosion Control Grassland Seed Mix VIS-MM-2: Develop a Soil Borrow Strategy and Site Reclamation Plan VIS-MM-3: Limit Construction near Residences to Daylight Hours	Potentially Significant	No effect	Less than significant	VIS-MM-4: Limit Use of Lighting Nearby Sensitive Receptors During Construction Activities at Night
VIS-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings	Significant and Unavoidable	No effect	Not applicable	None proposed	Less than significant	No effect	Not applicable	None proposed
UTL-5: Increase in Emergency Response Times during Project Construction	Less than Significant	No effect	Not applicable	None proposed	Less than Significant	No effect	Not applicable	None proposed
HAZ-1: Incidental Release of Hazardous Materials during Construction	Less than Significant	Less than Significant	Not applicable	None proposed	Less than Significant	No effect	Not applicable	None proposed
CUL-1: Potential Damage to or Destruction of Previously Undiscovered Tribal Cultural Resources*	Not applicable	Not applicable	Not applicable	Not applicable	Potentially Significant	No effect	Less than significant	CUL-MM-1: Implement Avoidance, Minimization, and Preservation Measures Should Tribal Cultural Resources Be Discovered During Construction

Note: *Analysis of Tribal Cultural Resources was not required under CEQA when the 2014 EIR was prepared. Thus, there are no impacts or mitigation measures listed for this resource in the 2014 EIR.

Chapter 1. Introduction

1.1 Project Background

The West Sacramento Area Flood Control Agency's (WSAFCA's) Southport Sacramento River Early Implementation Project (EIP) implements flood risk-reduction measures along the Sacramento River South Levee in the City of West Sacramento, Yolo County, California. The study area encompasses the area of levee risk-reduction measure construction along the river corridor, roadway construction and/or relocation, and potential soil borrow sites. The project brings the levee up to standard with Federal and State flood protection criteria, as well as providing opportunities for ecosystem restoration and public recreation. WSAFCA prepared an Environmental Impact Report (EIR) for the Southport Sacramento River EIP, which was certified in August 2014 (2014 EIR) (WSAFCA 2014). WSAFCA also prepared a Subsequent EIR for use of the Borrow One Site, to provide an additional location for sourcing borrow material during project construction, which was certified in April 2016 (WSAFCA 2016).

Construction of the Southport Sacramento River EIP features was substantially completed in 2018. Construction involved excavation of borrow material from sites identified in the 2014 EIR in the City of West Sacramento to supply fill materials. WSAFCA has identified the need to import up to 600,000 cubic yards (CY) of material to restore approximately 89.1 acres of borrow sites excavated for the project to desired elevations and contours. Since construction of the project was completed in 2018, the borrow sites are currently disturbed and restoration as soon as possible is desired for many reasons, including erosion control and planned future uses of the sites.

Restoration of borrow sites is identified as a project activity in the 2014 EIR; however, potential borrow sites identified in the 2014 EIR were either used for project construction or are not currently available for sourcing fill material. Accordingly, fill material for restoration of the project borrow sites is proposed by WSAFCA to be sourced from surplus soil stockpiles at the Sacramento Regional Wastewater Treatment Plant (SRWTP; referred to as the SRWTP Borrow Site). WSAFCA has confirmed soil is of suitable quality for the proposed project and the quantity of material needed for the proposed project–up to 600,000 CY–is available. Use of the SRWTP Borrow Site (proposed project) was not identified in the Southport Sacramento River EIP EIR or Subsequent EIR and is the subject of this Supplemental EIR.

1.2 Intended Uses and Purpose of the Supplemental EIR

The California Environmental Quality Act (CEQA) Guidelines state that the environmental analysis in an EIR must evaluate impacts associated with all phases of a proposed project, including construction and operation, and identify feasible mitigation measures that could minimize any potentially significant adverse impacts. These measures are to be fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines Section 15126.4[a]). Mitigation measures are not required for impacts that are found to be less than significant. CEQA Guidelines Section 15163 states that a lead agency may choose to prepare a Supplemental EIR when only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. The Supplemental EIR need contain only the information necessary to make the previous EIR adequate for the project as revised. This Supplemental EIR revisits each resource topic from the 2014 EIR,

including cumulative effects, to determine if the proposed project would result in new or substantially more severe significant effects that were not analyzed in the 2014 EIR. As necessary, this document updates or expands upon impact discussions in the 2014 EIR to evaluate inclusion of the proposed project and describes any new impacts attributable to the proposed project. When WSAFCA decides whether to approve the project, the board shall consider the 2014 EIR as revised by the Supplemental EIR. Therefore, the WSAFCA Board will ultimately consider the Supplemental EIR in combination with the 2014 EIR.

1.3 Public Involvement Process

1.3.1 Scoping Comment Period

Community outreach efforts related to the Southport Sacramento River EIP are detailed in the 2014 EIR. To initiate preparation of this Supplemental EIR, in accordance with State CEQA Guidelines (14 CCR 15082[a], 15103, 15375), WSAFCA circulated a Notice of Preparation (NOP) of a Supplemental EIR for the proposed project on July 12, 2019 (provided as Appendix A). The NOP, in which WSAFCA was identified as lead agency for the proposed project, was circulated to the public; State Clearinghouse; responsible, trustee, and other relevant local, State, and Federal agencies; and to the Yolo County Clerk. The NOP was circulated to the Sacramento County Clerk on July 29, 2019. The scoping period began July 12, 2019 and ended August 27, 2019, except in Sacramento County where the 30-day scoping period begin July 29, 2019 and ended August 27, 2019. A scoping meeting was held on August 14, 2019, at the West Sacramento City Hall Galleria. The NOP and scoping meeting provided opportunity for comment from public agencies, stakeholders, organizations, and interested individuals on the scope of the environmental analysis addressing the potential effects of the proposed project. During the scoping period, five public and agency responses were received. WSAFCA reviewed and considered all public comments in preparing this Subsequent EIR.

1.3.2 Draft EIR Supplemental Comment Period

WSAFCA is now circulating this Draft Supplemental EIR for a 45-day public review and comment period and will host a public meeting during this period. The purpose of public circulation and the public meeting are to provide agencies and interested individuals with opportunities to comment on the contents of the Draft Supplemental EIR.

For those interested, written comments or questions concerning this Draft Supplemental EIR should be submitted within this review period and directed to the name and address listed below, either via postal mail or email. Please submit your response at the earliest possible date, but no later than 45 days from release of the Draft Supplemental EIR.

Greg Fabun
West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, California 95691
gregf@cityofwestsacramento.org

All documents mentioned herein or related to this project can be reviewed on any WSAFCA business day between the hours of 8:00 a.m. and 3:30 p.m., Monday through Friday, at the WSAFCA's offices, located at 1110 West Capitol Avenue, 2nd Floor, West Sacramento, California, 95691. Please contact

Mr. Greg Fabun at 916.617.4855 to request the documents you wish to review and to arrange a date and a time for review. Documents can also be viewed at:

https://www.cityofwestsacramento.org/government/departments/community-development/flood-protection/southport-eip/environmental-studies

Written comments received in response to the Draft Supplemental EIR will be addressed in a Response to Comments in the Final Supplemental EIR, which, together with the Draft Supplemental EIR, will constitute the entire Supplemental EIR.

1.4 Issues to be Resolved and Areas of Controversy

Potentially controversial issues that may arise in the development and execution of the project are related to construction. As the restoration site is close to residential areas, the large amount of fill material and related hauling actions proposed by the project are likely to result in construction-related effects. These effects include those under the topics of visual resources, noise, air quality, and climate change and are specifically described in Chapter 3.

1.5 Tribal Consultation

Tribal consultation efforts related to the Southport Sacramento River EIP are detailed in the 2014 EIR. Since certification of the 2014 EIR, Assembly Bill (AB) 52 (Chapter 532, California Statutes of 2014) established a formal consultation process for California tribes as part of the CEQA review process and equates significant impacts on "tribal cultural resources" with significant environmental impacts (new Public Resources Code [PRC] Section 21084.2). AB 52 became law on January 1, 2015, and applies to projects that have a NOP or notice of negative declaration/mitigated negative declaration filed on or after July 1, 2015. The United Auburn Indian Community (UAIC) and Yocha Dehe Wintun Nation (YDWN) previously requested notice from WSAFCA for AB52 consultation on the proposed project. The AB52 consultation letter for the proposed project was circulated to UAIC on July 10, 2019, and to YDWN on July 15, 2019.

1.6 Organization of this EIR

This Draft Supplemental EIR contains the following components:

Executive Summary. A summary of the Proposed Project, a description of the issues of concern, Project alternatives, and a summary of environmental impacts are provided in this chapter.

Chapter 1, Introduction. This chapter describes the Southport Sacramento River EIP background, intended uses and purpose of the Supplemental EIR, public involvement, tribal consultation, and organization of the Supplemental EIR.

Chapter 2, Project Description. This chapter summarizes the proposed project, including a description of the project objectives; components covered by the Southport Sacramento River EIP EIR; new components subject to environmental analysis in the Supplemental EIR; a brief description of the proposed project site; construction activities; proposed project implementation and oversight; Environmental Commitments (ECs) from the Southport Sacramento River EIP that are applicable to the proposed project; and related permits and approvals.

Chapter 3, Environmental Setting and Impact Analysis. Chapter 3 includes 16 subchapters that describe existing environmental conditions of new proposed project locations and for areas where conditions have changed since preparation of the Southport Sacramento River EIP EIR and anticipated environmental impacts of the proposed project which are new or have changed from those in the Southport Sacramento River EIP EIR. The introduction to Chapter 3 discusses potential impacts of the proposed project that have not changed from the Southport Sacramento River EIP and are not evaluated further in Chapter 3. The following resource topics are addressed in Chapter 3:

- Water Quality and Groundwater Resources
- Geology, Seismicity, Soils and Mineral Resources
- Transportation and Navigation
- Air Quality
- Climate Change
- Noise
- Vegetation and Wetlands
- Wildlife
- Visual Resources
- Land Use and Agriculture
- Utilities and Service Systems
- Public Health and Environmental Hazards
- Cultural Resources
- Energy
- Wildfire
- Tribal and Cultural Resources

Chapter 4, Other Statutory Considerations. Addressing the proposed project's potential to contribute to cumulative impacts in the project's region, Chapter 4 outlines the proposed project's potential to induce growth and identifies significant, irreversible environmental changes resulting from the project.

Chapter 5, Alternatives Analysis. This chapter describes the process through which alternatives to the proposed project were developed and screened, evaluates their likely environmental impacts, and identifies the environmentally superior alternative.

Chapter 6, Report Preparation. This is a list of the individuals involved in preparing the EIR and their responsibilities.

Appendix A Notice of Preparation and Public Comments – August 2019

Appendix B Air Pollutant and Greenhouse Gas Emissions Modelling

Chapter 2. Project Description

The proposed project would not change the components or operations and maintenance of the Southport Sacramento River EIP; and therefore, this information can be found in the 2014 EIR and is not addressed further in this Supplemental EIR. This Supplemental EIR will focus only on the SRWTP Borrow Site and associated haul route as the "project".

2.1 Project Location

The SRWTP Borrow Site is located approximately 1.5 miles east of Interstate 5 (I-5) at the intersections of Dwight Road and Simms Road in unincorporated Sacramento County, California (**Figure 2-1**). This borrow site consists of approximately 40 acres of surplus soil stockpiles at the southeast end of the SRWTP property. Soil from the SRWTP Borrow Site would be transported approximately 19.5 miles to the Southport Sacramento River EIP site. The Southport Sacramento River EIP Site consists of areas located along the Sacramento River South Levee and borrow sites east of Jefferson Boulevard in the City of West Sacramento, Yolo County, California, including the approximately 89.1 acres of borrow sites to be restored (referred to as the restoration sites) by the proposed project (Figure 2-1).

2.2 Project Objectives

The proposed project objectives are to:

- Restore the Southport Sacramento River EIP borrow sites to land elevations and contours desired by the landowners.
- Restore the Southport Sacramento River EIP borrow sites as soon as possible to fulfill previously executed landowner agreements.
- Source borrow material of suitable quality, condition, and quantity to restore the Southport Sacramento River EIP borrow sites.
- Avoid or minimize to the extent possible additional land disturbances and restoration requirements for sourcing of new borrow material.

The project objectives are focused on completing restoration of areas disturbed by the Southport Sacramento River EIP to satisfy commitments to landowners. Since construction of the project was completed in 2018, the borrow sites are currently disturbed and restoration is desired as soon as possible for several reasons, including landowner commitments, erosion control, site safety, and planned future uses of the sites.

Figure 2-1. Southport Sacramento River EIP Site and SRWTP Borrow Site

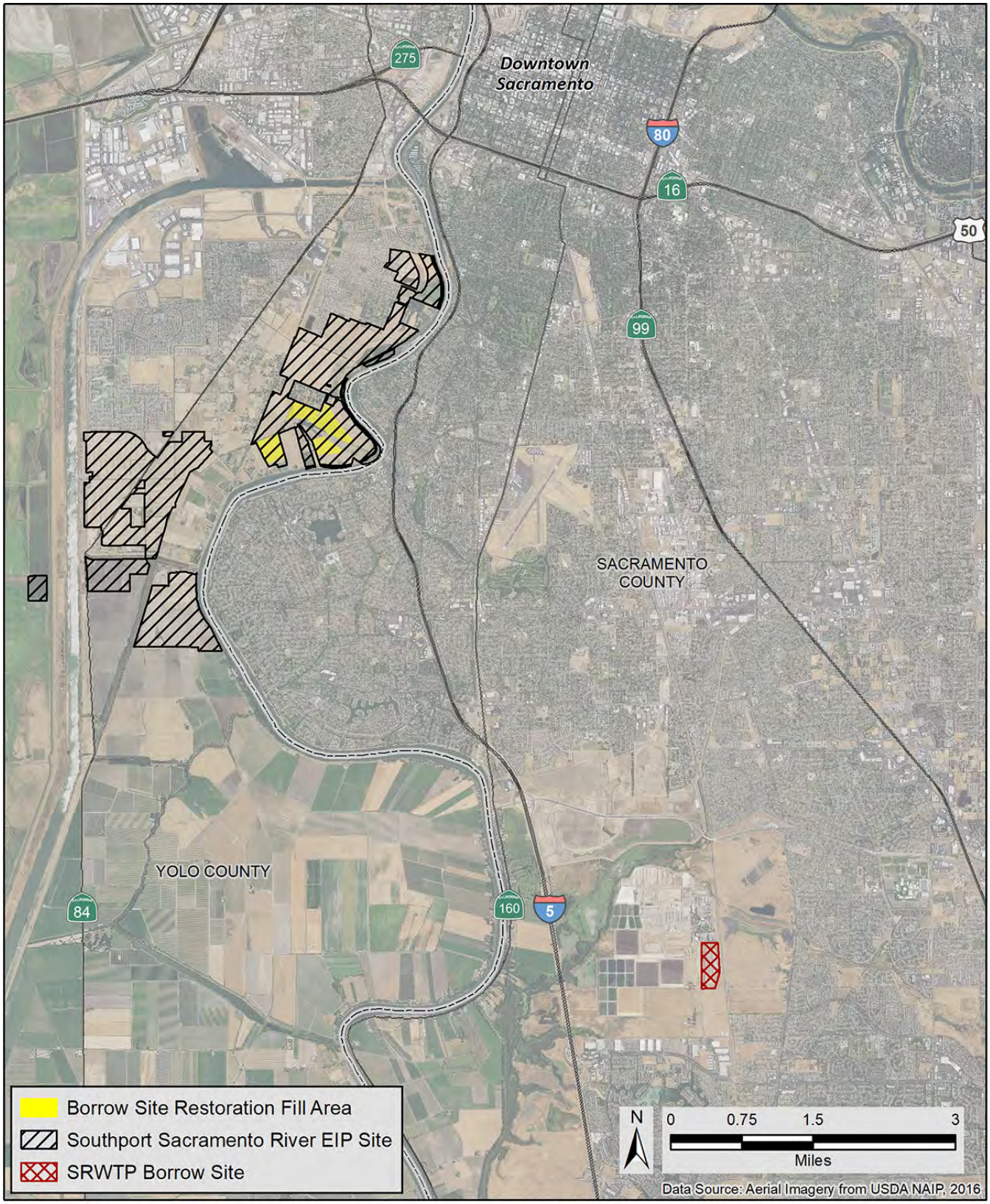

Figure Source: GEI Consultants, Inc. 2019

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Source: GEI Consultants, Inc., 2019

2.3 Project Description

2.3.1 2014 EIR Coverage

WSAFCA has identified the need to import up to 600,000 CY of material to restore borrow sites excavated for the project to desired elevations and contours. The 2014 EIR covered importing up to 2,400,000 CY of fill material and thus no additional material beyond what was previously identified is needed for the proposed project. Grading of fill material to desired elevations and contours will occur within the boundaries of the borrow site parcels identified in the 2014 EIR. The Southport Sacramento River EIP EIR identifies excavation of borrow material from sites within and adjacent to the project site in the City of West Sacramento and from offsite sources up to 20 miles away; however, specific borrow sites were not identified. Without known quantities of material or borrow site locations, the 2014 EIR did not analyze the impacts of sourcing borrow material from offsite sources.

In summary, the following activities associated with the proposed project are covered by the 2014 EIR:

- Disturbance, grading, stockpiling and restoration of topsoil, and revegetation of Southport Sacramento River EIP borrow sites, including the approximately 89.1 acres to be restored by the proposed project.
- Importation of fill material for restoration of Southport Sacramento River EIP borrow sites.
- Truck hauling along 7 miles in the City of West Sacramento, on hauling routes shown on Plate 3.4-1 of the 2014 EIR.

These activities are discussed in the Supplemental EIR where necessary to describe and understand the proposed project. These activities are not considered in Section 3 "Environmental Setting and Impact Analysis" unless noted, such as in Section 3.3.4 "Transportation and Navigation," Section 3.3.6 "Air Quality," and Section 3.3.6 "Climate Change".

2.3.2 Supplemental EIR Scope

The SRWTP Borrow Site is within 20 miles of the Southport Sacramento River EIP; however, the 2014 EIR did not consider use of this specific location and potential impacts from sourcing borrow material at the site and transporting it to the restoration site, which are addressed in this Supplemental EIR. The SRWTP contains approximately 40 acres of surplus soil stockpiles available for use by WSAFCA. The Sacramento County Regional Sanitation District (SRCSD) is stockpiling excess soil excavated from the ongoing EchoWater Project at the SRWTP. Therefore, use of these stockpiles would not result in new ground disturbance. WSAFCA has confirmed soil is of suitable quality for the proposed project and the quantity of material needed for the proposed project–up to 600,000 CY–is available. Use of the SRWTP Borrow Site includes excavation of stockpiled soil, management of stockpiles, and hauling of soil to the Southport Sacramento River EIP borrow sites for restoration.

2.3.3 Construction Activities

This section discusses construction activities for use of the SRWTP Borrow Site and activities associated with use of the restoration sites and not covered in the 2014 EIR. Construction activities would consist of: site preparation and mobilization at the SRWTP Borrow Site and restoration sites; hauling, temporary stockpiling, grading and placement of borrow material at the restoration site; hydroseeding and/or other site stabilization after restoration is complete at the restoration sites; and

demobilization of equipment at the SRWTP Borrow Site and the restoration site. The SRWTP Borrow Site does not require restoration, only grading to provide proper drainage and site stabilization after removal of the surplus material, since this area is part of ongoing construction activities at the SRWTP which are overseen by the SRCSD.

WSAFCA has identified an approximately 19.5-mile truck hauling route from the SRWTP to the restoration sites, as shown in **Figure 2-2**. Trucks would access the SRWTP Borrow Site via I-5, Laguna Boulevard, and Dwight Road in the City of Elk Grove., Haul routes in the City of Elk Grove were determined in coordination with the City of Elk Grove and no other routes are allowed for the proposed project. The restoration sites would then be accessed from I-5, to Interstate/Business Route (I/BR-80), and then Jefferson Boulevard, Gregory Avenue, and Village Parkway in the City of West Sacramento.

Approximately 60 haul trucks will be used to transport the borrow material. At 15 CY per truck load, an estimated 40,000 one-way truck trips are required to haul up to 600,000 CY of fill material. Construction equipment used at the SRWTP Borrow Site for site preparation, soil excavation, stockpile management, and haul truck loading consist of: 1 Excavator, 1 Street Sweeper, and 1 Water Truck, 1 Cat. Crawler Tractor. Construction equipment used at the restoration sites for grading of fill material and other restoration activities consist of: 2 Cat. D6LGP Crawler Tractor, 1 Cat 14H Motor Grader, 1 Street sweeper, and 1 4K water truck. Up to 80 workers will be needed for project activities, each day, including drivers for each of the 60 haul trucks and additional laborers at the SRWTP Borrow Site and restoration sites.

The proposed project would begin in early 2020. Project activities would occur during a 10-hour shift, Monday to Friday, and potentially during an 8-hour shift on Saturdays. On Saturdays, construction would typically occur during daytime hours from 8am to 5pm, and from Monday to Friday, may begin as early as 4 a.m. to 3 p.m. or be conducted at night to avoid peak traffic hours, but would not exceed 10 hours per day. The intensive construction scenario used in this Supplemental EIR assumes construction activities could be completed in 5 months.

2.4 Environmental Commitments

Environmental Commitments (ECs) in the 2014 EIR are measures proposed as elements of the project and are considered in the impact analysis and determination of an impacts level of significance before mitigation measures. ECs from the 2014 EIR applicable to the proposed project are identified in **Table 2-1**, along with any amendments to the measures for the proposed project.

The Soil Supply Protection Measures EC in 2014 EIR Section 2.4.17 states that WSAFCA's first choice for borrow material shall be potential borrow sites identified in the 2014 EIR (on EIR Plate 1-5). WSAFCA has determined that borrow sites shown on Plate 1-5 of the 2014 EIR, or the Borrow One Site covered in a 2016 Subsequent EIR, either were used during construction of the Southport Sacramento River EIP features (i.e., the borrow sites restored by the proposed project), do not have suitable fill material, or are otherwise not available. Since borrow material is not available from borrow sites shown on Plate 1-5 of the 2014 EIR, use of the SRWTP Borrow Site is compliant with this EC.

Figure 2-2. SRWTP Hauling Route

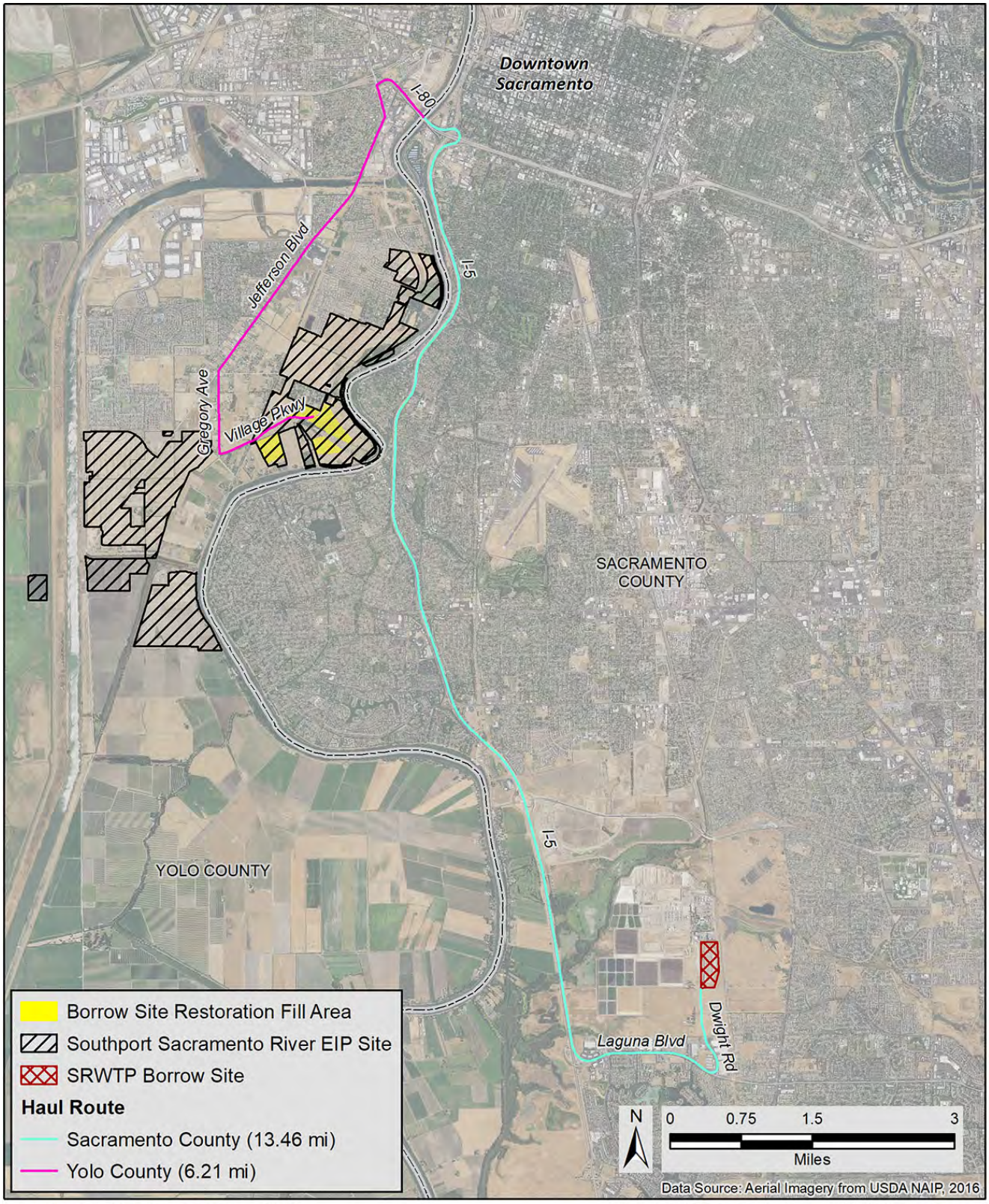

Figure Source: GEI Consultants, Inc. 2019

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Source: GEI Consultants, Inc., 2019

Table 2-1. Proposed Project ECs

2014 EIR Section	EC Name	Summary and Additions (*in italics*)
2.4.1	Nesting or Roosting Raptors Survey	For construction between February 1 and August 31, WSAFCA will perform preconstruction surveys to determine whether raptors are nesting or roosting at or adjacent to staging or construction areas.
2.4.3	Invasive Plant Species Prevention	Implementation of actions to minimize the spread or introduction of invasive plant species.
2.4.4	Noise Reducing Construction Practices	WSAFCA will require the construction contractor to follow noise-reducing construction practices such that noise from construction does not exceed applicable City of West Sacramento noise ordinance limits or, at a minimum, to implement measures to reduce noise to acceptable levels. *This measure is amended to add that noise from construction does not exceed applicable City of Elk Grove noise ordinance limits.*
2.4.6	Traffic Control and Road Maintenance Plan	WSAFCA, in coordination with relevant city and county public works departments, will develop and implement traffic control plan(s) for the proposed project.
2.4.7	Coordination to Ensure Minimal Overlap in Disturbances to Traffic during Construction	WSAFCA will coordinate with the City of West Sacramento prior to starting any construction activities to determine whether any other projects would disrupt traffic or require detours affecting the same roads. *This measure is amended to add that WSAFCA will also coordinate with the City of Elk Grove prior to starting any construction activities.*
2.4.12	Stormwater Pollution Prevention Plan (SWPPP)	WSAFCA will obtain coverage under the U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System general construction activity stormwater permit. *Refer to Section 2.5 below for more discussion of the construction general permit for the proposed project.*
2.4.14	Spill Prevention, Control, and Countermeasure Plan (SPCCP)	WSAFCA or its contractor will develop and implement an SPCCP to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction activities.
n/a *new EC*	*Basic Construction Emission Control Practices*	*This is a new EC. WSAFCA will implement the following practices for controlling fugitive dust:* ▪ Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. ▪ Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. ▪ Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. ▪ Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). ▪ All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. *Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.*
n/a *new EC*	*Comply with SRWTP Hazardous Waste Management Procedure*	*This is a new EC. WSAFCA will implement the SRWTP's Hazardous Waste Management Procedure. This procedure provides detailed guidance and methods for the proper handling and management of hazardous wastes generated onsite, including instructions for proper handling and disposal of wastes, waste containers, and waste spills. Procedures for waste profiling, manifesting, auditing, and record keeping are also provided. Hazardous waste storage areas are equipped with secondary containment or spill containment features, impervious surfaces, and spill control equipment, and are routinely inspected. Under*

Note: Full text of ECs from the 2014 EIR is provided in Section 2.4 of the 2014 EIR.

2.5 Regulatory Requirements, Permits, and Approvals

As the CEQA lead agency, WSAFCA has the principal responsibility for approving and carrying out the proposed project and for ensuring that CEQA requirements and all other applicable regulations are met. Many of the permits and approvals identified in the 2014 EIR are not applicable to the proposed project analyzed in this Supplemental EIR. Other permitting agencies that may have permitting approval or review authority over portions of the proposed project are listed below:

- **City of Elk Grove Encroachment Permit.** Based on discussions with the City of Elk Grove, an encroachment permit may be required due to potential damages caused by the haul trucks.

- **State Water Resources Control Board Construction General Permit**. Required for projects which disturb one (1) or more acres of soil. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation. Requires the development of a Storm Water Pollution Prevention Plan (SWPPP). Proposed project activities would be conducted under the existing SWPPP for the restoration sites. WSAFCA would determine if the proposed project is covered by an existing Construction General Permit for the SRWTP or if a new permit is required.

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Chapter 3. Environmental Setting and Impact Analysis

3.1 Introduction

For some resource topics, either no impact would occur from use of the SRWTP Borrow Site or the 2014 EIR adequately and sufficiently describes potential impacts. These circumstances are briefly identified in this section. As directed by the CEQA guidelines, this analysis closely considers potential impacts of the proposed project that were not previously analyzed in the 2014 EIR. Potential impacts from the proposed project typically occur where the 2014 EIR impact analysis is related to the location of the project site or activities, which did not consider the SRWTP Borrow Site location or the associated hauling route. Where impacts aren't completely covered by the 2014 EIR, the conclusions of the 2014 EIR impact are summarized followed by an evaluation of only the new or different aspects of the impact analysis related to the proposed project.

For each resource topic, regulatory and environment setting information that is applicable to the proposed project or has changed since the 2014 EIR is provided. Potential impacts are quantified where needed to determine the significance of the impact from the proposed project. Applicable mitigation measures from the 2014 EIR were first considered and then new mitigation measures were identified where feasible to reduce potentially significant impacts. In some instances, new mitigation measures were identified to update conditions of mitigation measures in the 2014 EIR based on new guidance from regulatory agencies. The impact conclusions from the 2014 EIR and proposed project are then compared to determine if the proposed project results in a substantial increase in the severity of a significant impact in the 2014 EIR or if a new potentially significant impact would occur.

This Supplemental EIR typically uses the terminology impact when making conclusions about the significance of a CEQA criterion. Effect may also be used in discussing the proposed projects relationship to the environment. For consistency among this Supplemental EIR and the 2014 EIR, "effect" is also used when referring to the effect name in the 2014 EIR (e.g., "Effect Air-2: Violate Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation").

3.2 Summary of Resources and Impacts

This section presents a summary of impacts for the different resources required by CEQA and identifies if impacts from the proposed project:

- do not occur (i.e., "no impact"),
- remain the same as stated in the 2014 EIR,
- result in a change to impacts in the 2014 EIR that is not a substantial increase in severity to significant impacts or a new potentially significant impact,
- result in a substantial increase in severity to significant impacts identified in the 2014 EIR,
- results in new potentially significant impacts.

Table 3-1 summarizes the impact findings for each resource category required by CEQA. The resource categories are named and categorized following the 2014 EIR (e.g., "Geology, Soils, Seismicity, and Mineral Resources") to ensure consistency in comparison of impacts in this Supplemental EIR with the 2014 EIR.

Table 3-1. Summary of Proposed Project Impacts by Resource Compared to the 2014 EIR

Resources	Impact Findings Compared to 2014 EIR				
	No Impact	Same Impact	Changed Impact	Substantially More Severe Significant Impact	New Potentially Significant Impact
Flood Risk Management and Geomorphic Conditions	X				
Water Quality and Groundwater Resources		X			
Geology, Soils, Seismicity, and Mineral Resources		X			
Transportation, and Navigation			X		
Air Quality				X	
Climate Change					X
Noise			X		
Vegetation and Wetlands		X			
Fish and Aquatic Resources	X				
Wildlife			X		
Land Use and Agriculture		X			
Environmental Justice, Socioeconomic, and Community Effects	X				
Visual Resources			X		
Recreation	X				
Utilities and Public Services			X		
Public Health and Environmental Hazards			X		
Cultural Resources		X			
Energy	X				
Wildlife	X				
Tribal Cultural Resources					X

The CEQA Guidelines were amended in 2014 and again in 2018, after preparation of the 2014 EIR. AB 52 amended the CEQA Guidelines in 2014 to create a separate category of cultural resources, "Tribal Cultural Resources" and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resources is a project that may have a significant effect on the environment. Amendments to the CEQA Guideline in 2018 added two new impact categories–

"Energy" and "Wildfire". These three impact categories were not considered in the 2014 EIR and have been added to this Supplemental EIR for the proposed project as new impacts considered.

3.3 Resources Analysis

3.3.1 Resources Without Impacts

The resources listed below would not be impacted by the proposed project. Accordingly, no further analysis is provided in this Supplemental EIR. The regulatory framework, assessment methods, determination of impacts, and associated mitigation measures remains as described in the 2014 EIR.

- **Flood Risk Management and Geomorphic Conditions.** The proposed project would not require construction in surface waters or the water side of levees.
- **Fish and Aquatic Resources.** The proposed project would not require construction in surface waters or the water side of levees.
- **Environmental Justice, Socioeconomics and Community Effects.** The proposed project would not displace residents and construction activities would benefit the local economy by temporarily increasing employment and personal income.
- **Recreation.** The proposed project would not occur near marina or boat launch facilities, on the waterside of levees, or adjacent to the Sacramento River and recreational boating activities. No recreation opportunities are present at the SRWTP Borrow Site.

3.3.2 Water Quality and Groundwater Resources

Impact Analysis

The proposed project would not require construction in surface waters or the water side of levees. Groundwater was not encountered during excavation of the restoration sites during construction of the Southport Sacramento River EIP. Stockpiled soil at the SRWTP Borrow Site would be used and excavation would not encounter the water table. With implementation of the EC to obtain coverage under a SWPPP, use of the SRWTP Borrow Site is consistent with the 2014 EIR analysis of impacts to water quality.

3.3.3 Geology, Seismicity, Soils, and Mineral Resources

Environmental Setting

Mineral Resources

The proposed project lies within the Sacramento-Fairfield Production-Consumption Region for Portland cement concrete aggregate, which includes all designated lands within the marketing area of the active aggregate operations supplying the Sacramento-Fairfield urban center. In compliance with the Surface and Mining Reclamation Act, CGS has established the classification system for Mineral Resource Zones (MRZ) shown in **Table 3-2** and **Figure 3-1** to denote both the location and significance of key extractive resources.

Previous studies have determined that all areas along the east side of the Sacramento River throughout Sacramento County should be classified as MRZ-1: areas where adequate information indicates that no

significant mineral deposits are present or where it is judged that little likelihood exists for their presence (Dupras 1999). Additionally, the Sacramento County General Plan indicates there are no locally important mineral resources in the vicinity of the proposed borrow or restoration sites (Sacramento County 2011).

Table 3-2. California Geological Survey Mineral Land Classification System

Classification	Description
MRZ-1a	Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence
MRZ-1b	Areas of mined out Portland cement concrete-grade aggregate resources
MRZ-2	Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood exists for their presence
MRZ-3	Areas containing mineral deposits, the significance of which cannot be evaluated from available data
MRZ-4	Areas where available data is inadequate for assignment to any other mineral resource zone

Notes: MRZ = Mineral Resource Zone
Source: Dupras 1999: Plate 3

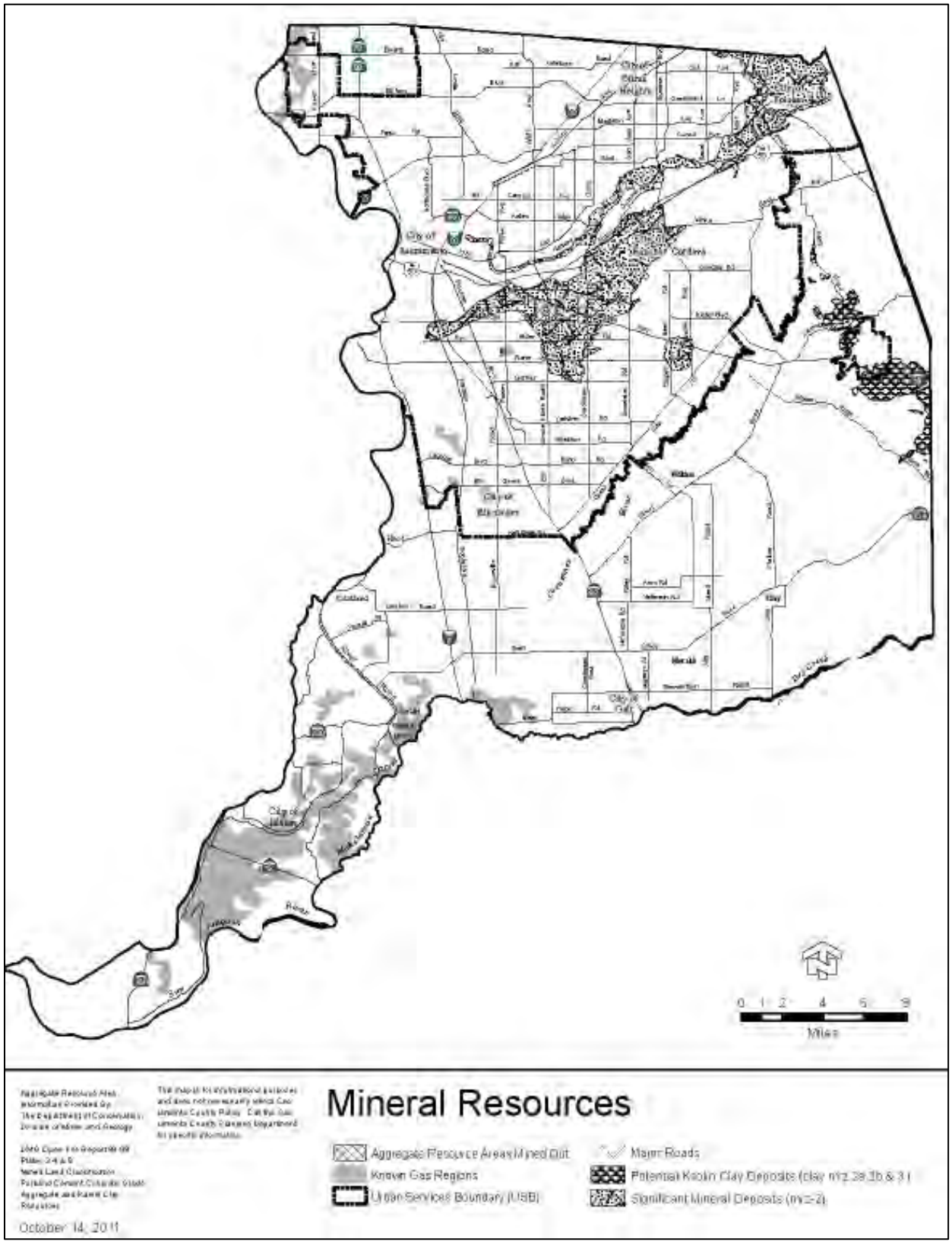
Impact Analysis

As analyzed in the 2014 EIR, based on historical data regarding fault locations and past earthquakes, the risk of groundshaking in the Southport Sacramento River EIP area is low and would not increase due to the proposed project, since the proposed project is limited to excavation and grading of stockpiles and hauling truck trips. There would be no construction of temporary or permanent structures or facilities that could increase the risk to public safety due to seismicity or construction on unsuitable soils.

Since existing stockpiled soil at the SRWTP Borrow Site would be used to restore topography and grade at the restoration site, there would be no new, below-ground excavation involved with the proposed project. Additionally, the SRWTP Borrow Site is not located in an area mapped as MRZ-2 (significant mineral deposits) and thus is not affected by state policies pertaining to the maintenance of access to regionally significant mineral deposits under the California Surface Mining and Reclamation Act of 1975. Therefore, the use of the SRWTP Borrow Site would not result in the loss or availability of a known mineral resource.

Earthwork that would be conducted during construction would primarily result in substantial use of existing stockpiles of disturbed soil. Ongoing disturbance of this soil from the proposed project could result in soil erosion and could temporarily increase erosion and sedimentation rates above existing levels. However, with implementation of the EC to obtain coverage under a SWPPP and develop a SPCCP, use of the SRWTP Borrow Site is consistent with the 2014 EIR analysis of impacts to geology, seismicity, soils, and mineral resources.

Figure 3-1. Designated Mineral Resource Zones, Sacramento County



Source: Sacramento County 2011

3.3.4 Transportation and Navigation

Regulatory Setting

CEQA Guidelines

Amendments to the CEQA Guidelines were adopted on December 28, 2018, allowing lead agencies to use the vehicle miles traveled (VMT) approach immediately and is required statewide beginning July 1, 2020. CEQA Guidelines Section 15064.3(b)(3) states that for many projects, a qualitative analysis of construction traffic may be appropriate.

City of Elk Grove

The City of Elk Grove adopted new Transportation Analysis Guidelines (Guidelines) in February 2019, which established a protocol for transportation analysis under CEQA using the VMT approach. This change to VMT in the Guidelines is consistent with amendments to the CEQA Guidelines adopted on December 28, 2018. The City of Elk Grove has adopted VMT standards requiring reductions in the quantity of new VMT compared to baseline levels for land use development and transportation projects. The City of Elk Grove has not adopted standards for non-permanent VMT generation or construction traffic.

Environmental Setting

Primary regional access to the SRWTP Borrow Site is I-5. Access to the SRWTP Borrow Site would be provided via Dwight Road from Laguna Boulevard. I-5 is a north-south interstate highway to the west of the SRWTP Borrow Site. I-5 extends through Sacramento to the north and connects the region to Stockton and the San Joaquin Valley to the south. In the SRWTP Borrow Site vicinity, I-5 is a six-lane facility with an interchange at Laguna Boulevard. Laguna Boulevard is an east-west arterial roadway that connects to I-5 in the west and to SR 99 to the east. In the SRWTP Borrow Site vicinity, Laguna Boulevard is a six-lane roadway with a posted speed limit of 45 miles per hour. Laguna Boulevard would be the primary street carrying trips to and from the project site via Dwight Road. Dwight Road is a north-south collector roadway that connects the project site to Laguna Boulevard. It is a four-lane roadway with a center two-way left-turn lane. Dwight Road would provide the primary access to the SRWTP Borrow Site.

Impact Analysis

The proposed project does not involve construction in navigable waters, road closures, or permanent changes in transportation circulation patterns, and would not disrupt alternative transportation modes. The proposed project would generate the same types of construction-generated traffic as discussed in the 2014 EIR and the proposed project is consistent with the 2014 EIR analysis of impacts to increases in safety hazards from construction-generated traffic. Impacts to transportation and navigation identified in the 2014 EIR that would change due to the proposed project are evaluated below.

Methodology

Haul routes identified for the Southport Sacramento River EIP are shown in Plate 3.4-1 of the 2014 EIR. Hauling is identified on routes up to 7 miles round-trip in the City of West Sacramento. Under the proposed project, the hauling route, shown in Figure 2-3, covers approximately 39.3 miles round trip in Yolo and Sacramento Counties. This Supplemental EIR evaluates the portion of the hauling route that

wasn't identified in the 2014 EIR–32.3 miles including 5.4 miles in Yolo County and 26.9 miles in Sacramento County.

The 2014 EIR transportation analysis (in Effect TRA-1) identifies public roadway segments of haul routes in the City of West Sacramento where increases in average daily trips (ADT) due to construction activities results in changes to the level of service. However, in this Supplemental EIR, WSAFCA uses the VMT approach, consistent with amendments to the CEQA Guidelines Section 15064.3(b)(3), as discussed in Section 3.3.3.1 "Regulatory Setting".

Effect TRA-1: Temporary Increase in Traffic Volumes from Construction-Generated Traffic

2014 EIR Conclusions

The 2014 EIR identifies public roadway segments of haul routes in the City of West Sacramento where increases in average daily trips due to construction trips results in changes to the level of service and determines construction of the Southport Sacramento River EIP would result in a substantial increase in traffic volumes on several roadway segments. Although WSAFCA would implement the traffic control and maintenance EC, this impact was still determined to be potentially significant. Since no feasible mitigation measures were available, the impact to temporary increases in traffic volumes was found to be significant and unavoidable in the 2014 EIR.

Proposed Project Evaluation

The proposed project would generate temporary construction trips from hauling fill material from the SRWTP Borrow Site to the restoration sites. Under the proposed project, vehicle trips would be generated from the use of haul trucks and worker vehicles. The proposed project would generate up to 40,000 one-way hauling truck trips (80,000 round-trips). Accounting for round-trip travel to/from the SRWTP Borrow Site, under the intensive 5-month construction scenario, hauling would require an average of 580 hauling truck trips each work day. Worker vehicle commutes account for 160 trips per day. Under the intensive 5-month construction scenario, a total of 22,080 worker commute trips would be generated. The use of fill material from the SRWTP Borrow Site would require hauling on segments of Village Parkway, Gregory Avenue, Jefferson Boulevard, I/BR-80, I-5, Laguna Boulevard, and Dwight Road (**Figure 2-2**).

While the 2014 EIR did not use the VMT approach, the traffic analysis in the 2014 EIR estimates ADT for hauling on different roadway segments and evaluates up to a 7-mile round-trip for each offsite hauling trip. Use of the SRTWP Borrow Site requires traveling at approximately 32.3 miles more per hauling round-trip, resulting in greater VMT for trips required to haul up to 600,000 CY of material considered in the 2014 EIR. Since haul routes in the 2014 EIR are in the City of West Sacramento, the additional mileage per trip is primarily in Sacramento County and the City of Elk Grove.

Table 3-3 shows daily and total VMT in Sacramento County and Yolo County from use of the SRWTP Borrow Site. VMT would primarily be generated from hauling truck trips. This Supplemental EIR considers a 5-month intensive construction scenario where VMT would be generated over 5 months/130 working days for the proposed project. If work was conducted over a longer period, daily VMT shown in **Table 3-3** would be reduced and the total VMT would slightly increase from additional days of worker vehicle trips, but VMT from hauling would not change. No reduction in VMT from the proposed project is possible since trips would be generated for hauling fill material and worker vehicles. Since VMT generated from the proposed project would be limited to construction activities and temporary

during the construction period, this impact is **less than significant**. Since this impact is less-than-significant, the proposed project would not result in a substantial increase in severity of Effect TRA-1. Other impacts associated with additional VMT generated by the proposed project are evaluated in Section 3.3.5 "Air Quality" and Section 3.3.6 "Climate Change".

Table 3-3. Construction VMT from Use of the SRWTP Borrow Site

Location	VMT	
	Average Daily	Project Total
Yolo County	4,935	641,600
Sacramento County	9,305	1,209,600
Project Total	14,240	1,851,200

3.3.5 Air Quality

Environmental Setting

Sensitive Receptors

As discussed in the 2014 EIR, for the purposes of air quality analysis, typical sensitive receptors include residences, hospitals, and schools. The EchoWater Project EIR identifies the nearest sensitive receptor to the SRWTP Borrow Site as residences in the City of Elk Grove located over 1,500 feet to the south and 1,700 feet east of Dwight Road (SRCSD 2014). Newer sensitive receptors closer to the SRWTP Borrow Site have not been identified since preparation of the EchoWater Project EIR. Sensitive receptors also include residences located along the hauling route on local streets. New portions of the hauling route on local streets consists of Laguna Boulevard located in the City of Elk Grove.

Impact analysis

The proposed project would not conflict with or obstruct the implementation of air quality plans. The proposed project would not create new types of odors and the proposed project is consistent with the 2014 EIR analysis of impacts from objectional odors. Impacts to air quality identified in the 2014 EIR that would change due to the proposed project are evaluated below.

Methodology

Air quality impacts in this Supplemental EIR are evaluated using the same methodology as the 2014 EIR. The CEQA guidelines state that the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the determinations above. An air quality effect is considered to be significant if the project's construction emissions would exceed a district's CEQA emission thresholds. The appropriate district-recommended emission thresholds as published in their respective CEQA guidance documents apply only to the portions of emissions generated under their jurisdiction. Emissions from the proposed project are limited to construction emissions. The CEQA construction emissions thresholds for the YSAQMD and SMAQMD are shown in Table 3-4. The significance thresholds for some pollutants in SMAQMD have changed since preparation of the 2014 EIR. The proposed project would not generate emissions within the Bay Area Air Quality Management District (BAAQMD) which is also included in the 2014 EIR impact analysis. As discussed in Section 3.3.4 "Transportation and Navigation", this Supplemental EIR evaluates the portion of the

hauling route that wasn't identified in the 2014 EIR–32.3 miles including 5.4 miles in Yolo County/YSAQMD and 26.9 miles in Sacramento County/SMAQMD.

Table 3-4. SMAQMD and YSAQMD Current CEQA Significance Thresholds

Air District	CEQA Significance Threshold				
	ROG	NOx	CO	PM_{10}	$PM_{2.5}$
SMAQMD	n/a	85 lbs/day	n/a	If all feasible BACT/BMPs are applied, then 80 lbs/day and 14.6 tons/year	If all feasible BACT/BMPs are applied, then 82 lbs/day and 15 tons/year
YSAQMD	10 tons/year	10 tons/year	Violation of a state ambient air quality standard	80 lbs/day	n/a

Notes: lbs=pounds; ROG=reactive organic gases; NOx=nitrous oxides; CO=carbon monoxide; PM_{10}=particulate matter less than 10 microns in diameter; $PM_{2.5}$= particulate matter less than 2.5 microns in diameter
Source: SMAQMD 2015; YSAQMD 2007

Effect AIR-2: Violate Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation—CEQA

2014 EIR Conclusions

The 2014 EIR analysis for Effect AIR-2 concludes that project-level construction emissions of reactive organic gases, carbon monoxide, and particulate matter (PM) less than 2.5 microns in diameter ($PM_{2.5}$) would not exceed significance thresholds in YSAQMD or SMAQMD; emissions of nitrous oxides (NO_x) would exceed significance thresholds in YSAQMD and SMAQMD and would be reduced below significance thresholds with implementation of Mitigation Measures AIR-MM-1 and AIR-MM-3 through AIR-MM-5; and emissions of PM less than 10 microns in diameter (PM_{10}) would exceed the significance threshold in YSAQMD and remain above significance thresholds after implementation of Mitigation Measures AIR-MM-1 through AIR-MM-3.

Proposed Project Evaluation

The proposed project would generate criteria air pollutant emissions from exhaust associated with additional hauling VMT (refer to VMT discussion in Effect TRA-1 in Section 3.3.4 "Transportation and Navigation"), worker vehicle trips, and operation of construction equipment at the SRWTP Borrow Site and restoration sites. In addition, fugitive dust emissions would be generated from excavation of fill material at the SRWTP Borrow Site and grading of fill material at the restoration sites. Emissions would be generated in the Sacramento Valley Air Basin (SVAB), within the SMAQMD in Sacramento County and within the YSAQMD in Yolo County.

This Supplemental EIR estimates emissions from an intensive construction scenario of 5 months. **Tables 3-5** and **3-6** show estimated emissions from the proposed project within the SMAQMD and YSAQMD, respectively. Under the proposed project, emissions of criteria air pollutants would not exceed applicable thresholds, except for NO_x emissions in the SMAQMD which are well above the SMAQMD's NO_x threshold. Emissions shown in the SMAQMD were not considered in the 2014 EIR. The 2014 EIR covered a portion of emissions shown in the YSAQMD resulting from worker vehicle trips, operation of equipment at the restoration sites, and hauling along 7 miles. A small portion of emissions shown in the YSAQMD were not considered in the 2014 EIR, since each hauling round-trip generated by the proposed project consists of an additional 5.4 miles in Yolo County.

Table 3-5. SMAQMD Criteria Air Pollutant Emissions from Use of the SRWTP Borrow Site

	Unmitigated Emissions (lbs/day)					Mitigated Emissions (lbs/day)				
Category	ROG	NOx	CO	PM_{10}	$PM_{2.5}$	ROG	NOx	CO	PM_{10}	$PM_{2.5}$
Proposed Project	3.6	107.2	43.3	2.9	1.5	n/a	104.3	n/a	n/a	n/a
SMAQMD threshold	n/a	85	n/a	80	82	n/a	85	n/a	80	82
Exceed threshold?	no	yes	no	no	no	no	yes	no	no	no

Notes: lbs=pounds; ROG=reactive organic gases; NOx=nitrous oxides; CO=carbon monoxide; PM_{10}=particulate matter less than 10 microns in diameter; $PM_{2.5}$= particulate matter less than 2.5 microns in diameter

Table 3-6. YSAQMD Criteria Air Pollutant Emissions from Use of the SRWTP Borrow Site

	Unmitigated Emissions				
	tons/year			lbs/day	
Category	ROG	NOx	CO	PM_{10}	$PM_{2.5}$
Proposed Project	0.2	5.1	2.3	2.6	1.4
YSAQMD threshold	10	10	n/a	80	n/a
Exceed threshold?	no	no	no	no	no

Notes: lbs=pounds; ROG=reactive organic gases; NOx=nitrous oxides; CO=carbon monoxide; PM_{10}=particulate matter less than 10 microns in diameter; $PM_{2.5}$= particulate matter less than 2.5 microns in diameter.

Since additional emissions of NO_X from the proposed project would exceed the SMAQMD's significance threshold, this impact would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure AIR-MM-6: Reduce Construction Related Exhaust Emissions in SMAQMD

WSAFCA will comply with the following measures during construction to reduce emissions of NOx in exhaust:

- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

- WSAFCA will provide a plan for approval by SMAQMD that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10 percent NOx reduction compared to the most recent California Air Resources Board fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion. The plan shall be prepared with the following:

- Acceptable options for reducing emissions may include use of cleaner engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

- Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool (http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation).

- Provide project information and construction company information.

- Include the equipment type, horsepower rating, engine model year, projected hours of use, and the California Air Resources Board equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.

- Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with SMAQMD staff and documented in the approval letter, to demonstrate continued project compliance.

Responsibility: WSAFCA

Timing: Prior to and During Construction Activities

Mitigation Measure AIR-MM-7: Off-Site NOx Construction Mitigation Fees in SMAQMD

WSAFCA will comply with the following measures to pay an off-site construction mitigation fee to reduce NOx emissions:

- WSAFCA shall pay a mitigation fee in the amount of $30,000 per ton of NO_X emissions and a 5% administrative fee in the amount of $1,500 per ton of NO_X emissions to SMAQMD to reduce the project impacts from construction NO_X emissions to below an average of 85 pounds per day.

- The project applicant, or its designee, shall pay the mitigation and administrative fees in full prior to commencement of proposed project construction activities generating GHG emissions.

- An alternative payment plan may be negotiated by WSAFCA based on the timing of construction. Any alternative payment plan must be acceptable to SMAQMD and agreed upon in writing prior to commencement of proposed project construction activities generating GHG emissions.

- In coordination with SMAQMD, WSAFCA may reanalyze construction NOx emissions from the proposed project prior to commencing construction to update the required mitigation and administrative fees.

Responsibility: WSAFCA

Timing: Prior to Construction Activities

Implementing Mitigation Measure AIR-MM-6, a new mitigation measure identified in this Supplemental EIR, would achieve an overall 10 percent NO_X reduction from the proposed project. This mitigation measure updates a similar NO_X reduction plan requirement in Mitigation Measure AIR-MM-1 in the 2014 EIR, using current CEQA guidance from the SMAQMD (SMAQMD 2019). Tables 3-4 and 3-5 also show estimated NO_X emissions with the implementation of Mitigation Measure AIR-MM-6. However, the proposed project would still generate NO_x emissions within the SMAQMD above the significance thresholds after implementation of mitigation measures AIR-MM-6. Implementing Mitigation Measure AIR-MM-7, a new mitigation measure identified in this Supplemental EIR, would require payment of off-site construction mitigation fees to reduce NOx emissions to below SMAQMD's significance threshold–an average of 85 pounds per day. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**. Since additional emissions of NOx from the proposed project would exceed the SMAQMD's significance thresholds in an additional year after construction of the Southport Sacramento River EIP project was substantially completed, there would be a substantial increase in severity of Effect AIR-2.

Effect AIR-4: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region is a Non-Attainment Area under NAAQS and CAAQS

2014 EIR Conclusions

The 2014 EIR analysis for Effect AIR-4 concludes that cumulative construction emissions of reactive organic gases, carbon monoxide, and $PM_{2.5}$ would not exceed significance thresholds in YSAQMD or SMAQMD; emissions of NO_X would exceed significance thresholds in YSAQMD and SMAQMD and would be reduced below significance thresholds with implementation of Mitigation Measures AIR-MM-1 and AIR-MM-3 through AIR-MM-5; and emissions of PM_{10} would exceed the significance threshold in YSAQMD and remain above significance thresholds after implementation of Mitigation Measures AIR-MM-1 through AIR-MM-3.

Proposed Project Evaluation

The project-level analysis performed in Effect AIR-3 in this Supplemental EIR evaluates the significance of construction related emissions. **Tables 3-5** and **3-6** show emissions estimates in SMAQMD and YSAQMD, respectively. The proposed project would exceed SMAQMD's NO_X significance threshold. The SMAQMD considers emissions in excess of their project-level thresholds to have the potential to contribute to a cumulative impact on regional air quality. Accordingly, since additional emissions of NO_X from the proposed project would exceed the SMAQMD's significance threshold, this impact would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure AIR-MM-6: Reduce Construction Related Exhaust Emissions in SMAQMD

Please refer to Mitigation Measure AIR-MM-6 in air quality Effect AIR-2 above for the full text of this mitigation measure.

Mitigation Measure AIR-MM-7: Off-Site NOx Construction Mitigation Fees in SMAQMD

Please refer to Mitigation Measure AIR-MM-7 in air quality Effect AIR-2 above for the full text of this mitigation measure.

Implementing Mitigation Measure AIR-MM-6, a new mitigation measure identified in this Supplemental EIR, would achieve an overall 10 percent NO_X reduction from the proposed project. This mitigation measure updates a similar NO_X reduction plan requirement in Mitigation Measure AIR-MM-1 in the 2014 EIR, using current CEQA guidance from the SMAQMD (SMAQMD 2019). **Tables 3-5** and **3-6** also show estimated NO_X emissions with the implementation of Mitigation Measure AIR-MM-6. However, the proposed project would still generate NO_x emissions within the SMAQMD above the significance thresholds after implementation of mitigation measures AIR-MM-6. Implementing Mitigation Measure AIR-MM-7, a new mitigation measure identified in this Supplemental EIR, would require payment of off-site construction mitigation fees to reduce NOx emissions to below SMAQMD's significance threshold–an average of 85 pounds per day. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**. Since additional emissions of NOx from the proposed project would exceed the SMAQMD's significance thresholds in an additional year after construction of the Southport Sacramento River EIP project was substantially completed, there would be a substantial increase in severity of Effect AIR-4.

Effect AIR-5: Expose Sensitive Receptors to Substantial Fugitive Dust Concentrations

2014 EIR Conclusions

The 2014 EIR analysis for Effect AIR-5 identifies potentially significant impacts to nearby land uses, especially those residences located downwind of the Southport Sacramento River EIP, from exposure to dust generated during construction activities. This impact would be reduced to a less-than-significant level with implementation of Mitigation Measure AIR-MM-2 requiring implementation of a fugitive dust control plan.

Proposed Project Evaluation

As discussed in the "Sensitive Receptors" section above, sensitive receptors that weren't identified in the 2014 EIR are residences located approximately 1,500 and 1,700 feet from the SRWTP Borrow Site and nearby the hauling route on Laguna Boulevard. Excavation of soil at the SRWTP Borrow Site would result in short-term dust emissions. Although the 2014 EIR does not consider sensitive receptors nearby the SRWTP Borrow Site, the type of potential effects from fugitive dust to these sensitive receptors would be consistent with the 2014 EIR analysis. However, excavation of soil stockpiles at the SRWTP Borrow Site under the proposed project would generate significantly less dust than the multitude of project construction activities analyzed in the 2014 EIR and would involve minimal amounts of grading and earth moving. Dust emissions would be reduced with implementation of the new EC for Basic Construction Emission Control Practices required by the SMAQMD (in Section 2.4 "Environmental Commitments"). **Tables 3-5** and **3-6** show that estimated emissions of PM_{10} and $PM_{2.5}$ from the proposed project would not exceed significance thresholds in SMAQMD and YSAQMD, respectively. This impact would be **less than significant**. Since this impact is less-than-significant, the proposed project would not result in a substantial increase in severity of Effect AIR-5.

Effect AIR-6: Expose Sensitive Receptors to Substantial Diesel Particulate Matter Concentrations

2014 EIR Conclusions

The 2014 EIR analysis for Effect AIR-6 determined that diesel exhaust emissions from the Southport Sacramento River EIP are not anticipated to result in an increased health risk. This impact was less than

significant. However, impacts were further reduced with implementation of Mitigation Measure AIR-MM-1 requiring measures to reduce exhaust emissions of NO_X and PM_{10}.

Proposed Project Evaluation

As discussed in the "Sensitive Receptors" section above, sensitive receptors that weren't identified in the 2014 EIR are residences located approximately 1,500 and 1,700 feet from the SRWTP Borrow Site and nearby the hauling route on Laguna Boulevard. Although the 2014 EIR does not consider sensitive receptors nearby the SRWTP Borrow Site, the type of potential effects from diesel PM to sensitive receptors would be consistent with the 2014 EIR analysis. The 2014 EIR analysis considers that construction activities are not expected to take place along any one segment for more than 80 days per year over the two-year intensive construction period. While the proposed project would require construction at the SRWTP Borrow Site and hauling for an estimated 5 to 8 months, assessment of health risks associated with exposure to diesel exhaust typically is associated with chronic exposure, in which a 70-year exposure period is often assumed. Thus, this impact would be **less than significant**. Since this impact is less-than-significant, the proposed project would not result in a new potentially significant impact related to Effect AIR-6.

3.3.6 Climate Change

Regulatory Setting

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea level. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32 Climate Change Scoping Plan

In December 2008, the California Air Resources Board (CARB) adopted its *Climate Change Scoping Plan*, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) CO2e, or approximately 22 percent from the state's projected 2020 emission level of 545 MMT of CO2e under a business-as-usual scenario (this is a reduction of 47 MMT CO2e, or almost 10 percent, from 2008 emissions). The Scoping Plan includes ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. CARB estimates the largest reductions in GHG emissions to be achieved by implementing the following measures (CARB 2011) relevant to the proposed project: improved emissions standards for light-duty vehicles (26.1 MMT CO2e) and the Low-Carbon Fuel Standard (15.0 MMT CO2e).

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that is being phased in (starting in 2012). To

effectively implement the cap, AB 32 directs the CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

Sacramento County General Plan

The Sacramento County General Plan includes the following policy related to reducing GHG emissions in Sacramento County (Sacramento County 2017):

- Policy LU-115. It is the goal of the County to reduce greenhouse gas emissions to 1990 levels by the year 2020. This shall be achieved through a mix of state and local action.

Yolo County Policies

On September 11, 2007, the Yolo County Board of Supervisors adopted a resolution declaring that Yolo County was participating in the Cool Counties Climate Stabilization Initiative. This resolution commits Yolo County to working with regional jurisdictions and entities to strive to achieve a fair-share reduction in regional greenhouse gas emissions of 80 percent by the year 2050, with the following actions:

a. Create an inventory of county government GHG emissions and implement policies, programs and operations to achieve significant, measurable and sustainable reduction of those operational GHG emissions to help contribute to the regional reduction targets;

b. Work closely with local, State, and Federal governments and other leaders to reduce County geographical GHG emissions to 80 percent below current levels by 2050, by developing a GHG emissions inventory and regional plan that establishes short-, mid-, and long-term GHG reduction targets, with recommended goals to stop increasing emissions by 2010, and to achieve a 10 percent reduction every five years thereafter through to 2050;

c. Urge Congress and the Administration to enact a multi-sector national program of requirements, market-based limits, and incentives for reducing GHG emissions to 80 percent below current levels by 2050. Urge Congress and the Administration to strengthen standards by enacting legislation such as a Corporate Average Fuel Economy ("CAFE") standard that achieves at least 35 miles per gallon within 10 years for cars and light trucks.

2030 Countywide General Plan for Yolo County

Conservation and Open Space Element

- Policy CO-8.1: Assess current greenhouse gas emission levels and adopt strategies based on scientific analysis to reduce global climate change impacts.

- Policy CO-8.2: Use the development review process to achieve measurable reductions in greenhouse gas emissions.

- Policy CO-8.3: Prepare appropriate strategies to adapt to climate change based on sound scientific understanding of the potential impacts.

- Policy CO-8.4: Encourage all businesses to take the following actions, where feasible: replace high mileage fleet vehicles with hybrid and/or alternative fuel vehicles; increase the energy efficiency of

facilities; transition toward the use of renewable energy instead of non-renewable energy sources; adopt purchasing practices that promote emissions reductions and reusable materials; and increase recycling.

- Policy CO-8.6: Undertake an integrated and comprehensive approach to planning for climate change by collaborating with international, national, State, regional, and local organizations and entities.

- Policy CO-8.7: Integrate climate change planning and program implementation into County decision making.

- Policy CO-8.9: Work with local, regional, State, and Federal jurisdictions, as well as private and non-profit organizations, to develop a regional greenhouse gas emissions inventory and emissions reduction plan.

- Action CO-A115: Develop a Greenhouse Gas (GHG) Emissions Reduction Plan and/or Climate Action Plan (CAP) for the County, to control and reduce net GHG emissions, and to address economic and social adaptation to the effects of climate change. Development of this plan(s) shall include the following steps: 1) conduct a baseline analysis (GHG emissions inventory) for 1990; 2) adopt an emissions reduction target; 3) develop strategies and actions for reducing emissions including direct offsets and fees to purchase offsets; 4) develop strategies and actions for adaptation to climate change; 5) implement strategies and actions; and 6) monitor emissions and verify results a minimum of every five years starting in 2010.

City of West Sacramento Draft Climate Action Plan

The City released a draft Climate Action Plan (CAP) in August 2010. The draft CAP included policies and strategies to reduce community and municipal GHG emissions. The updated CAP has been prepared consistent with State CEQA Guidelines Section 15183.5, and once adopted, it will enable streamlined CEQA review for future projects that are consistent with the CAP (City of West Sacramento 2010).

City of Elk Grove Climate Action Plan

The purpose of the CAP is to identify how the City will achieve State-recommended targets of reducing GHG emissions to 1990 levels by 2020 and 40 percent below 1990 levels by 2030 pursuant to Assembly Bill (AB) 32 and Senate Bill 32.

- Identifies and provides an inventory of GHG emissions associated with activities within the City's jurisdictional boundary.

- Uses key indicators, such as population growth, to forecast future annual GHG emissions in the City for the years set for achieving reduction targets.

- Provides GHG reduction strategies for each emissions sector to reduce the City's annual per capita GHG levels to specific targets, which are aligned with the State targets, as follows: 7.6 $MTCO_2e$ by 2020, 4.1 $MTCO_2e$ by 2030

- Quantifies, using substantial evidence, the emissions reduction targets and reduction measures included in the CAP, ensuring they are feasible and in line with State emissions reduction targets and measures pursuant to AB 32, Senate Bill 32, as well as State guidance issued pursuant to Public Resources Code Section 21083.05, which requires the Governor's Office of Planning and Research

(OPR) and the California Natural Resources Agency to periodically update the California Environmental Quality Act (CEQA) guidelines related to the analysis and mitigation of GHG emissions. [The CEQA Guidelines encourage the adoption of policies or programs that mitigate GHG emissions as a means of addressing comprehensively the cumulative impacts of projects. See State CEQA Guidelines, Chapter 3 of Division 6 of Title 14 of the California Code of Regulations, § 15064, subd. (h)(3), § 15130, subd. (d).]

Impact Analysis

Impacts to climate change identified in the 2014 EIR that would change due to the proposed project are discussed and evaluated below.

Methodology

The YSAQMD, SMAQMD, and BAAQMD have local jurisdiction over the Southport Sacramento River EIP. At the time the 2014 EIR was prepared, none of the three air districts recommended a greenhouse gas (GHG) emission threshold for construction-related emissions. Based on consultation with the YSAQMD, the 2014 EIR uses BAAQMD's GHG significance threshold for stationary sources-10,000 metric tons (MT) of carbon dioxide equivalents (CO2e) per year-because the GHG emissions associated with the project would be generate mostly from the on-site equipment operation that have similar characteristics as stationary sources. Since preparation of the 2014 EIR, SMAQMD has adopted a significance threshold for GHG emissions from land development and construction projects of 1,100 metric tons (MT) of CO2e per year (SMAQMD 2015). Accordingly, this Supplemental EIR evaluates GHG emissions from the proposed project to both the BAAQMD significance threshold used in the 2014 EIR and the newer SMAQMD significance threshold.

Effect CC-1: Generate GHG Emissions That May Have a Significant Effect on the Environment

2014 EIR Conclusions

The 2014 EIR estimated that annual project-wide emissions (total of YSAQMD, SMAQMD, and BAAQMD emissions) were well below the BAAQMD's threshold. Although not required as mitigation to reduce a potentially significant impact, Mitigation Measure CC-MM-1 was identified as optional to minimize GHG emissions during construction.

Proposed Project Evaluation

The proposed project would generate GHG emissions from exhaust associated with additional hauling VMT (refer to VMT discussion in Effect TRA-1 in Section 3.3.4 "Transportation and Navigation"), worker vehicle trips, and operation of construction equipment for excavation of fill material at the SRWTP Borrow Site and grading of fill material at the restoration sites. Emissions would be generated within the SMAQMD in Sacramento County and within the YSAQMD in Yolo County.

This Supplemental EIR estimates emissions from an intensive construction scenario of 5 months. **Table 3-7** shows estimated emissions from the proposed project within the SMAQMD and YSAQMD and the project total. The analysis evaluates total GHG emissions in the SMAQMD and YSAQMD, consistent with the 2014 EIR approach, and because climate change is a global issue and inherently a cumulative impact. Under the proposed project, project total GHG emissions would not exceed the BAAQMD significance threshold, used in the 2014 EIR, but would exceed the new SMAQMD significance

threshold. Emissions shown in the SMAQMD were not considered in the 2014 EIR. The 2014 EIR covered a portion of emissions shown in the YSAQMD resulting from worker vehicle trips, operation of equipment at the restoration sites, and hauling along 7 miles. A small portion of emissions shown in the YSAQMD were not considered in the 2014 EIR, since each hauling round-trip generated by the proposed project consists of an additional 5.4 miles in Yolo County.

Table 3-7. GHG Emissions from Use of the SRWTP Borrow Site

Category	GHG Emissions (MT/year of CO2e)		
	SMAQMD	YSAQMD	Project Total
Proposed Project	787.9	979.6	1,767.5
BAAQMD threshold	–	–	10,000
SMAQMD threshold	–	–	1,100
Exceed threshold?	–	–	yes – SMAQMD

Notes: SMAQMD=Sacramento Metropolitan Air Quality Management District; YSAQMD=Yolo-Solano Air Quality Management District; BAAQMD= Bay Area Air Quality Management District; GHG=greenhouse gas; MT=metric tons.

Since additional emissions of GHGs from the proposed project would exceed the SMAQMD's significance threshold, this impact would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure CC-MM-2: Implement SMAQMD Construction GHG Emissions Reduction Best Management Practices

WSAFCA will implement the following measures where possible during construction to reduce emissions of GHG in exhaust:

- Improve fuel efficiency from construction equipment:
  - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes (5-minute limit is required by the state airborne toxics control measure [Title 13, sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.
  - Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.
  - Train equipment operators in proper use of equipment.
  - Use the proper size of equipment for the job.
- Perform on-site material hauling with trucks equipped with on-road engines (if determined to be less emissive than the off-road engines).
- Use alternative fuels for generators at construction sites such as propane or solar, or use electrical power.

- Use a California Air Resources Board approved low carbon fuel for construction equipment. (NOx emissions from the use of low carbon fuel must be reviewed and increases mitigated.)

- Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.

Responsibility: WSAFCA

Timing: During Construction Activities

Mitigation Measure CC-MM-3: Off-Site GHG Construction Mitigation Credits

WSAFCA will purchase project total GHG emissions credits that will be equal to GHG emissions in exceedance of the SMAQMD significance threshold, equivalent to 667.5 MTs of CO2e, or WSAFCA may reanalyze construction GHG emissions from the proposed project, including with implementation of Mitigation Measure CC-MM-2, prior to commencing construction to update emissions and required mitigation.

For purchased credits, WSAFCA will open a Climate Action Reserve account or engage a private broker to facilitate the purchase of carbon offset credits that are real, permanent, and verifiable from a voluntary market. Carbon offset credits purchased by WSAFCA will be banked by the Climate Action Reserve, so that carbon offset credits purchased are real, permanent, and verifiable. Carbon offset credits will be measured in metric tons of CO2e. Documentation of purchased GHG offsets will be provided to the SMAQMD prior to commencement of proposed project construction activities generating GHG emissions.

Responsibility: WSAFCA

Timing: Prior to Construction Activities

Implementing Mitigation Measure CC-MM-2, a new mitigation measure identified in this Supplemental EIR, would reduce GHG emissions from construction equipment used for the proposed project. This mitigation measure updates a similar GHG reductions measures in Mitigation Measure CC-MM-1 in the 2014 EIR, using current CEQA guidance from the SMAQMD (SMAQMD 2016). GHG emissions reductions are not estimated with implementation of Mitigation Measure CC-MM-2 because it's uncertain to what extent these measures can be implemented; however, it's anticipated the proposed project would still generate project total GHG emissions above the SMAQMD significance threshold. Implementing mitigation measure CC-MM-3, a new mitigation measure identified in this Supplemental EIR, would require purchase of off-site construction mitigation credits to reduce GHG emissions to below SMAQMD's significance threshold–1,100 tons per year. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**. Since emissions from the Southport Sacramento River EIP did not exceed applicable thresholds in the 2014 EIR, but additional emissions of GHGs from the proposed project would exceed the SMAQMD's significance threshold, a new potentially significant impact would occur related to Effect CC-1.

Effect CC-2: Conflict with an Applicable Plan, Adopted for the Purpose of Reducing GHG Emissions

2014 EIR Conclusions

The 2014 EIR found that annual project-wide emissions did not conflict with the goals of AB 32, the key elements and GHG reduction measures in the Climate Change Scoping Plan, or any other local jurisdiction plans for reduction or mitigation of GHGs. Additionally, the estimated emission rates are well below the BAAQMD's significance threshold used in the 2014 EIR. Therefore, the Southport Sacramento River EIP did not conflict with or obstruct the implementation of GHG emission reduction plans. This indirect effect was less than significant in the 2014 EIR.

Proposed Project Evaluation

As described in the discussion for Effect CC-1 (above), additional emissions of GHGs from the proposed project would exceed the SMAQMD's significance threshold. Since exceedance of this threshold would conflict with all local and regional plans to reduce GHG emissions in the proposed project area, this impact would be **potentially significant**. The following mitigation measures have been identified to address this impact:

> **Mitigation Measure CC-MM-2: Implement SMAQMD Construction GHG Emissions Reduction Best Management Practices**
>
> Please refer to Mitigation Measure CC-MM-2 in climate change Effect CC-1 above for the full text of this mitigation measure.
>
> **Mitigation Measure CC-MM-3: Off-Site GHG Construction Mitigation Credits**
>
> Please refer to Mitigation Measure CC-MM-3 in climate change Effect CC-1 above for the full text of this mitigation measure.

Implementing Mitigation Measure CC-MM-2, a new mitigation measure identified in this Supplemental EIR, would reduce GHG emissions from construction equipment used for the proposed project. This mitigation measure updates a similar GHG reductions measures in Mitigation Measure CC-MM-1 in the 2014 EIR, using current CEQA guidance from the SMAQMD (SMAQMD 2016). GHG emissions reductions are not estimated with implementation of Mitigation Measure CC-MM-2 because it's uncertain to what extent these measures can be implemented; however, it's anticipated the proposed project would still generate project total GHG emissions above the SMAQMD significance threshold. Implementing mitigation measure CC-MM-3, a new mitigation measure identified in this Supplemental EIR, would require purchase of off-site construction mitigation credits to reduce GHG emissions to below SMAQMD's significance threshold– 1,100 tons per year. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**. Since emissions from the Southport Sacramento River EIP did not exceed applicable thresholds in the 2014 EIR, but additional emissions of GHGs from the proposed project would exceed the SMAQMD's significance threshold and applicable plans to reduce GHG emissions in the proposed project area, a new potentially significant impact would occur related to Effect CC-2.

3.3.7 Noise

Regulatory Setting

The SRWTP Borrow Site and a portion of the haul route are located in unincorporated Sacramento County and the City of Elk Grove. Therefore, the County of Sacramento and City of Elk Grove are considered in this analysis, since noise impacts in these geographic areas were not analyzed in the 2014 EIR.

Sacramento County General Plan

The Noise Element of the *Sacramento County General Plan* (Sacramento County 2017) contains the following policies and standards related to construction noise:

- NO-8: Noise associated with construction activities shall adhere to the County Code requirements. Specifically, Section 6.68.090(e) addresses construction noise within the County.

Sacramento County Code

Section 6.68.070 of the Sacramento County Code contains exterior noise standards for specific zoning districts (**Table 3-8**).

Table 3-8. Sacramento County Exterior Noise Standards

Noise Area	County Zoning Districts	Time Period	Exterior Noise Standard
1	RE-1, RD-1, RE-2, RD-2, RE-3, RD-3, RD-4, R-1-A, RD-5, R-2, RD-10, R-2A, RD-20, R-3, R-D-30, RD-40, RM-1, RM-2, A-1-B, AR-1, A-2, AR-2, A-5, AR-5	7 a.m.-10 p.m.	55 dB
		10 p.m.-7 a.m.	50 dB

Source: Sacramento County Code

Section 6.68.090 of the Sacramento County Code provides the following exemption to the exterior noise standards:

- Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities do not take place between the hours of eight p.m. and six a.m. on weekdays and Friday commencing at eight p.m. through and including seven a.m. on Saturday; Saturdays commencing at eight p.m. through and including seven a.m. on the next following Sunday and on each Sunday after the hour of eight p.m. Provided, however, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after eight p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner.

City of Elk Grove Municipal Code

Although the City of Elk Grove has not adopted specific construction noise standards, Section 6.32.080 of the Elk Grove City Code, contains the following exterior noise standards:

A. Except as otherwise provided, it is unlawful for any person to create any noise that results in the exposure of sensitive receptors to noise levels that exceed the levels of **Table 3-9**.

Table 3-9. Exterior Noise Standards for Sensitive Receptors

Noise Source	Noise Standard	
	7:00 am to 10:00 pm	10:00 pm to 7:00 am
Stationary noise sources, generally	55 dBA	45 dBA
Stationary noise sources which are tonal, impulsive, repetitive, or consist primarily of speech or music	50 dBA	40 dBA

B. Boundary between Different Noise Areas. If the measurement location is on a boundary between two (2) different designated noise areas, the lower noise level limit applicable to the two (2) areas shall apply.

C. If the measured ambient noise level at the time of a complaint investigation exceeds the identified permissible noise level provided in Table 6.32-1, the allowable noise shall conform to the following:

1. Where the ambient noise level is less than sixty (60) dB but greater than the threshold in Table 6.32-1, a maximum increase of five (5) dB above the ambient noise level is allowed.

2. Where the ambient noise level is between sixty (60) dB and sixty-five (65) dB, inclusive, a maximum increase of three (3) dB above the ambient noise level is allowed.

3. Where the ambient noise level is greater than sixty-five (65) dB, a maximum increase of one and one-half (1.5) dB above the ambient noise level is allowed. [Ord. 6-2019 §3 (Exh. A), eff. 4-26-2019; Ord. 9-2011 §3, eff. 6-24-2011]

City of Elk Grove General Plan

The SRWTP Borrow Site and a portion of the haul route is situated adjacent to residences that are located within the City of Elk Grove. The *Elk Grove General Plan* Noise Element (City of Elk Grove 2019) contains the following policy and standards related to noise.

Policy N-1-4: Protect noise-sensitive land uses, identified in **Table 3-10**, from noise impacts.

Table 3-10. Maximum Allowable Noise Exposure from Transportation Noise Sources by Land Use Type

Land Use	Outdoor Activity Areas[a,b] Ldn/dB	Interior Spaces	
		Ldn/dB	Leq, dB[c]
Residential	60[d,g]	45	-
Residential subject to noise from railroad tracks, aircraft overflights, or similar noise sources which produce clearly identifiable, discrete noise events (the passing of a single train, as opposed to relatively steady noise sources such as roadways)	60 [d,g]	40f	-
Transient Lodging	60 [e,g]	45	-
Hospitals, Nursing Homes	60[d,g]	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	60[d,g]	-	40
Office Buildings	-	-	45
Schools, Libraries, Museums	-	-	45

Notes: Ldn= day-night average noise level

[a] Where the location of outdoor activity areas is unknown, the exterior noise level standards shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patios or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

[b] Transportation projects subject to Caltrans review or approval shall comply with the Federal Highway Administration noise standards for evaluation and abatement of noise impacts.

[c] As determined for a typical worst-case hour during periods of use.

[d] Where it is not possible to reduce noise in outdoor activity areas to 60dB,Ldn or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB,Ldn may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

[e] In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

[f] The intent of this noise standard is to provide increased protection against sleep disturbance for residences located near railroad tracks.

[g] In cases where the existing ambient noise level exceeds 60 dbA, the maximum allowable project-related permanent increase in ambient noise levels shall be 3 dBA /Ldn.

Source: City of Elk Grove 2019

Environmental Setting

Airports

As described in Section 3.3.13, “Public Health and Environmental Hazards”, the only airport within 2 miles of the SRWTP Borrow Site is the Borges-Clarksburg Airport and the SRWTP Borrow Site is not located within an airport land use planning area.

Sensitive Receptors

As discussed in the 2014 EIR, for the purposes of noise analysis, typical sensitive receptors include residences, hospitals, and schools. The EchoWater Project EIR identifies the nearest sensitive receptor to the SRWTP Borrow Site as residences in the City of Elk Grove located over 1,500 feet to the south and 1,700 feet east of Dwight Road (SRCSD 2014). Newer sensitive receptors closer to the SRWTP Borrow Site have not been identified since preparation of the EchoWater Project EIR. Sensitive receptors also include residences located along the hauling route on local streets. New portions of the haul route on local streets include Laguna Boulevard located in the City of Elk Grove.

The existing noise environment in the proposed project area is primarily influenced by transportation noise from vehicle traffic on the roadways (e.g., Dwight Road, Laguna Boulevard, I-5). Other noise sources that contribute to the existing noise environment include existing construction and operation activities at the SRWTP. These include mobile noise sources from heavy duty equipment such as tractors, maintenance vehicles, and employee vehicles, as well as stationary noise sources associated with pumps and motors that run the various processes at the SRWTP. These noise sources are also considered sources of vibration in the proposed project area.

Impact analysis

The proposed project would not introduce any permanent increases in ambient noise levels, groundborne vibration, or groundborne noise levels. The proposed project would not impact airports or airport land use planning areas. Impacts to noise identified in the 2014 EIR that would change due to the proposed project are evaluated below.

Methodology

Noise impacts are evaluated by comparing expected construction noise from proposed project activities to applicable county and local noise policies and ordinances. Where multiple thresholds exist, the most stringent applicable noise threshold was used for the evaluation of impacts.

Effect NOI-1: Exposure of Sensitive Receptors to Temporary Construction-Related Noise

2014 EIR Conclusions

The 2014 EIR analysis for Effect NOI-1 evaluated noise effects from temporary use of construction equipment at the borrow sites and trucks on hauling routes in the City of West Sacramento. In the 2014 EIR, several project components were expected to exceed applicable threshold of significance for construction noise including: slurry wall construction, borrow, levee repairs. Additionally, the use of haul trucks on public roads was expected to exceed 60 Ldn and was considered to be significant. However, noise from haul trucks traveling on the onsite haul routes was not predicted to exceed 60 Ldn at adjacent residences, and therefore, was considered to be less than significant. Due to the possible noise effects of the project components listed above, project noise impacts were expected to exceed significance thresholds even with implementation of mitigation measure NOI-MM-1. Since feasible measures were not expected to be available in all situations to reduce noise to below the applicable noise ordinance limits, this impact was found to be significant and unavoidable in the 2014 EIR.

Proposed Project Evaluation

The analysis in Effect NOI-1 did not consider noise effects from temporary use of construction equipment at the SRWTP Borrow Site and haul route segments in the City of Elk Grove. The SRWTP and northern portion of the haul route on Dwight Road are within unincorporated Sacramento County; and the southern portion of Dwight Road and Laguna Boulevard are within the City of Elk Grove. Surplus stockpiled soil at the SRWTP is surrounded by operational facilities of the SRWTP and undeveloped parcels owned by the SRCSD. As mentioned previously, the EchoWater Project EIR identifies the nearest sensitive receptor as residences in the City of Elk Grove located over 1,500 feet south of the surplus stockpiled soil and 1,700 feet east of Dwight Road (SRCSD 2014).

The new hauling route for use of the SRWTP Borrow Site includes the haul route used for construction of the EchoWater Project. Dwight Road is also one of two ingress/egress routes from the SRWTP and regularly experiences truck traffic. Laguna Boulevard also regularly experience truck traffic from the SRWTP and other trucks entering/existing Interstate 5. Commercial and office building structures along Dwight Road and residences along Laguna Boulevard are generally setback approximately 70 feet or more from the roadway centerline and typically the properties contain a landscaped buffer between the road and buildings.

Applicable noise standards for Sacramento County and the City of Elk Grove are presented in the regulatory setting section above. Approximately four pieces of equipment would operate concurrently for use of borrow material at the SRWTP and new hauling truck trips would occur throughout the day. Under the proposed project, vehicle trips would be generated from the use of haul trucks and worker vehicles daily throughout the construction period–160 trips per day for worker vehicles and an average of 616 hauling trips per day (including round-trip travel to/from the SRWTP Borrow Site). **Table 3-11** identifies typical noise levels emitted from construction equipment used for the proposed project.

Table 3-11. Noise Emission Levels from Construction Equipment

Equipment Type	Typical Noise Level (dBA) at 50 feet
Dozer	85
Grader	85
Trucks	74–88

Source: FTA 2006

The assessment below relies on the analysis in Impact 4.11-1 "Short-term construction noise impacts" from the EchoWater Project EIR, which evaluated noise using modelling of noise levels from construction activities for the EchoWater Project. The peak construction period evaluated for construction of the EchoWater Project involved site preparation activities (e.g., grading, earth moving, stockpiling), paving activities (e.g., concrete mixing, pavement pouring, compacting) in conjunction with structure erection, and use of as many as 13 pieces of heavy-duty construction equipment operating simultaneously during the daytime at the SRWTP (including the SRWTP Borrow Site). The impact also considered that construction activity may take place during nights and weekends, including material delivery and hauling, excavation, concrete mixing, and concrete pours. Based on noise emission levels and factoring in attenuation from distances alone, the analysis concluded that noise levels would not exceed the City of Elk Grove's daytime hourly noise standards (i.e., 55 dB L_{eq} from 7 a.m. and 10 p.m.) or nighttime hourly noise standards (i.e., 45 dB L_{eq} from 10 p.m. and 7 a.m.) at the nearby sensitive receptors. Since substantially fewer pieces of construction equipment would be used at the SRWTP under the proposed project compared to the EchoWater Project, noise levels generated from the proposed project also would not exceed the City of Elk Grove's daytime and nighttime hourly noise standards.

The EchoWater Project EIR considered a maximum of 1,087 total vehicle trips (from worker commutes and off hauling) would occur in one hour of the day during peak construction activities. These trips would originate from a variety of locations and enter the SRWTP along Dwight Road from Laguna Boulevard–which is also the haul route for the proposed project. Based on modeled noise, the analysis concluded that noise from peak hour construction trips would not exceed the City of Elk Grove's daytime exterior noise standards (i.e., 55 dB L_{eq} from 7 a.m. and 10 p.m.) but would exceed the nighttime hourly noise standards (i.e., 45 dB L_{eq} from 10 p.m. and 7 a.m.) by 2 dB at the nearby

sensitive receptors. The analysis identifies a mitigation measure limiting total hourly trips entering and leaving Dwight Road from Laguna to 700 vehicles or less to ensure that noise levels at the nearby sensitive receptors would not exceed 45 dBA L_{eq}. Since substantially fewer vehicle trips would occur at the SRWTP under the proposed project compared to the EchoWater Project, including the threshold of 700 peak hour trips at night, noise levels also would not exceed the City of Elk Grove's daytime and nighttime hourly noise standards. Therefore, this impact would be **less than significant**. Since this impact is less-than-significant, the proposed project would not result in a substantial increase in severity of Effect NOI-1.

Effect NOI-2: Exposure of Sensitive Receptors to Temporary Construction-Related Vibration

2014 EIR Conclusions

The 2014 EIR analysis for Effect NOI-2 evaluated exposure of sensitive receptors at the Southport Sacramento River EIP, which included extensive levee construction adjacent to residences. It was assumed that construction equipment would not typically operate within approximately 30 feet of residences and structures. However, there may be situations where this would be required, directly exposing residences and other structures to ground vibration in excess of 0.2 in/sec, and this impact was considered potentially significant. The analysis in Effect NOI-2 does not differentiate vibration impacts during daylight and nighttime. This impact was reduced with implementation of Mitigation Measure NOI-MM-2 requiring use of vibration reducing construction practices; however, it was not anticipated that feasible measures would be available in all situations to reduce vibration to below the applicable levels and this impact was found to be significant and unavoidable in the 2014 EIR.

Proposed Project Evaluation

The analysis in Effect NOI-2 did not consider vibration effects from temporary use of construction equipment at the SRWTP Borrow Site. As discussed in the sensitive receptors section above, sensitive receptors that were not identified in the 2014 EIR are residences located approximately 1,500 and 1,700 feet from the SRWTP Borrow Site and nearby the hauling route on Laguna Boulevard. Surplus stockpiled soil at the SRWTP is surrounded by operational facilities of the SRWTP, which are not considered sensitive to vibrations from construction equipment, and undeveloped parcels owned by the SRCSD. The nearest sensitive receptor to vibrations (i.e., offsite residence or structure) is located over 1,500 feet south of the soil stockpiles and would not be subjected to vibrations from construction equipment.

The new hauling route for use of the SRWTP Borrow Site includes the haul route used for construction of the EchoWater Project. Dwight Road is also one of two ingress/egress routes from the SRWTP and regularly experiences truck traffic. Laguna Boulevard also regularly experiences truck traffic from the SRWTP and other trucks entering/exiting I-5. Commercial and office building structures along Dwight Road and residences along Laguna Boulevard are generally setback approximately 70 feet or more from the roadway centerline and typically contain a landscaped buffer. Therefore, temporary construction-related vibration impacts from use of the SRWTP Borrow Site are not considered substantial under the proposed project. Therefore, this impact would be **less than significant**. Since this impact is less-than-significant, the proposed project would not result in a substantial increase in severity of Effect NOI-2.

3.3.8 Vegetation and Wetlands

Regulatory Setting

CEQA Guidelines

Updates to the CEQA Guidelines adopted in December 2018 included a minor change to the wetland threshold in the Appendix G checklist; this threshold now addresses State and Federally protected wetlands.

County of Sacramento

The Conservation Element of the Sacramento County 2030 General Plan (County of Sacramento 2017) includes goals and policies designed to minimize loss of wetlands, riparian, oak woodland, and other sensitive habitats and identify guidelines for mitigating loss or modification of sensitive habitats, including habitat for special-status species. The Sacramento County Tree Preservation Ordinance also provides protection for trees within the designated urban area of the unincorporated area of Sacramento County, in which the SRWTP Borrow Site is located.

Final South Sacramento Habitat Conservation Plan

The *Final South Sacramento Habitat Conservation Plan* (SSHCP) (County of Sacramento et al. 2018) was released in 2018. The SSHCP is a regional effort that provides streamlined Federal and State permitting processes for development and infrastructure projects, while creating a preserve system to protect habitat, open space, and agricultural lands. The SRWTP Borrow Site is in Preserve Planning Unit (PPU) 4 of the SSHCP area. PPU 4 encompasses 5,253 acres; approximately 527 acres of this PPU would be preserved, with a focus on grassland and freshwater marsh. The SSHCP has not yet been adopted by all partners, and not all regulatory agency permits have been issued. However, these final steps are anticipated to be completed in 2019.

Environmental Setting

The SRWTP Borrow Site is an active soil stockpile for the ongoing EchoWater Project. Based on review of recent aerial photography, much of this borrow site has been subject to regular disturbance since EchoWater Project implementation began in 2015. As described in the EchoWater Project EIR (SRCSD 2014), surrounding areas are dominated by non-native annual grassland. Portions of the SRWTP Borrow Site that have not been regularly disturbed in recent years likely support a similar assemblage of non-native herbaceous species. Although the SRWTP Borrow Site was not addressed in the 2014 EIR, the habitat conditions in undisturbed portions of the site and surrounding areas are likely very similar to those described for the fallow agricultural fields and non-native annual grassland habitats that dominated the potential borrows sites that were evaluated in the EIR. Non-native grasses and forbs characteristic of both the SRWTP Borrow Site and the potential borrow sites evaluated in the 2014 EIR include foxtail barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*), Italian ryegrass (*Lolium multiflorum*), soft chess (*Bromus hordeaceus*), wild oats (*Avena* spp.), yellow star-thistle (*Centaurea solstitialis*), broad-leaf pepper grass (*Lepidium latifolium*), and bindweed (*Convolvulus arvensis*).

No sensitive habitats, including riparian, oak woodland, waters of the United States, or waters of the State occur on or adjacent to the SRWTP Borrow Site. In addition, the site does not support any trees protected by Sacramento County ordinance or provide suitable habitat for special-status plants.

Impact analysis

The proposed project would not impact riparian habitat, waters of the US, Federal or State wetlands, trees, or special-status plant populations and would not conflict with habitat conservation plans. Use of the SRWTP Borrow Site could introduce new invasive plants to the proposed project area or contribute to the spread of existing invasive plants to un-infested areas outside the proposed project area. With implementation of the 2014 EIR EC to implement invasive plant species protections, the potential impact from the proposed project is the same as analyzed in the 2014 EIR.

3.3.9 Wildlife

Regulatory Setting

County of Sacramento

The Conservation Element of the Sacramento County 2030 General Plan (County of Sacramento 2017) includes goals and policies to ensure loss or modification of habitat for special-status species is mitigated. In addition, the Sacramento County Code includes an ordinance that addresses loss of Swainson's hawk foraging habitat in unincorporated Sacramento County.

Final South Sacramento Habitat Conservation Plan

Refer to description in Section 3.3.8 "Vegetation and Wetlands" above.

Environmental Setting

In November 2014, western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) was listed as threatened under the Federal Endangered Species Act (ESA); when the 2014 EIR was prepared, it was proposed for listing. In March 2019, tricolored blackbird (*Agelaius tricolor*) was listed as threatened under the California ESA; when the 2014 EIR was prepared, it was a Species of Special Concern. Yellow-billed cuckoo has no potential to occur at the SRWTP Borrow Site or at the Southport Sacramento River EIP borrow sites to be restored. Tricolored blackbird has low potential to forage at these sites, but no potential nesting habitat is present.

A search of the California Natural Diversity Database (CNDDB) was conducted for occurrences of special-status species on or near the SRWTP Borrow Site (CDFW 2019); this search included the Florin U.S. Geological Survey 7.5-minute quadrangle. Several special-status species are known to occur on the SRWTP property and surrounding Bufferlands, but no occurrences are known from the SRWTP Borrow Site (SRCSD 2014; CDFW 2019; County of Sacramento et al. 2018).

Portions of the SRWTP Borrow Site are not actively disturbed and grassland areas adjacent to the site provide habitat for most of the same species identified in the 2014 Southport EIR as having potential to occur in non-native annual grasslands, field crops, and fallow agricultural fields, such as occurred at the potential borrow sites evaluated in the 2014 EIR. The SRWTP Borrow Site and adjacent habitat likely support common reptiles and mammals and provide habitat for common and special-status birds. Several bird species could nest on undisturbed portions of the SRWTP Borrow Site and adjacent areas that support suitable vegetation and in adjacent grassland habitat, such as savanna sparrow (*Passerculus sandwichensis*), western meadowlark (*Sturnella neglecta*), and northern harrier (*Circus cyaneus*). If ground squirrel burrows are present, they could provide suitable habitat for western burrowing owl (*Athene cunicularia*). Northern harrier and burrowing owl, both California Species of Special Concern,

nest in the SRWTP vicinity (SRCSD 2014; County of Sacramento et al. 2018). The nearest known occupied burrowing owl burrows have been along and east of the Union Pacific Railroad berm, approximately 0.25 to 0.4 mile from the SRWTP Borrow Site; nesting has not been documented on or adjacent to the SRWTP Borrow Site (SRCSD 2014; CDFW 2019). No potential nest trees for Swainson's hawk (*Buteo swainsoni*) (state-listed under the California Endangered Species Act), white-tailed kite (*Elanus leucurus*) (fully protected under the California Fish and Game Code), or other tree-nesting raptors occur on the SRWTP Borrow Site. However, potential nest trees are located near the SRWTP Borrow Site, and some of these locations have supported Swainson's hawk nests in the past (CDFW 2019).

Impact analysis

The proposed project would not result in impacts to many of the special-status species addressed in the 2014 EIR, including: valley elderberry beetle, western pond turtle, giant garter snake, Swainson's hawk, and bat species. The proposed project would not impact wildlife movement corridors or conflict with habitat conservation plans. Impacts to wildlife identified in the 2014 EIR that would change due to the proposed project are evaluated below.

Effect WILD-5: Disturbance or Loss of Western Burrow Owl and Their Habitat

2014 EIR Conclusions

The 2014 EIR analysis for Effect Wild-5 identifies potentially significant impacts to western burrowing owls from loss of foraging and nesting habitat, injury and mortality of burrowing owls if they are present in the construction work area, and disturbance from construction noise near active nests. These impacts are reduced to a less-than-significant level with implementation of Mitigation Measure VEG-MM-3 requiring worker awareness training for biological resources, Mitigation Measure WILD-MM-10 requiring preconstruction surveys for active western burrowing owl burrows, and Mitigation Measure WILD-MM-11 requiring development of a western burrowing owl compensation plan for conversion of occupied habitat.

Proposed Project Evaluation

If ground squirrel burrows are present at or near the SRWTP Borrow Site, then suitable burrow habitat for western burrowing owl may be present. The SRWTP Borrow Site was not covered in the 2014 EIR and is a new project location where impacts to western burrowing owl could occur. If suitable burrow habitat is present, the proposed project could result in impacts to burrowing owl due to direct disturbance to occupied burrows from construction equipment/activities or disturbance to nearby occupied burrows from construction noise. This impact is **potentially significant**.

With implementation of Mitigation Measures VEG-MM-3, WILD-MM-10, and WILD-MM-11 in the 2014 EIR this impact would be consistent with the 2014 EIR analysis. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**. Because potential effects to western burrowing owl from use of the SRWTP Borrow Site are consistent with the types of effects associated with borrow sites evaluated in the 2014 EIR, and mitigation identified in the 2014 EIR would be implemented to reduce these effects, the proposed project would not result in a substantial increase in severity of Effect WILD-5.

Effect WILD-6: Loss or Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors

2014 EIR Conclusions

The 2014 EIR analysis for Effect Wild-6 identifies potentially significant impacts to nesting habitat for special-status and non-special-status migratory birds and raptors from disturbance or removal of occupied nests. These impacts are reduced to less-than-significant level with implementation of Mitigation Measure VEG-MM-1 requiring compensation for the loss of woody riparian habitat, Mitigation Measure VEG-MM-3 requiring worker awareness training for biological resources, and Mitigation Measure WILD-MM-8 requiring avoidance of ground-nesting special-status birds and preconstruction nesting bird surveys (among other activities).

Proposed Project Evaluation

Several bird species, including special-status raptors such as Swainson's hawk, white-tailed kite, and northern harrier, could nest on undisturbed portions of the borrow site that support suitable vegetation and in adjacent grassland habitat and nearby trees. The SRWTP Borrow Site was not covered in the 2014 EIR and is a new project location where impacts to nesting bird species could occur. The proposed project could potentially result in impacts during the breeding season (February 1 through August 31) due to direct disturbance to active nests from construction equipment/activities or disturbance to nearby nests from construction noise. This impact is **potentially significant**.

With implementation of Mitigation Measures VEG-MM-3 and WILD-MM-8 in the 2014 EIR this impact would be consistent with the 2014 EIR analysis. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**. Because potential effects to tree-, shrub-, and ground-nesting birds from use of the SRWTP Borrow Site are consistent with types of effects associated with borrow sites evaluated in the 2014 EIR, and mitigation identified in the 2014 EIR would be implemented to reduce these effects, the proposed project would not result in a substantial increase in severity of Effect WILD-6.

3.3.10 Visual Resources

Regulatory Setting

The SRWTP Borrow Site and a portion of the haul route are located in unincorporated Sacramento County and the City of Elk Grove. Therefore, the County of Sacramento and City of Elk Grove are evaluated in this analysis, since impacts to visual resources in these geographic areas were not analyzed in the 2014 EIR.

Sacramento County General Plan

The Land Use and Circulation Elements of the *Sacramento County General Plan* (Sacramento County 2017a, 2017b) contains the following policies and standards related to construction effects on visual resources:

Land Use Policy LU 31. Strive to achieve a natural nighttime environment and an uncompromised public view of the night sky by reducing light pollution.

Circulation

The Circulation Element designates all freeways within Sacramento County as scenic corridors. Scenic corridors extend 660 feet on each side of the right-of-way. These scenic corridors apply to I-5 in the vicinity of the project haul route.

Bufferlands Master Plan

The Bufferlands Master Plan is an element of the approved 2020 SRWTP Master Plan (SRCSD 1998). The Plan establishes guidelines and management practices to establish a long-term, cost effective management direction for the Bufferlands that would maintain the existing buffer zone, provide for future expansion at the SRWTP, and protect and enhance the area's environmental resources. The master plan provides guidelines and policies for alternative land uses, visitor use and access, and vegetation and wildlife management. A primary management objective of the Bufferlands Master Plan is to allow continued operation and expansion of the SRWTP, while maintaining security and ensuring the safety of personnel and the surrounding public.

The following aesthetic resource management policies address important, sensitive aesthetic areas and provide a framework for management of these key resources:

- maintain and protect the general open space character and visual qualities of the Bufferlands;
- encourage reuse of existing facilities to maintain the natural aesthetic character of the Bufferlands;
- require that any new facilities be sited to avoid or, if avoidance is infeasible, to minimize disturbance of large stands of mature, healthy trees and individual healthy trees of notable size and age;
- require the use of landscaping for onsite activities and encourage the use of landscaping for adjacent offsite development activities to protect and enhance the scenic quality of the Bufferlands and to screen undesirable views.

City of Elk Grove Zoning Code

The Elk Grove Zoning Code (Municipal Code Title 23) provides development standards that address building mass, setbacks, landscaping, lighting, and signage to achieve an aesthetically pleasing appearance. Chapter 23.56, Lighting, addresses lighting specifically, which would reduce the potential for local light and glare, as well as contribution to skyglow. Section 23.56.030 contains requirements for shielding of fixtures and levels of illumination, as well as restrictions on fixture heights and hours of illumination for multifamily and nonresidential uses. Municipal Code Section 23.56.040 prohibits certain types of lighting, such as neon tubing or band lighting along building structures, searchlights, illumination of entire buildings, roof- mounted lights (except for security purposes with motion detection), and any light that interferes with a traffic signal or other necessary safety or emergency light.

Environmental Setting

Topography in the area surrounding the SRWTP property is generally level with the only topographic variation provided by levees and soil mounds from spoils. Vegetation is a mix of remnant riparian vegetation along Laguna Creek to the north and east of the SRWTP, hayfields in cultivated areas to the south, grasslands to the north and east and urban landscaping to the south and east.

Suburban development, located in the City of Sacramento to the east and northeast and in the City of Elk Grove to the east and south of the SRWTP Borrow Site, is characterized by single-family detached housing and low-rise retail and commercial development. The closest residential development is located approximately 0.3 mile southeast of the SRWTP Borrow Site in the City of Elk Grove. Some isolated structures associated with former agricultural uses remain standing within the southern portion of the Bufferlands (SRCSD 2014: Exhibit 4.1-2, View A) and are visible from the haul route along Laguna Boulevard.

Arterial roadways (four to six lanes) in the area have landscaped medians with sidewalks. The walk areas are landscaped with street trees, and concrete/masonry walls separate the roadways from residential areas. Laguna Boulevard, on the haul route, is a six-lane arterial roadway south of the SRWTP. Residential neighborhoods, industrial parks, and office parks occupy the north side of Laguna Boulevard. Residential neighborhoods are on the south side of Laguna Boulevard. I-5 is a heavily traveled commuter and thru traffic route.

The SRWTP Borrow Site is located within the core facility area that is occupied by the existing and under construction SRWTP facilities; this area is surrounded by the Bufferlands. Structures near the SRWTP Borrow Site have an industrial appearance and consist of tanks of various sizes, concrete-construction and metal-construction buildings, conveyance pipes, below-ground and above ground tanks, pumps, and paved expanses. Most structures are clustered on the east side of the core area. The western portion of the SRWTP Borrow Site is less developed than the eastern portion, but has scattered facilities, buildings, emergency storage basins, land disposal areas, and access roads. The majority of the core facility area is not landscaped and vegetation consists of annual grasses and ruderal vegetation. The administration and laboratory buildings are located near the southeast corner of the core facility and include four, one- or two-story buildings in a campus-like setting with parking lots to the north, east, and south of the buildings; extensive landscaped areas are to the south of the buildings on either side of the entrance road. SRWTP buildings and facilities are also visible from the haul route along Laguna Boulevard and Dwight Road.

There are no roadways in or near the SRWTP Borrow Site or along the haul route that are designated in State or Federal plans as scenic highways worthy of protection for maintaining and enhancing scenic viewsheds. Additionally, there are no other scenic vistas or other scenic resources in the project vicinity.

Impact analysis

The proposed project would not introduce any permanent sources of substantial light or glare and would not permanently degrade visual quality in the proposed project area or conflict with any applicable zoning or policies governing visual quality. There are no scenic roadways, scenic vistas, or other scenic resources that would be impacted by the proposed project. Impacts to visual resources identified in the 2014 EIR that would change due to the proposed project are evaluated below.

Methodology

Temporary construction visual impacts are evaluated in this section by comparing expected construction effects on visual quality in the proposed project area to applicable county and local policies and ordinances.

Effect VIS-1: Result in Temporary Visual Effects from Construction

2014 EIR Conclusions

The 2014 EIR analysis for Effect VIS-1 identifies potentially significant impacts to visual resources from temporary use of construction equipment. Impacts are reduced with implementation of Mitigation Measure VIS-MM-1 requiring use of native wildflower species in erosion control grassland seed mix, Mitigation Measure VIS-MM-2 requiring development of a soil borrow strategy and site reclamation plan, and Mitigation Measure VIS-MM-3 limiting construction near residences to daylight hours. However, even with implementation of these mitigation measures, this impact remained significant and unavoidable in the 2014 EIR.

Proposed Project Evaluation

The 2014 EIR analysis under Effect VIS-1 did not consider temporary visual changes from use of construction equipment at the SRWTP Borrow Site or along the haul route. As discussed above, construction activities have been ongoing at the SRWTP for the EchoWater Project. Therefore, use of construction equipment, including excavation and grading of soil for borrow material, is not new to the SRWTP. The new hauling route for use of the SRWTP Borrow Site includes the haul route used for construction of the EchoWater Project on Dwight Road, Laguna Boulevard, and I-5. Dwight Road is also one of two ingress/egress routes from the SRWTP and regularly experiences truck traffic. Laguna Boulevard also regularly experiences truck traffic including from the SRWTP. Residences back up to Laguna Boulevard but are setback and separated with a landscaped buffer. Additionally, I-5 is a major local and regional commuter and transportation route and regularly acts as a transport route for vehicles that are similar to those that would be used for construction and worker commute trips for the proposed project.

Under the proposed project, construction may occur as early as 4 a.m. and at night to avoid peak traffic hours, when high-powered lighting would be required for safe equipment operation at the restoration sites and the SRWTP Borrow Site. Temporary visual effects to sensitive receptors (i.e., residences) from use lighting for construction at night are reduced in the 2014 EIR with the implementation of Mitigation Measure VIS-MM-3 limiting construction near residences to daylight hours; specifically, by requiring construction activities except slurry cutoff wall construction (an activity identified in the project EIR to occur 24 hours-per-day, which is not part of the proposed project) are limited to the hours of 7 a.m. to 6 p.m. to avoid introducing high-wattage lighting sources near residences. However, under the proposed project, construction activities are anticipated to occur to some extent before 7 a.m. and after 6 p.m., and this mitigation measure would not be implemented.

The Southport Sacramento River EIP involved a multitude of construction activities occurring over a large area (shown in Figure 2-1), but the proposed project is limited to the SRWTP Borrow Site and restoration sites where nearby sensitive receptors can be easily identified to evaluate specific impacts from use of lighting during construction activities at night. As discussed in the "Sensitive Receptors" section in Section 3.3.5 "Air Quality," the nearest sensitive receptors to the SRWTP Borrow Site are residences located approximately 1,500 and 1,700 feet from the SRWTP Borrow Site. Any lighting for nighttime construction has the potential to be visible but would be largely screened from residents near the SRWTP by substantial distance, intervening walls, and an existing railroad berm. The restoration sites are in rural areas containing open space and agricultural land uses with scattered residences. Most residences are located a significant distance from the restoration sites, but a few residences located nearby could be substantially impacted by lighting during construction activities at night. Therefore, this

impact would be **potentially significant** at the restoration sites. The following mitigation measure has been identified to address this impact:

> **Mitigation Measure VIS-MM-4: At the Restoration Sites, Limit Use of Lighting Near Sensitive Receptors During Construction Activities at Night**
>
> Use of all lighting during construction activities at night shall be aimed in the opposite direction of nearby sensitive receptors/residences. Use of lighting is prohibited at night within 750 feet of residences nearby the restoration sites. Furthermore, residences within 1,000 feet of the restoration sites shall be provided notice that nighttime construction activities and lighting may be used 750 feet or further away during the construction period for the proposed project.
>
> **Responsibility:** WSAFCA
>
> **Timing:** Prior to and During Construction Activities

Implementing Mitigation Measure VIS-MM-4, a new mitigation measures identified in this Supplemental EIR, would ensure sensitive receptors nearby the restoration sites are not substantially impacted by lighting during construction activities at night. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**. Since the proposed project would not implement Mitigation Measure VIS-MM-3 and would instead result in a new potentially significant impact from use of lighting at night that requires implementation of Mitigation Measure VIS-4, the proposed project would result in a substantial increase in severity of Effect VIS-1.

Effect VIS-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings

2014 EIR Conclusions

The 2014 EIR analysis for Effect VIS-3 identifies permanent adverse effects to visual character and quality in the Southport Sacramento River EIP area from levee construction, on-site borrow (at what is now the restoration sites), and extensive vegetation removal. Since no feasible mitigation measures were available, the impact to visual character and quality was determined to be significant and unavoidable in the 2014 EIR.

Proposed Project Evaluation

The 2014 EIR did not consider permanent visual changes from use of the SRWTP Borrow Site. The SRWTP is an industrial type site which regularly experiences use of heavy-duty equipment and hauling trucks. In addition, construction activities have been ongoing at the SRWTP for the EchoWater Project for several years and the SRWTP and soil stockpiles have consistently changed over this time, including from use as a source of borrow material for other offsite projects. As discussed in Effect VIS-1 above in this section, the new hauling route for use of the SRWTP Borrow Site includes the haul route used for construction of the EchoWater Project. Existing uses and construction activities at the SRWTP would continue to some extent after the proposed project is completed. Therefore, the impact to existing visual character and quality at the SRWTP Borrow Site and haul route would be **less than significant.** Since this impact is less-than-significant, the proposed project would not result in a substantial increase in severity of Effect VIS-3.

3.3.11 Land Use and Agriculture

Environmental Setting

The Sacramento County General Plan designates the SRWTP Borrow Site for Public/Utilities land uses (Sacramento County 2011) and the land has been used as a borrow and stockpile site during SRWTP expansion construction for the past several years. The SRWTP Borrow Site is still currently zoned as AG-80, which is an agricultural zone meant to promote long-term agricultural use and to discourage the premature and unnecessary conversion of agricultural land to urban uses. The SRWTP Borrow Site is also designated as Farmland of Local Importance by the California Farmland Mapping and Monitoring Program (CGS 2019). However, Farmland of Local Importance is not typically defined as significant farmland under CEQA.

Impact Analysis

The SRWTP Borrow Site has not been in active agricultural use since 2007 (i.e. has not been farmed in more than 7 years), and therefore, does not meet the County's definition of locally important farmland per the General Plan. Additionally, conversion of the SRWTP Borrow Site to non-agricultural use (i.e. creating the stockpile site) was previously analyzed under the Draft EIR for the EchoWater Project [SCH #2012052017] (SRCSD 2014). Therefore, use of surplus stockpiled soil at the SRWTP Borrow Site would not result in impacts related to land use and agriculture.

3.3.12 Utilities and Service Systems

Impact Analysis

Utilities and public service systems would not be impacted from excavation of surplus stockpiled soil at the SRWTP Borrow Site or by hauling activities. The proposed project would not generate any solid waste that would need to be disposed of or generate waste in excess of local disposal facility capacity. The project is reducing the overall solid waste volume in the region by reusing available excavated material resulting from ongoing construction activities at the SRWTP.

Use of the SRWTP Borrow Site and associated hauling of material would have no effect on population growth or increased demand for public services or facilities, such as police or fire protection in the proposed project area. The proposed project would not involve any activities that would affect existing facilities, or that would require new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. The proposed project does not involve construction of any temporary or permanent facilities or structures and thus would not result in any wastewater generation that could exceed a wastewater treatment provider's capacity. Additionally, since the project involves only excavation, hauling, and placement of fill material, no new water supply would need to be developed to support project construction or implementation, thus the project would have no effect on local or regional water supply during any water year type.

As discussed in Section 3.3.13 "Public Health and Environmental Hazards", the proposed project would not be located within 0.25 miles of a school. Additionally, since the proposed project involves only borrow material excavation, hauling and placement, it would not require the construction of any new school facilities or parks to support project implementation.

Effect UTL-5: Increase in Emergency Response Times during Project Construction

2014 EIR Conclusions

The 2014 EIR analysis for Effect UTL-5 identifies a possible increase in emergency response times during construction due to delays from construction-related traffic or obstructions to the movement of emergency vehicles. With implementation of EC's from the 2014 EIR (i.e. Traffic Control and Road Maintenance Plan, Coordination to Ensure Minimal Overlap in Disturbances to Traffic during Construction), the risk of effects to emergency response is low, and the direct and indirect effect is considered less than significant, and no mitigation was required in the 2014 EIR.

Proposed Project Evaluation

The 2014 EIR analysis under Effect UTL-5 did not consider effects to emergency response or evacuation routes from the use of construction equipment at the SRWTP Borrow Site or along the haul route in Sacramento County. During construction of the proposed project, construction-related traffic could delay or obstruct the movement of emergency vehicles. However, with of implementation of EC's from the 2014 EIR (i.e. Traffic Control and Road Maintenance Plan, Coordination to Ensure Minimal Overlap in Disturbances to Traffic during Construction), the proposed project would be consistent with the 2014 EIR analysis and is not expected to interfere with emergency site access. Use of the new haul route from the SRWTP Borrow Site would be consistent with the 2014 EIR impact analysis for construction-related effects on fire and police response, evacuation route access and emergency response times. Therefore, this impact would be **less than significant.** Since this impact is less-than-significant, the proposed project would not result in a new potentially significant impact related to Effect UTL-5.

3.3.13 Public Health and Environmental Hazards

Regulatory Setting

County of Sacramento Office of Emergency Services

The Sacramento Office of Emergency Services (SacOES) implements the State's Right-to-Know Ordinance that gives it the authority to inventory hazardous materials used by businesses. The County collects information regarding existing and proposed locations of hazardous material disposal, storage, handling, and transportation facilities. SacOES is responsible for enforcing State regulations at the City and county level, governing hazardous waste generators, hazardous waste storage, underground storage tanks, and environmental health including inspections and enforcement. SacOES also regulates the use, storage, and disposal of hazardous materials (Chapter 6.28 of the Sacramento County Code) in the county by issuing permits, monitoring regulatory compliance, investigating complaints, and other activities. SacOES reviews technical aspects of hazardous waste site cleanups and oversees remediation of contaminated sites resulting from leaking underground storage tanks and aboveground storage tanks.

City of Elk Grove Municipal Code

Municipal Code Section 23.60.030, Hazardous Materials, establishes standards to ensure that the use, handling, storage and transportation of hazardous materials comply with all applicable state laws (Section 65850.2 of the Government Code and Section 25505 et seq. of the Health and Safety Code) and that appropriate information is reported to the Cosumnes Fire Department as the regulatory authority.

City of Elk Grove Local Hazard Mitigation Plan

The City participates in the multijurisdictional Sacramento County Local Hazard Mitigation Plan, last updated in 2016. The purpose of the plan is to guide hazard mitigation planning to better protect the people and property of the county from the effects of hazard events, such as flood, drought, earthquake, and severe weather. This plan also ensures that Sacramento County and participating jurisdictions, including the City, continue to be eligible for federal disaster assistance including the FEMA Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and the Flood Mitigation Assistance Program. The Sacramento County Local Hazard Mitigation Plan provides policies and programs for participating jurisdictions to implement that reduce the risk of hazards and protect public health, safety, and welfare (County of Sacramento 2016).

City of Elk Grove Emergency Operations Plan

The City of Elk Grove's Emergency Operations Plan (EOP) provides a strategy for the City to coordinate and conduct emergency response. The EOP establishes an Emergency Management Organization and assigns functions and tasks consistent with California's Standardized Emergency Management System and the National Incident Management System. The intent of the EOP is to provide direction on how to respond to an emergency from the initial onset, through an extended response, and into the recovery process. The EOP integrates and coordinates the planning efforts of multiple jurisdictions. This plan was reviewed and approved by representatives from each City department, local special districts with emergency services responsibilities in the City, and the Sacramento Operational Area Office of Emergency Services. The content is based upon guidance approved and provided by the State of California, FEMA, and the federal Department of Homeland Security (City of Elk Grove 2018)

Environmental Setting

Hazardous Materials Sites

The SRWTP Borrow Site does not contain any existing hazardous material sites, including sites on the "Cortese List". The closest hazardous waste site to SRWTP Borrow Site is a biosolid disposal site located approximately 0.25 mile to the northwest (ID# L10007002783). The site was closed by SRCSD in 2005 and monitoring and cleanup efforts for that site are ongoing (SWRCB 2019).

Airports

The Borges-Clarksburg Airport, a small, unpaved (i.e., turf runway) private airstrip for primarily agricultural and limited recreational use, is located approximately 1.2 miles west of the SRWTP Borrow Site, immediately west of the Sacramento River. The project site is not located within any airport land use planning areas.

Schools

The nearest school is the Horizon Charter School located 1-mile away from the SRWTP Borrow Site.

Emergency Planning

The Sacramento County Flood Emergency Evacuation Plan identifies evacuation areas and evacuation routes in the vicinity of the SRWTP Borrow Area, including I-5. Access roads to the SRWTP Borrow Site are not included as county-level evacuation routes. (County of Sacramento 2015).

Impact Analysis

The proposed project would not expose people or structures to flood risk-related hazards. The SRWTP Borrow Site is not located within one quarter mile of a school. Use of the SRWTP Borrow Site would not result in disturbance of nearby hazardous waste site #L10007002783. Additionally, since there were no hazardous waste or other contaminated sites in the areas excavated as part of the ongoing SRWTP expansion (SRCSD 2014), the source soil material for the SRWTP Borrow Site is not likely to be contaminated or cause a hazard to public health or the environment. Furthermore, WSAFCA has already determined stockpiled soil at the SRWTP is of suitable quality for use as borrow material. The proposed project would be consistent with the 2014 EIR analysis of safety hazards from the construction site and vehicles. See Section 3.3.12, "Utilities and Service Systems for a discussion of project effects on emergency response access and egress during construction. Impacts to public health and environmental hazards identified in the 2014 EIR that would change due to the proposed project are evaluated below.

Effect HAZ-1: Incidental Release of Hazardous Materials during Construction

2014 EIR Conclusions

The 2014 EIR analysis for Effect HAZ-1 identifies impacts related to incidental hazardous material release during construction. However, with implementation of the EC to obtain coverage under a SWPPP and develop a SPCCP, the risk of accidental spills and releases into the environment would be minimized. In addition, WSAFCA would be required to comply with applicable Federal, State, and local laws, which would reduce the potential for accidental release of hazardous materials during their transport and use. Consequently, the risk of incidental release of hazardous materials during their transport and use during construction activities is low, and the direct and indirect effect is considered less than significant, and no mitigation was required in the 2014 EIR.

Proposed Project Evaluation

The 2014 EIR analysis under Effect HAZ-1 did not consider incidental release of hazardous materials from the use of construction equipment at the SRWTP Borrow Site or along the haul route. Under the proposed project, construction activities would involve the use of materials necessary for construction equipment operation and maintenance, such as fuels and lubricants. The use and storage of these materials could potentially expose and adversely affect workers, the public, or the environment as a result of improper handling or use or accidental discharge. All allowable uses would be subject to compliance with Federal, State, and local hazardous materials regulations (e.g., Cal/OSHA, DTSC, and County). Therefore, it is not anticipated that the routine use of these materials handled in accordance with these laws and regulations would create a significant hazard to the public or the environment. However, since the borrow site is on SRWTP property, hazardous material handling and temporary onsite storage at the SRWTP Borrow Site is also managed in accordance with the SRWTP's Hazardous Waste Management Procedure. This procedure provides detailed guidance and methods for the proper handling and management of hazardous materials and is included as a new EC under the proposed project. Hazardous waste storage areas at the SRWTP are equipped with secondary containment or spill containment features, impervious surfaces, and spill control equipment, and are routinely inspected. With implementation of the new ECs for compliance with SRWTP's Hazardous Waste Management Procedure and implementation of the 2014 EIR EC to obtain coverage under a SWPPP and develop a SPCCP, the risk of accidental spills and releases into the environment would be minimized and use of the SRWTP Borrow Site is consistent with the 2014 EIR analysis. Thus, this impact would be **less than significant.** Since this impact is less-than-significant, the proposed project would not result in a new potentially significant impact related to Effect HAZ-1.

3.3.14 Cultural Resources

Impact Analysis

No new impacts were identified for cultural resources because the soil material is being transported from an approved existing facility, the soil is not being excavated from a new area, and it is being transported to a site that was analyzed as part of the 2014 EIR–for which mitigation has already been implemented (see Mitigation Measure CUL-MM-5 in the 2014 EIR).

Soil stockpiled at the SRWTP Borrow Site (i.e. originated from construction of the EchoWater Project and potential discovery of cultural resources from soil excavation activities at the SRWTP was analyzed and mitigated under the Draft EIR for the EchoWater Project [SCH #2012052017] (SRCSD 2014). The EchoWater Project included mitigation measures for unanticipated discovery of cultural resources, and therefore, it is anticipated any cultural resources would have been identified previously and are not present in soil stockpiles used for the proposed project.

3.3.15 Tribal and Cultural Resources

Tribal Cultural Resources were not analyzed in the 2014 EIR because that document was prepared prior to the passage of AB 52 which amended CEQA and requires the discussion of Tribal Cultural Resources. The regulatory and environmental setting below contains information that was not included in Chapter 3.17 Cultural Resources in 2014 EIR.

Regulatory Setting

CEQA Guidelines

AB 52 (Chapter 532, California Statutes of 2014) established a formal consultation process for California tribes as part of the CEQA review process and equates significant impacts on "tribal cultural resources" with significant environmental impacts (new Public Resources Code [PRC] Section 21084.2). AB 52 became law on January 1, 2015, and applies to projects that have a NOP or notice of negative declaration/mitigated negative declaration filed on or after July 1, 2015.

Federal Plans, Policies, and Regulations

National Historic Preservation Act – Section 106 of the NHPA and its implementing regulations (36 Code of Federal Regulations [CFR] 800, as amended in 1999) require Federal agencies to consider the potential effects of their proposed undertakings, or those they fund or permit, on properties that may be eligible for listing, or that are listed in, the NRHP, and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on the proposed undertaking. Only the area where the soil material is being placed is subject to Section 106; the remainder of the area is not in the Section 106 Area of Potential Effects (APE) since the APE need only include the project area where activities may result in effects on historic properties.

National Register of Historic Places

A property may be listed in the NRHP if it meets criteria for evaluation as defined in 36 CFR 60.4 and as described below.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design,

setting, materials, workmanship, feeling, and association and meets one or more of the following criteria:

a. That are associated with events that have made a significant contribution to the broad patterns of our history; or

b. That are associated with the lives of persons significant in our past; or

c. That embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. That have yielded, or may be likely to yield, information important in prehistory or history.

State Plans, Policies, Regulations and Laws

California Environmental Quality Act (CEQA)

CEQA includes provisions that specifically address the consideration of cultural resources. CEQA states that if a project would have significant impacts on important cultural resources, then alternative plans or mitigation measures must be considered. However, only significant cultural resources (termed "historical resources") need to be addressed. CEQA defines an historical resource as "a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources [CRHR]" (California PRC Section 21084.1), and only applies to the consideration of cultural resources in the project APE.

Assembly Bill 52

AB 52, effective on July 1, 2015, amends CEQA and adds new sections relating to Native American consultation and certain types of cultural resources, TCRs. TCRs are either (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that is either on or eligible for inclusion in the CRHR or a local historic register; or (2) the lead agency (in this case, WSAFCA), at its discretion and supported by substantial evidence, chooses to treat the resource as a TCR. Additionally, a cultural landscape may also qualify as a TCR if it meets the criteria to be eligible for inclusion in the CRHR and is geographically defined in terms of the size and scope of the landscape. Other historical resources (as described in California PRC 21084.1) include a unique archaeological resource (as defined in California PRC 21083.2[g]), or non-unique archaeological resources (as described in California PRC 21083.2[h]) may also be TCRs if they conform to the criteria to be eligible for inclusion in the CRHR.

AB 52 provides that a project with an effect that may cause a substantial adverse change in the significance of a TCR may have a significant effect on the environment. AB 52 requires the lead agency (in this case, WSAFCA) to begin consultation with California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project if the tribe requests the lead agency, in writing, to be informed by the lead agency through formal notification of projects that are proposed in that geographic area and the tribe subsequently requests consultation. California PRC Section 21084.3 states that "public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource".

AB 52 explicitly recognizes "that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because the California Environmental Quality Act calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources". AB 52 therefore includes a requirement for meaningful consultation with culturally and geographically affiliated Tribes to identify TCRs and to develop avoidance or mitigation as appropriate.

Methodology/Data Sources

Native American Consultation

Under PRC section 21080.3.1 and 21082.3, WSAFCA must consult with tribes traditionally and culturally affiliated with the proposed project area that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

As part of the preparation of the 2014 EIR a request was sent to the California Native American Heritage Commission (NAHC) requesting a list of Native American contacts for the proposed project area and requesting a search of the NAHC's Sacred Lands File. The NAHC responded to the request and provided a list of Native American contacts and indicated that there are no known Sacred Sites listed in their Sacred Lands File for the proposed project area. A second NAHC request was not sent for this Supplemental EIR. NAHC requests for the SRWTP Borrow Site are covered under the EchoWater EIR (SRCSD 2014).

Native American Consultation under CEQA

Two tribes have previously requested to be notified regarding projects within their traditional geographic area of cultural affiliation, in accordance with Public Resources Code Section 21080.3.1: United Auburn Indian Community and Yocha Dehe Wintun Nation. On July 10, 2019, WSAFCA sent letters to each contact describing the proposed project, identifying WSAFCA as the lead CEQA agency and requesting information on Tribal Cultural Resources. As of the preparation of this document, no responses have been received. **Table 3-12** below, provides a description of Native American consultation activities completed to date.

Table 3-12. Native American Contact Efforts

Date Contacted	Method of Contact	Response
July 10, 2019	Letter	WSAFCA sent a letter to UAIC notifying the Tribe about the proposed project and requesting a response within 30 days if consultation concerning the proposed project is requested. No response has been received to date.
July 15, 2019	Letter	WSAFCA sent a letter to YDWN notifying these Tribes about the proposed project and requesting a response within 30 days if consultation concerning the proposed project is requested. No response has been received to date

Tribal Cultural Resources Results

Based on consultation with Native American Tribes in accordance with Public Resources Code Section 21080.3.1 portions of the proposed project area may be sensitive for the presence of tribal cultural resources, but no tribal cultural resources as defined in Public Resources Code 21074 have been identified in or adjacent to the proposed project area.

Impact Analysis

Impact CUL-1: Potential Damage to or Destruction of Previously Undiscovered Tribal Cultural Resources

As discussed in Section 3.3.14 "Cultural Resources," soil stockpiled at the SRWTP Borrow Site (i.e. originated from construction of the EchoWater Project and the EchoWater Project) included mitigation measures for unanticipated discovery of cultural resources. However, the EchoWater Project EIR was approved before CEQA required analyzing tribal cultural resources and previously unknown tribal cultural resources could be present in soil stockpiles at the SRWTP Borrow Site. The 2014 EIR was also approved before tribal cultural resources required analysis in CEQA. Efforts to identify tribal cultural resources at the restoration sites and the SRWTP Borrow Site included a records search and research, extensive Native American consultation, a pedestrian field survey with Native American participation, and archaeological testing. Based on these investigations, no tribal cultural resources have been identified within the proposed project area where the soil material is being placed. However, there remains the possibility that previously unknown tribal cultural Resources could be discovered during project construction and inadvertently damaged. This is a **potentially significant** impact. The following mitigation measures have been identified to address this impact:

Mitigation Measure CUL-MM-1: Implement Avoidance, Minimization, and Preservation Measures Should Tribal Cultural Resources Be Discovered During Construction

If tribal cultural resources (such as Native American archaeological materials, sacred objects, unusual amounts of bone or shell, artifacts, or human remains and associated objects and materials) are encountered at the project site during construction, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural materials), and the construction contractor shall immediately notify the project's WSAFCA representative. Avoidance and preservation in place are the preferred manner of mitigating impacts to cultural resources or tribal cultural resources. This will be accomplished, if feasible, by several alternative means, including:

- Planning construction to avoid tribal cultural resource; incorporating tribal resources within parks, green-space or other open space; covering tribal resources; deeding a tribal resource to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.

- Recommendations for avoidance of tribal cultural resources will be reviewed by WSAFCA's representative, interested culturally affiliated Native American tribes and other appropriate agencies, considering factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment and/or revision of construction equipment activities within the project site to avoid tribal cultural resources, modification of the design to eliminate or reduce impacts to

tribal cultural resources or modification or realignment to avoid highly significant features within a tribal cultural resource.

- Native American representatives from interested culturally affiliated Native American tribes will be invited to review and comment on these analyses and shall have the opportunity to meet with the WSAFCA representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

- If the discovered tribal cultural resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. The boundary of a tribal cultural resource will be determined in consultation with interested culturally affiliated Native American tribes and tribes will be invited to monitor the installation of fencing. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American representatives from interested culturally affiliated Native American tribes.

- The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an "Environmentally Sensitive Area".

If a tribal cultural resource cannot be avoided, the following performance standard shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of tribal cultural resources:

- Each resource will be evaluated for California Register of Historical Resources (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes, as applicable.

If a tribal cultural resource is determined to be eligible for listing in the CRHR, WSAFCA will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. WSAFCA shall coordinate the investigation of the find with a qualified archaeologist (meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology) approved by WSAFCA and with interested culturally affiliated Native American tribes that respond to WSAFCA's invitation. As part of the site investigation and resource assessment, WSAFCA and the archaeologist shall consult with interested culturally affiliated Native American tribes to assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by WSAFCA to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to WSAFCA representative by the qualified archaeologist. These recommendations will be documented in the project record. For any recommendations made by interested culturally affiliated Native American tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record. Native American representatives from interested culturally affiliated Native American Tribes and the WSAFCA representative will also consult to develop measures for long-term management of any discovered tribal cultural resources. Consultation will be limited to actions consistent with the jurisdiction of WSAFCA and considering ownership of the subject property.

If WSAFCA determines that the project may cause a significant impact to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:

Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria. Treat the resource with culturally appropriate dignity considering Tribal cultural values and meaning of the resource, including, but not limited to, the following:

- Protect the cultural character and integrity of the resource.
- Protect the traditional use of the resource.
- Protect the confidentiality of the resource.
- Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.
- Protect the resource.

Responsibility: WSAFCA / Construction Contractor

Timing: During Construction Activities

Implementation of Mitigation Measures CUL-MM-1, a new mitigation measure in this Supplemental EIR, would avoid or minimize impacts and preserve any previously undiscovered tribal cultural resources. Therefore, this impact would be **less-than-significant impact with mitigation incorporated**.

3.3.16 Energy

Impact Analysis

Impacts related to energy would be considered potentially significant if the project would result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, or if project construction or implementation would conflict with or obstruct a State or local plan for renewable energy or energy efficiency. There are currently no Sacramento County or City of Elk Grove policies that are germane to consumption of energy resources during construction. For a discussion of GHG regulatory policies, see Section 3.3.6, “Climate Change”.

The proposed project would consume energy during the construction phase, largely due to the loading, hauling and placement of up to 600,000 CY of fill material. While energy use was not a criterion considered in the 2014 EIR, operation of equipment and hauling associated with use of borrow material and restoration of borrow sites was considered in the 2014 EIR; and therefore, additional energy use from the proposed project is limited to the hauling the addition distance required for use of the SRWTP

borrow site. There are no temporary or permanent structures or facilities planned as part of the proposed project and energy use would only be through short-term, standard operation of construction equipment and vehicles rather than electricity. Construction energy use and associated emissions are analyzed in Section 3.3.5, "Air Quality" and Section 3.3.6, "Climate Change". Equipment and vehicle use would occur as specified in Section 2.3.3, "Construction Activities," which is typical of similar earthmoving projects and would not be wasteful or inefficient. Therefore, impacts would be **less-than-significant** from construction.

Once constructed, no operations and maintenance activities are necessary or proposed. Additionally, implementation of the proposed project would not result in any developed land uses or construction of temporary or permanent structures or facilities that could conflict with State or local plans for renewable energy or efficiency. Therefore, there would be **no impact** from operation of the proposed project**.**

3.3.17 Wildfire

Regulatory Setting

Public Resources Code and Government Code - Wildfire

Public Resources Code (PRC) Sections 4201–4204 and Government Code Sections 51175–51189 require identification of fire hazard severity zones (FHSZ) in the State of California. FHSZs are modeled based on vegetation, topography, weather, fuel load type, and ember production and movement. FHSZs are defined as moderate, high, and very high fire hazard severity by the California Department of Forestry and Fire Protection. Fire prevention areas under State jurisdiction are referred to as State Responsibility Areas, while areas under local jurisdiction are called local responsibility areas.

Environmental Setting

The proposed project is not located within or near a State responsibility area or lands classified as very high fire hazard severity zones according to the California Department of Forestry and Fire Protection (CalFire 2007, 2008).

Impact Analysis

Impacts related to wildfire are evaluated based on the following criteria: If located in or near State responsibility areas or lands classified as very high FHSZ, would the project:

- Substantially impair an adopted emergency response plan or emergency evacuation plan,
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire,
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Construction earthmoving construction practices at the SRWTP Borrow Site and restoration sites would not increase the risk of wildfire or the possibility of uncontrolled spread of wildfire, interfere with an adopted emergency response or evacuation plan, or require the installation or maintenance of wildfire prevention or management infrastructure as part of the proposed project. Therefore., there would be **no impacts.**

Chapter 4. Other Statutory Considerations

4.1 Significant and Unavoidable Impacts

Section 21100(b)(2)(A) of the State CEQA Guidelines provides that an EIR shall include a detailed statement setting forth "in a separate section: any significant effect on the environment that cannot be avoided if the project is implemented". Accordingly, this section provides a summary of significant environmental impacts of the project that cannot be mitigated to a less-than-significant level. Chapter 3, "Environmental Setting and Impact Analysis," provides a description of the potential environmental impacts of the project and recommends various mitigation measures to reduce impacts, to the extent feasible. Section 4.3, "Cumulative Impacts," determines whether the incremental effects of this project are significant when viewed in combination with the effects of past projects, other current projects, and probable future projects. After implementation of the recommended mitigation measures, most of the impacts associated with construction of the project would be reduced to a less-than-significant level.

Implementation of the proposed project will not cause any significant and unavoidable impacts.

4.2 Growth Inducement

4.2.1 2014 EIR Conclusions

The 2014 EIR analyzed the potential for the Southport Sacramento River EIP to induce growth. The City of West Sacramento experienced extensive growth between 2004 and 2014. This growth was generally consistent with the City of West Sacramento General Plan but had slowed considerably as a result of economic conditions. The 2014 EIR found the Southport Sacramento River EIP would incrementally reduce localized flood risk for the Southport area by addressing known site-specific levee deficiencies, and therefore, was incrementally growth inducing. The project was acknowledged to be an incremental part of a larger program with a goal of achieving a level of performance sufficient to withstand a 200-year flood event for the City of West Sacramento, and therefore, would facilitate future growth. However, at the time of construction, there were no growth restrictions in place based on City of West Sacramento land use or zoning regulations, or resulting from Federal or state flood zone or hazard area designations, and the project alone did not cause a change in current or future FEMA maps or buildout decisions (with the exception that implementation of the project would reduce the developable footprint in the proposed project area and would be restoring area to natural floodplain).

4.2.2 Proposed Project Evaluation

The proposed project would consist of sourcing fill material from the SRWTP Borrow Site and transporting it along a haul route to be used for restoration of topography and ground surface at the restoration sites, which were used as borrow sites during construction of the Southport Sacramento River EIP. Borrow at the SRWTP site and hauling of materials will not involve or facilitate the construction of housing or commercial facilities or structures or reduce the risk of flood or other hazard (and thus indirectly support housing or commercial construction) in the proposed project area.

Because the proposed project would not involve construction of housing, the proposed project would not directly induce growth. Proposed project-related construction activities would generate temporary and

short-term employment, but these construction jobs are anticipated to be filled from the existing local employment pool and would not indirectly result in a population increase or induce growth by creating permanent new jobs. Furthermore, the project would not involve constructing businesses or extending roadways or other infrastructure that could indirectly induce population growth. Consequently, the project would not induce growth leading to changes in land use patterns, population densities, or related impacts on environmental resources. This impact would be **less than significant**.

4.3 Cumulative Effects

The cumulative effects analysis determines the combined effect of the proposed project and other closely related, reasonably foreseeable, projects. This section introduces the methods used to evaluate cumulative effects, lists related projects, and describes their relationship to the project, identifies cumulative effects by resource area, and recommends mitigation for significant cumulative effects. The State CEQA Guidelines define cumulative effects as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (Section 15355). Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). The cumulative effects of a project are to be addressed if the project's incremental effect is cumulatively considerable, meaning that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (State CEQA Guidelines Sections 15130[a][2] and 15065[a][3]).

State CEQA Guidelines Section 15130(b)(1) identifies two basic methods for establishing the cumulative environment in which the project is to be considered: a) the use of a list of past, present, and probable future projects; and b) the use of projections contained in relevant planning documents.

The following categories of projects were considered in formulating the list of past, present, and probable future projects:

1. projects partially occupied or under construction;

2. projects which have received final discretionary approvals;

3. projects whose applications have been accepted as complete and are currently undergoing environmental review; and

4. proposed projects that have been discussed publicly by an applicant or that otherwise become known to the lead department, provided sufficient information is available about the project to allow at least a general analysis of environmental impacts.

The analysis also considers planning efforts that address regional environmental issues, such as water quality improvement programs, and potential effects associated with climate change. These plans, programs, and effects are discussed in relevant resource discussions below.

4.3.1 2014 EIR Conclusions

For a complete discussion of cumulative impacts, refer to the 2014 EIR, which included projects of local and regional importance including flood management and flood risk reduction projects, projects potentially seeking Section 408 approval from the U.S. Army Corps of Engineers (Corps), City of West

Sacramento development projects, and projects implemented to meet the requirements of the Corps levee vegetation policy.

Proposed Project Evaluation

For purposes of this EIR, the proposed project would result in a significant cumulative effect if:

- the cumulative effects of related projects (past, current, and probable future projects) are not significant and the incremental impact of implementing the proposed project is substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact; or

- the cumulative effects of related projects (past, current, and probable future projects) are already significant and implementation of the proposed project makes a considerable contribution to the effect. The standards used herein to determine a considerable contribution are that either the impact must be substantial or must exceed an established threshold of significance.

- Since the proposed project involves only borrow from the SRWTP Borrow Site and transport of material along the haul route, most projects identified for cumulative analysis in the 2014 EIR are not relevant to cumulative effects analysis in this EIR. Projects relevant to use of the SRWTP Borrow Site are presented in Table 4-1, below.

Table 4.1. Projects Included in Cumulative Analysis

Project	Primary Project Proponent(s)	Project Description	Expected Implementation
North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project (SREL)	Sacramento Area Flood Control Agency	Flood management improvement to levees protecting portions of the City and County of Sacramento along the Lower American and Sacramento Rivers and tributaries outside of the Natomas Basin	2020
EchoWater Project (at the SRWTP)	SRCSD	Water treatment plant expansion and upgrade to meet National Pollutant Discharge Elimination System permit requirements	Ongoing
Sacramento Railyards Specific Plan (Railyards)	City of Sacramento	Redevelopment of the Railyards area; a 244-acre site in downtown Sacramento	Unknown

4.3.2 Cumulative Effects by Resource

Since there are either no impacts or no changes in impacts (beyond what was analyzed in the 2014 EIR) associated with the following resource areas resulting from the proposed project, there are therefore no cumulative effects associated with the following resources areas and they are not discussed further in this EIR:

- Flood Risk Management and Geomorphic Conditions
- Fish and Aquatic Resources
- Environmental Justice, Socioeconomics and Community Effects
- Recreation
- Water Quality and Groundwater Resources
- Geology, Seismicity, Soils, and Mineral Resources

- Vegetation and Wetlands
- Land Use and Agriculture
- Cultural Resources
- Energy
- Wildfire

Transportation and Navigation

Transportation systems in the region are expected to change as a result of past, present, and reasonably foreseeable future projects related to population growth and changes in economic activity. The proposed project would generate temporary construction trips from hauling fill material from the SRWTP Borrow Site to the restoration sites. As shown previously in **Table 3-3**, VMT would primarily be generated from hauling truck trips. This Supplemental EIR considers a 5-month intensive construction scenario where VMT would be generated over 5 months/130 working days for the proposed project. If work was conducted over a longer period, daily VMT shown in Table 3-3 would be reduced and the total VMT would slightly increase from additional days of worker vehicle trips, but VMT from hauling would not change. No reduction in VMT from the proposed project is possible since trips would be generated for hauling fill material and worker vehicles. Additionally, no cumulatively considerable reduction of haul trips and worker trips associated with other, possibly concurrent projects can be guaranteed. Since VMT would only be generated temporarily from construction activities from the proposed project and other proposed and ongoing projects, use of the SRWTP Borrow Site will not cause a cumulatively considerable impact to transportation. Other cumulative impacts associated with additional VMT generated by the proposed project are evaluated in Section 3.3.5 “Air Quality” and Section 3.3.6 “Climate Change”.

Wildlife

The proposed project is not expected to contribute to a significant cumulative effect on wildlife. Implementation of the proposed project may result in temporary wildlife and habitat disturbance during construction. As discussed in Section 3.3.9 “Wildlife”, if ground squirrel burrows are present on or near the SRWTP Borrow Site, the proposed project could disturb western burrowing owls nearby. However, since the beginning of construction on the EchoWater project, construction activities have been intermittently ongoing at the SRWTP and birds in the area have regularly been subjected to some level of ongoing noise from construction equipment, including from use of surplus stockpiled soil for other offsite projects. Since the proposed project is not likely to cause disturbance to nesting birds beyond the level of existing disturbance or to cause an additional type or duration of disturbance under the cumulative project scenario, then what is already ongoing at the SRWTP Borrow Site, there will be no cumulatively considerable impact on wildlife due to the proposed project.

Noise

The proposed project is not expected to contribute to cumulative noise and vibration effects since the proposed project would not result in significant direct effects related to construction noise and vibration at sensitive receptors in the proposed project area. To assess the contribution of the project alternatives to cumulative noise and vibration conditions, noise and vibration from construction of the project is evaluated in conjunction with noise and vibration potentially generated by past, present, and reasonably foreseeable future projects within the region. Other projects in the vicinity of these receptors occurring at the same time could result in cumulative effects. However, because construction noise would be temporary and highly localized, implementation of the proposed project is not anticipated to contribute to significant cumulative noise effects in the proposed project area.

Air Quality

The proposed project may contribute to a significant cumulative effect on Air Quality due to temporary construction related-emissions of NO_X. As detailed in Effect AIR-4, the proposed project, combined with other projects occurring in the YSAQMD and SMAQMD at the same time as construction of the proposed project would result in cumulative effects from NO_X emissions that would be significant, particularly related to NO_X. It is expected that projects generating these pollutants also would minimize emissions through exhaust emissions control. However, there still could be a potentially significant cumulative impact. However, implementation of mitigation measures AIR-MM-6: Reduce Construction Related Exhaust Emissions in SMAQMD and AIR-MM-7: Off-Site NOx Construction Mitigation Fees in SMAQMD will reduce this cumulatively considerable air quality impact to **less than significant.** Cumulative effects of the proposed project are included in the analysis presented in Section 3.3.5 "Air Quality".

Climate Change

The proposed project would result in temporary construction-related GHG emissions. As detailed in the discussion for Effect CC-1, other projects occurring in the YSAQMD at the same time as construction of the proposed project would result in a cumulative increase in GHG emissions. Even with emissions reduction mitigation that would be incorporated into the project and other projects, this cumulative effect is significant. However, implementation of mitigation measures CC-MM-2: Implement SMAQMD Construction GHG Emissions Reduction Best Management Practices and CC-MM-3: Off-Site GHG Construction Mitigation Credits will reduce this cumulatively considerable climate change impact to **less than significant.** Cumulative effects of the proposed project are included in the analysis presented in Section 3.3.6 "Climate Change".

Visual Resources

Significant an unavoidable project-level impacts are possible, due to the possible use of construction lighting to ensure worker and equipment safety during nighttime construction hours. Lighting would be shielded, if possible, and nighttime construction at the project site will be temporary. Nighttime construction is already ongoing as the SRWTP Borrow Site due to EchoWater project implementation. The EchoWater EIR evaluated visual impacts of nighttime construction and found that nighttime views of the project site from the east and west are obstructed by existing plant facilities or vegetation growing on the Bufferlands. A portion of the SRWTP Borrow Site is visible from Dwight Road near the Union Pacific Railroad line intersection. Existing SRWTP facilities are located approximately 0.8 mile from nearby residential areas and are visible from Dwight Road. Minor skyglow effects from the SRWTP can be seen from the I-5 highway to the west under existing conditions.

Any lighting for nighttime construction has the potential to be visible but would be largely screened from residents near the SRWTP by substantial distance, intervening walls, and an existing railroad berm. Light and glare effects at the restoration site may be visible by nearby residences. However, lighting and glare associated with nighttime construction will be temporary and lighting would comply with CBC requirements, including shielding and lighting fixture directional orientation as detailed in Mitigation Measure VIS-MM-4: Limit Use of Lighting Near Sensitive Receptors During Construction Activities at Night. Additionally, after project completion (i.e. SRWTP Borrow Site material has been placed and graded at the restoration site), onsite visual character will be improved from the existing conditions for nearby residents and others passing the project site. Thus, proposed project effects on visual resources will not be cumulatively considerable.

Utilities and Service Systems

The proposed project is not expected to contribute to a significant cumulative effect on utilities and service systems in the project area. As discussed in Effect UTL-5, during construction of the proposed project, construction-related traffic could delay or obstruct the movement of emergency vehicles. However, with of implementation of EC's from the 2014 EIR (i.e. Traffic Control and Road Maintenance Plan, Coordination to Ensure Minimal Overlap in Disturbances to Traffic during Construction), the proposed project is not expected to interfere with emergency site access and there would be no cumulatively considerable impact to construction-related effects on fire and police response, evacuation route access or emergency response times. Thus, proposed project effects on utilities and service systems will not be cumulatively considerable.

Public Health and Environmental Hazards

The proposed project is not expected to contribute to a significant cumulative effect on public health and environmental hazards in the project area. As discussed in Effect HAZ-1, the possibility exists for incidental hazardous material release during construction. However, with implementation of the EC to obtain coverage under a SWPPP and develop a SPCCP, the risk of accidental spills and releases into the environment would be minimized. In addition, WSAFCA would be required to comply with applicable Federal, State, and local laws, which would reduce the potential for accidental release of hazardous materials during their transport and use. Consequently, the risk of incidental release of hazardous materials during their transport and use during construction activities is low. Thus, proposed project effects on public health and environmental hazards will not be cumulatively considerable.

Tribal Cultural Resources

As discussed in Section 3.3.14 "Cultural Resources," soil stockpiled at the SRWTP Borrow Site originated from construction of the EchoWater Project and has already been disturbed. The proposed project is not expected to contribute to a significant cumulative effect on tribal cultural resources in the project area. However, during any construction project, there remains the possibility that previously unknown tribal cultural resources or undiscovered human remains could be discovered during project construction and inadvertently damaged. With implementation of mitigation measures CUL-MM-1: Implement Avoidance, Minimization, and Preservation Measures Should Tribal Cultural Resources Be Discovered During Construction and CUL-MM-3: Implement Post Discovery Procedures in the Event of the Inadvertent Discovery of Human Remains would reduce potential cumulative impacts to a less-than-significant level. Thus, proposed project effects on tribal cultural resources will not be cumulatively considerable.

Chapter 5. Alternatives Analysis

5.1 CEQA Requirements for Alternatives

The principles used to guide selection of the alternatives analyzed in this Supplemental EIR are provided by section 15126.6 of the CEQA Guidelines, which specifies that an EIR must do the following:

- Describe a reasonable range of potentially feasible alternatives to the Project that could attain most of the basic objectives of the project,
- Consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed project, including alternatives that may be costlier or could otherwise impede the project's objectives, and
- Evaluate the comparative merits of the alternatives.

The focus and definition of the alternatives are governed by the "rule of reason," in accordance with section 15126.6(f) of the CEQA Guidelines. That is, the range of alternatives presented in this Supplemental EIR must permit a reasoned choice by WSAFCA. CEQA Guidelines require that an EIR evaluate at least one "No-Project Alternative," evaluate a reasonable range of alternatives to the Project, identify alternatives that were considered during the scoping process but were eliminated from detailed consideration, and identify the "environmentally superior alternative". Consistent with section 15126.6(d) of the CEQA Guidelines, the information provided in this Supplemental EIR about each alternative is sufficient to allow for a meaningful evaluation, analysis, and comparison of the alternatives with the proposed Project.

5.2 Alternatives Development

The 2014 EIR identifies several alternatives to the Southport Sacramento River EIP levee components but does not identify borrow sites alternatives. Instead, the 2014 EIR includes large areas of undeveloped lands in the City of West Sacramento as offsite options for potential borrow sites (refer to Plate 1-5 in the 2014 EIR). Furthermore, the 2014 EIR identifies commercial sources within 20 miles as potential offsite sources of borrow material, and as such, it was anticipated in the 2014 EIR that locations such as the SRWTP Borrow Site may be needed to source the quantity of fill material needed for the Southport Sacramento River EIP.

WSAFCA has identified borrow site alternatives, which were not included in the 2014 EIR, and evaluated if they would meet most of the proposed project objectives. The proposed project objectives (from Section 2.2 "Project Objectives") are to:

- Restore the Southport Sacramento River EIP borrow sites to land elevations and contours desired by the landowners.
- Restore the Southport Sacramento River EIP borrow sites as soon as possible to fulfill previously executed landowner agreements.

- Source borrow material of suitable quality, condition, and quantity to restore the Southport Sacramento River EIP borrow sites.

- Avoid or minimize to the extent possible additional land disturbances and restoration requirements for sourcing of new borrow material.

The project objectives are focused on completing restoration of areas disturbed by the Southport Sacramento River EIP to satisfy commitments to landowners. Since construction of the project was completed in 2018, the borrow sites are currently disturbed and restoration is desired as soon as possible for several reasons, including landowner commitments, erosion control, site safety, and planned future uses of the sites.

As discussed, CEQA requires consideration of potential alternatives that could reduce or eliminate one or more potentially significant environmental impacts of the proposed project. No impacts from the proposed project have been identified as significant and unavoidable. The following potentially significant impacts from the proposed project would be mitigated to a less-than-significant level by implementation of mitigation measures, and were considered in the development of potential alternatives:

- Effect AIR-2: Violate Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation—CEQA

- Effect AIR-4: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region is a Non-Attainment Area under NAAQS and CAAQS

- Effect CC-1: Generate GHG Emissions That May Have a Significant Effect on the Environment

- Effect CC-2: Conflict with an Applicable Plan, Adopted for the Purpose of Reducing GHG Emissions

- Effect WILD-5: Disturbance or Loss of Western Burrow Owl and Their Habitat

- Effect WILD-6: Loss or Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors

- Effect VIS-1: Result in Temporary Visual Effects from Construction

- Effect TCR-1: Potential Damage to or Destruction of Previously Undiscovered Tribal Cultural Resources

The potentially significant impacts of the proposed project are primarily the result of emissions from hauling truck trips between the SRWTP Borrow Site and restoration sites. Therefore, borrow sites which avoid or substantially reduce one or more of these significant impacts would need to substantially shorten the hauling distance by being located substantially closer to the restoration sites than the SRWTP; but, as discussed above, most nearby offsite borrow sites were included in the 2014 EIR. Furthermore, the SRWTP Borrow Site is previously disturbed, contains suitable fill material, and avoids potential impacts associated with disturbing new borrow sites.

5.3 Alternatives Considered

WSAFCA identified one alternative to the proposed project–the Daytime Only Construction alternative–which would meet most of the proposed project objectives, would be feasible, and would avoid or substantially reduce one or more significant impacts of the proposed project. This section discusses this alternative along with the No Project Alternative.

5.3.1 No Project Alternative

Alternative Description

Identification and analysis of a no project alternative is required for CEQA. The purpose of the no project alternative is to serve as a benchmark against which the effects of the action alternatives may be evaluated. Under the No Project Alternative, the SRWTP Borrow Site would not be used as a source of 600,000 CY of fill material for the restoration sites. Borrow material that would have been obtained from the SRWTP site would instead need to be sourced from borrow sites identified in the 2014 EIR or from the Borrow One Site, covered in the 2016 Subsequent EIR. As discussed previously, these borrow sites either were used during construction of the Southport Sacramento River EIP features (i.e., the borrow sites being restored by the proposed project), do not have suitable fill material, or are otherwise not available. Therefore, under the No Project Alternative, the fill material would not be available to complete restoration and the project borrow sites would remain in their present disturbed condition and well below grade of adjacent lands, and WSAFCA would not fulfill commitments with landowners for restoration of these sites.

Yarbrough Property

The approved Yarbrough project site in the City of West Sacramento is within the borrow areas identified in the 2014 EIR on Plate 1-5. A grading permit application has not been submitted by the property owner to the City of West Sacramento for the project. The project includes excavation of lakes up to approximately 11-foot deep within the development footprint. Soil excavated for the lakes is proposed to be distributed throughout the development. WSAFCA has determined that this soil is not suitable for use as borrow material for restoration of the borrow sites.

The property owner has speculated that soil beneath the proposed excavation limits of the lakes (i.e., greater than 11 feet deep) may be suitable for use as borrow material. However, soil would need to be tested by WSAFCA to determine suitability for use as borrow material. Therefore, WSAFCA has no way of planning for potential use of soil until construction of the lakes has begun. The construction timeline is dependent on the developer submitting a grading permit application and compliance with various terms in the project's development agreement, mitigation measures such as for habitat loss, other required permits, and subject to change due to a variety of market factors associated with planning a housing development. The timeline for WSAFCA's use of soil would be further extended because the property development plans and permit applications would need to be amended to accommodate deeper lakes, and WSAFCA would be required to re-initiate the NHPA Section 106 consultation for the Southport Sacramento River EIP through the U.S. Army Corps of Engineers to evaluate and mitigate potential effects to cultural resources from disturbance of the property (since it was not covered under the Section 106 consultation for project construction).

In conclusion, WSAFCA is not pursuing the Yarbrough property because the presence of suitable soil is speculative and all or a portion of borrow material required for restoration (i.e., 600,000 CY) may still

need to be sourced from other locations; and due to the timeline for property approvals, construction, Section 106 compliance, and the potential need to source additional borrow material after excavation of the lakes, pursuing this option would substantially extend the schedule for restoration of the borrow sites and delay satisfying restoration commitments in landowner agreements.

Impact Analysis

Restoration of borrow sites used for the Southport Sacramento River EIP would not occur under the No Project Alternative. Landowner agreements requiring restoration of the sites would not be satisfied. In addition, WSAFCA would not be compliant with Mitigation Measure GEO-MM-1 in the 2014 EIR which requires implementation of a reclamation plan, specifying the land surface configuration, at the borrow areas used for the Southport Sacramento River EIP.

The No Project Alternative would avoid impacts associated with the proposed project, including those related to emissions of NO_X and GHGs from operation of construction equipment and hauling trucks, potential disturbance of western burrowing owls and their habitat and other nesting birds, temporary effects to sensitive receptors near the restoration sites from use of high-powered lighting at night, and potential damage to previously unidentified tribal cultural resources.

5.3.2 Daytime Only Construction

Alternative Description

This alternative would be the same as the proposed project except construction activities would be limited to daytime hours and use of high-powered lighting at night would not be required at the restoration sites. This alternative would be consistent with the 2014 EIR analysis and implementation of Mitigation Measure VIS-MM-3 from the 2014 EIR which limits construction to the hours of 7 a.m. to 6 p.m. to avoid introducing high-wattage lighting sources near residences. This alternative would meet the basic objectives of the proposed project; however, hauling would not avoid peak traffic hours, and therefore, it is anticipated fewer hauling trips would be completed each day, resulting in more time needed to complete restoration activities compared to the proposed project. One of the project objectives is to complete restoration as soon as possible to fulfill previously executed landowner agreements. This alternative would satisfy this objective to a lesser extent than the proposed project.

Impact Analysis

This alternative would result in the same potential impacts as the proposed project except for Effect VIS-1, which would be reduced to a less-than-significant level since construction would not occur at night and use of high-powered lighting near sensitive receptors is not required.

5.4 Alternatives Considered and Dismissed

The following alternatives were considered but dismissed from further analysis for one or more of the following reasons: (1) they were not substantively different from one of the considered alternatives, (2) they would not sufficiently meet the proposed project objectives, (3) they were determined to be infeasible, or (4) they would not avoid or substantially reduce one or more significant impacts of the proposed project:

- SRWTP Borrow Site Two Daily Hauling Shifts
- SRWTP Borrow Site Shorter Hauling Route

- Nearby Terrestrial Borrow Sites Not Identified in the 2014 EIR
- Use of Dredged Material

Each of these alternatives is described further below, along with the specific reasons for dismissal.

5.4.1 SRWTP Borrow Site Two Daily Hauling Shifts

This alternative would involve use of the SRWTP Borrow Site with two daily 8-hour hauling shifts (16 hours per day total) to conduct the proposed project activities–excavating fill material, hauling material to the Southport Sacramento River EIP borrow sites, and conducting restoration activities. Under this alternative, proposed project activities at the SRWTP, restoration sites, and on haul routes would occur each night. With this alternative, it is anticipated construction activities could be completed in approximately four to five months (compared to five to eight months under the proposed project) and previously executed agreements with landowners to restore borrow sites would be fulfilled sooner.

This alternative was initially preferred by WSAFCA because it meets the project objectives, is considered feasible for implementation, and would complete restoration sooner. However, this alternative was dismissed because it would not avoid or substantially reduce one or more significant impacts of the proposed project, and instead, results in greater significant impacts than the proposed project. Because this alternative involves conducting construction activities in the proposed project at a higher intensity, average daily emissions of NOx and annual GHG emissions from operation of construction equipment and haul trucks would be significantly increased compared to the proposed project, which already significantly exceeds applicable thresholds for NOx and GHG emissions.

5.4.2 SRWTP Borrow Site Shorter Hauling Route

This alternative would involve use of the SRWTP Borrow Site with one daily 8-hour hauling shift using a shorter hauling route. Most alternative hauling routes use different local roadways and are a similar distance to the route chosen for the proposed project; and therefore, are not substantially different than the proposed project. One shorter route exists, crossing the Sacramento River along the Freeport Bridge and approaching the restoration sites from the south instead of the north. Specifically, from the SRWTP Borrow Site, the same local roadways (Dwight Road and Laguna Boulevard) would be used to access I-5; From I-5, the route would follow Consumes River Boulevard, then Freeport Boulevard, then the Freeport Bridge in Sacramento County; and onto South River Road, Gregory Avenue and Village Parkway to the restoration sites in Yolo County. This route is approximately 14.1 miles–5.4 miles (28%) shorter than the route for the proposed project.

The Freeport Bridge over the Sacramento River is a moveable bridge designed to be convenient for vessel traffic in the river. The bridge operates from 9am to 5pm between May 1 and October 31 and is subject to open on 4-hours of notice between November 1 and April 30 (Sacramento County 2019a). Therefore, there would likely be periods where the bridge is inaccessible to hauling trucks. Furthermore, in 2016, Sacramento County designated the Freeport Bridge as poor and structurally deficient and requiring “replacement of bridge or other structure because of substandard load carrying capacity or substandard bridge roadway geometry” (Sacramento County 2019b). In addition, South River Road in Yolo County is not in a condition that would be able to handle the large number of truck haul trips required to haul material to and from the borrow restoration sites. Hauling on this roadway could cause impacts requiring road repairs. In fact, Yolo County submitted a comment letter on the NOP stating that: “No truck traffic associated with this project will permitted to travel on any Yolo County roads

(including South River Road)" (see Appendix A). For these reasons, use of the shorter hauling route considered under this alternative was determined to be infeasible.

5.4.3 Nearby Terrestrial Borrow Sites Not Identified in the 2014 EIR

The 2014 EIR includes large areas of undeveloped lands in the City of West Sacramento as offsite options for potential borrow sites. This alternative involves use of terrestrial borrow sites not identified in the 2014 EIR or the Borrow One Site, covered in the 2016 Supplemental EIR. Hauling would occur during a single, 10-hour or 8-hour, on Saturdays, daily shift, similar to the proposed project. To substantially reduce the significant impacts of the proposed project from hauling, borrow sites under this alternative would need to be located substantially closer to the restoration sites than the SRWTP Borrow Site.

If another borrow site is used, soil would need to be tested for hazardous material to determine if soil is suitable for use in restoration. Use of new terrestrial borrow sites would result in new disturbances and depending on the borrow sites existing conditions, could result in new impacts to biological, cultural, and groundwater resources, among others. The timeline for identifying properties, entering into agreements with landowners, and conducting pre-testing and planning is significantly longer than for the proposed project. Permits may be necessary if waters of the U.S./State or Federal or State listed endangered species habitat is present, significantly extending the project timeline further. There is also a possible need for post-excavation restoration of borrow sites to match the surrounding land elevation and contours, resulting in additional restoration requirements and time.

WSAFCA has not identified a single terrestrial borrow site location that is substantially closer than the SRWTP Borrow Site is to the restoration sites and could potentially provide the 600,000 CY of fill needed for the proposed project. Identifying multiple locations to provide the large quantity of fill material needed for the proposed project would take considerable time and may not be possible. In addition, the composition and quality of available material may be unsuitable for application at the restoration sites and pre-testing is typically impossible or difficult before having an agreement with the landowner to use the property. For these reasons, the volume of material available from other nearby terrestrial borrow sites is not guaranteed ahead of time; and due to the large quantity of material needed for the proposed project, this alternative is considered speculative and potentially infeasible. Even if feasible, this alternative would take considerable time to develop and would result in new disturbances and potentially restoration requirements and would not meet the basic project objectives.

5.4.4 Use of Dredged Material

The 2014 EIR identifies one small borrow site consisting of dredged material previously removed from the Sacramento River Deep Water Ship Channel and stockpiled on land adjacent to the west of the channel. This alternative would consist of using materials newly dredged from the Sacramento River Deep Water Ship Channel or other local channels and marinas around the City of West Sacramento during routine maintenance and at new locations. New dredging would likely be needed for this alternative, as it is unlikely previously dredged material of the large quantity needed for the proposed project is available. Hauling would occur during a single, 10-hour or 8-hour, on Saturdays, daily shift, similar to the proposed project. However, the potential locations for receiving dredged material are closer to the restoration sites than the SRWTP Borrow Site and would likely reduce the hauling distance compared to the proposed project.

Stockpiles of dredged material would need to be tested for hazardous material, including mercury, to determine if soil is suitable for use in restoration. New disturbances would result from dredging material in the local channels and potentially stockpiling on upland areas, since stockpile locations aren't known, and could result in new impacts to biological resources, cultural resources, and water quality, among others. The timeline for identifying dredge locations, entering into agreements for dredge material and conducting pre-testing and planning is significantly longer than for the proposed project. Permits would be necessary for use of dredged material, significantly extending the project timeline further. There is also a possible need for post-project restoration of stockpile staging areas, resulting in additional restoration requirements and time.

WSAFCA has not identified a single location of dredge material to provide the 600,000 CY of fill needed for the proposed project. Identifying multiple locations to provide the large quantity of fill material needed for the proposed project would take considerable time and may not be possible. In addition, the composition and quality of dredged material may be unsuitable for application at the restoration sites and pre-testing is impossible since dredge material is not consistently available and stockpiled in a static quantity that can be pre-tested for appropriate composition during project planning. For these reasons, the volume of material produced during dredging is not guaranteed ahead of time; and due to the large quantity of material needed for the proposed project, this alternative is considered speculative and potentially infeasible. Even if feasible, this alternative would take considerable time to develop and would result in new disturbances and potentially restoration requirements and would not meet the basic project objectives.

5.5 Environmentally Superior Alternative

CEQA requires identification of the environmentally superior alternative for an EIR; that is, the alternative that has the least significant impacts on the environment. As presented in Chapter 2, implementation of the proposed project would result in less than significant environmental impacts with mitigation incorporated. As discussed in Section 5.3, the No Project Alternative would have the least significant impacts on the environment because no material would be borrowed or hauled; however, this alternative does not meet the project objectives. When the No Project alternative is the environmentally superior alternative, CEQA requires that an environmentally superior alternative be selected from among the other alternatives to the Proposed Project (CEQA Guidelines Section 15126.6(e)(2)). Therefore, the Daytime Only Construction alternative, the only other feasible alternative, is the environmentally superior alternative. This alternative would be environmentally superior to the proposed project because it would not require use of high-powered lighting near sensitive receptors at the restoration sites.

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Chapter 6. Report Preparation

West Sacramento Area Flood Control Agency

Greg Fabun.....Project Manager, Document Review

Toby Wong .....Project Manager, Document Review

GEI Consultants, Inc.

Michael Smith.....Document Review and Quality Assurance/Quality Control

Ryan Jolley.....Project Director/Manager (CEQA Compliance), Introduction, Project Description, Air Quality, Climate Change, Transportation and Navigation, Alternatives Analysis, Document Review and Quality Assurance/Quality Control

Erica Bishop.....Water Quality and Groundwater Resources; Geology, Seismicity, Soils, and Mineral Resources; Visual Resources; Land Use and Agriculture; Utilities and Service Systems; Public Health and Environmental Hazards; Energy; Wildlife; Other Statutory Considerations; Alternatives Analysis

Anne King.....Vegetation and Wetlands, Wildlife

Madeline Bowen .....Cultural Resources and Tribal Cultural Resources

Ryan Snyder.....Geographic Information Systems

Charisse Case .....Document Specialist

KD Anderson & Associates, Inc.

Wayne Shijo.....Criteria Air Pollutant and Greenhouse Gas Emissions

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Appendix A. Notice of Preparation and Public Comments

Notice of Preparation

To: State Clearinghouse, County Clerk, Responsible and Trustee Agencies, and Interested Parites
(Address) *See distribution list*

From: West Sacramento Area Flood Control Agency
(Address) 1110 West Capitol Avenue
West Sacramento, CA 95691

Subject: Notice of Preparation of a Draft Environmental Impact Report

West Sacramento Area Flood Control Agency will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☐ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Greg Fabun at the address shown above. We will need the name for a contact person in your agency.

Project Title: Southport Sacramento River Early Implementation Project

Project Applicant, if any: not applicable

Date July 25, 2019

Signature

Title Flood Protection Manager

Telephone 916.617.4855

Reference: California Code of Regulations, Title 14. (CEQA Guidelines) Sections 15082(a), 15103, 15375.

Notice of Preparation of a
Supplemental Environmental Impact Report

Southport Sacramento River Early Implementation Project

The West Sacramento Area Flood Control Agency (WSAFCA), as the Lead Agency under the California Environmental Quality Act (CEQA), publicly announces its intent to initiate the preparation of a Supplemental Environmental Impact Report (Supplemental EIR) for use of the Sacramento Regional Wastewater Treatment Plant (SRWTP) Borrow Site (proposed project) for the Southport Sacramento River Early Implementation Project (EIP). The Supplemental EIR is a continuation of the Final EIR prepared for the Southport Sacramento River EIP (State Clearinghouse No. 2011082069) and associated Subsequent EIR for the Borrow One Site. The Supplemental EIR will contain only the information necessary to make the previous EIR adequate for use of the SRWTP Borrow Site. This focus meets the requirements for supplemental analysis under Section 15163 of the CEQA Guidelines.

Project Background

The Southport Sacramento River EIP implements flood risk-reduction measures along the Sacramento River South Levee in the City of West Sacramento, Yolo County, California. The study area encompasses the area of levee risk-reduction measure construction along the river corridor, roadway construction and/or relocation, and potential soil borrow sites. The project brings the levee up to standard with Federal and State flood protection criteria, as well as providing opportunities for ecosystem restoration and public recreation. WSAFCA prepared an EIR for the Southport Sacramento River EIP, which was certified in August 2014. WSAFCA also prepared a Subsequent EIR for use of the Borrow One Site, to provide an additional location for sourcing borrow material during project construction, which was certified in April 2016.

Construction of the Southport Sacramento River EIP features was substantially completed in 2018. Construction involved excavation of borrow material from sites identified in the EIR in the City of West Sacramento to supply fill materials. WSAFCA has identified the need to import up to 600,000 cubic yards (CY) of material to restore borrow sites excavated for the project to desired elevations and contours. Restoration of borrow sites is identified as a project activity in the EIR; however, potential borrow sites identified in the EIR were either used for project construction or are not currently available for sourcing fill material. Accordingly, fill material for restoration of the project borrow sites is proposed by WSAFCA to be sourced from surplus soil stockpiles at the SRWTP. Use of the SRWTP Borrow Site was not identified in the Southport Sacramento River EIP EIR or Subsequent EIR.

Purpose of the Notice of Preparation

WSAFCA has prepared this Notice of Preparation (NOP) for the Supplemental EIR to provide opportunity for comment from public agencies, stakeholders, organizations, and interested individuals on the scope of the environmental analysis addressing the potential effects of the proposed project. In accordance with the CEQA Guidelines, 14 CCR Section 15000 et seq., WSAFCA acting as Lead Agency is requesting written comments from public agencies, stakeholders, organizations and interested individuals on the scope and content of the environmental information that should be addressed in the Supplemental EIR.

Project Site and Location

The SRWTP Borrow Site is located approximately 1.5 miles east of Interstate 5 at the intersections of Dwight Road and Simms Road in unincorporated Sacramento County, California (Figure 1). The borrow site consists of surplus soil stockpiles at the southeast end of the large SRWTP property. Soil from the SRWTP Borrow Site would be transported to the Southport Sacramento River EIP Site. The Southport Sacramento River EIP Site consists of areas located along the Sacramento River South Levee and borrow sites east of Jefferson Boulevard in the City of West Sacramento, Yolo County, California (Figure 1).

Project Description

Since the Southport Sacramento River EIP EIR covered restoration of borrow sites, the proposed project is limited to hauling of fill material for restoration from the SRWTP Borrow Site. The EIR covered importing up to 2,400,000 CY of fill material from up to 20 miles away; however, without known quantities or location, the EIR did analyze all of the impacts. The EIR covered hauling to an extent from potential borrow sites within the City of West Sacramento. Use of the SRWTP Borrow Site requires additional hauling on roadways in the City of West Sacramento, Sacramento County, and the City of Elk Grove. Use of the SRWTP Borrow Site and additional hauling activities will be the focus of the Supplemental EIR. The surplus soil stockpiles proposed for use were generated from soil excavated during ongoing construction activities of the EchoWater Project at the SRWTP. Therefore, use of these stockpiles would not result in new ground disturbance. WSAFCA has confirmed soil is of suitable quality for the proposed project and the quantity of material needed for the proposed project–up to 600,000 CY–is available.

Issues to Be Addressed in the Supplemental EIR

It is anticipated that some of the environmental effects of the proposed project will not change from those of the Southport Sacramento River EIP EIR because no new ground disturbance is needed for use of the SRWTP Borrow Site. The impact categories below have been preliminarily identified for analysis in the Supplemental EIR.

- Water Quality and Groundwater Resources
- Geology, Seismicity, Soils, and Mineral Resources
- Land Use and Agriculture
- Utilities and Service Systems
- Transportation and Navigation
- Air Quality
- Climate Change
- Noise
- Vegetation and Wetlands
- Wildlife
- Visual Resources
- Public Health and Environmental Hazards
- Cultural Resources
- Energy
- Wildfire
- Tribal Cultural Resources

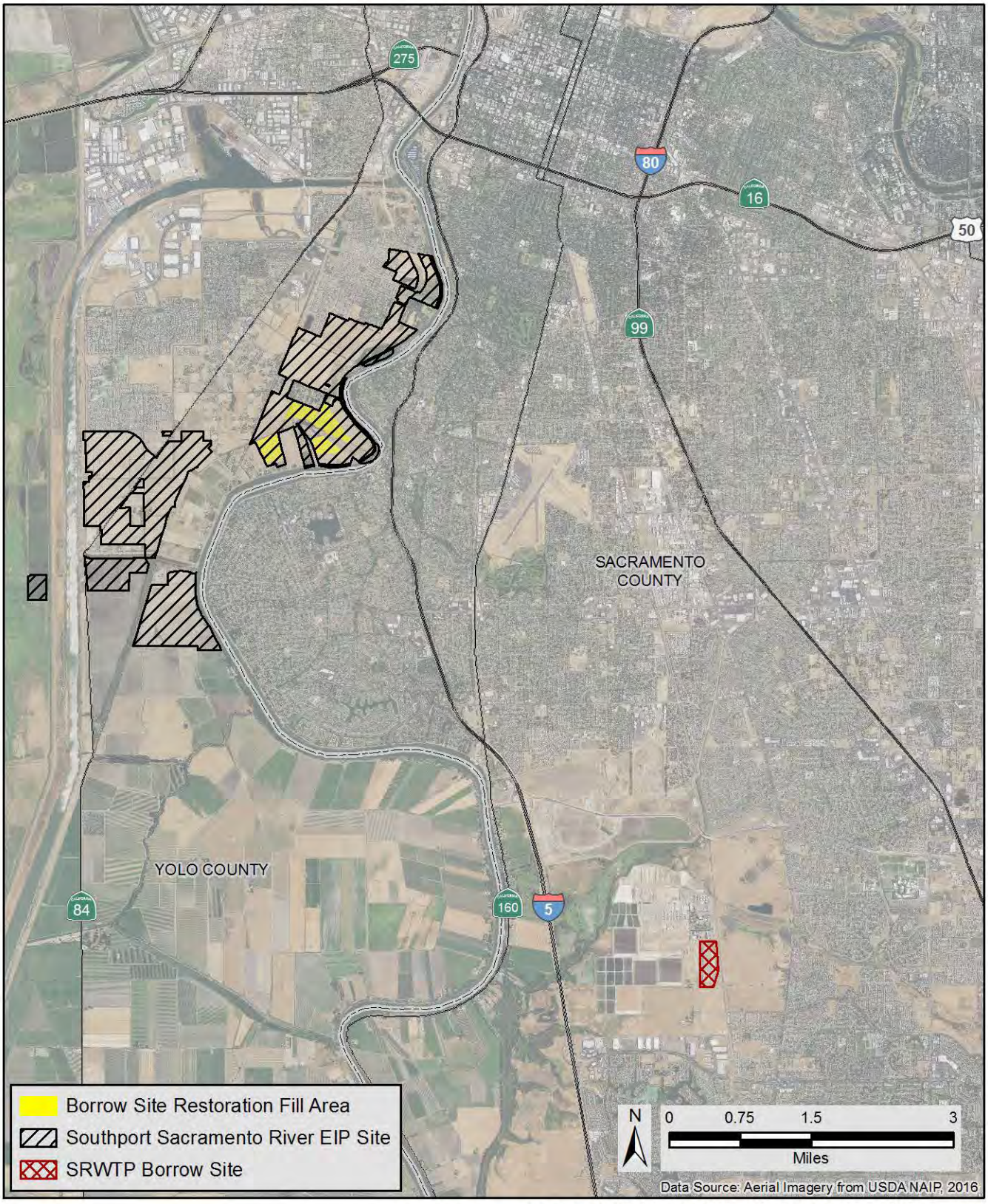
In addition, the Supplemental EIR will address cumulative impacts, growth inducing impacts, and other issues required by CEQA. As discussed in CEQA Guidelines Section 15163, a lead agency may choose to prepare a Supplemental EIR when only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. The Supplemental EIR need contain only the information necessary to make the previous EIR adequate for the project as revised. When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the Supplemental EIR. Therefore, the WSAFCA Board will ultimately consider the Supplemental EIR in combination with the previous EIR certified in August 2014.

How to Comment

The public review period began July 12, 2019 and the ending has been extended from August 10 to August 27, 2019. Comments regarding the scope of the environmental analysis to be conducted for the proposed project may be submitted during this timeframe. When submitting a comment, please include the name of a contact person in your agency or organization. Comments can be received by mail, e-mail, or fax to the address below:

Greg Fabun
West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, CA 95691
gregf@cityofwestsacramento.org

All comments must be received by August 27, 2019. The City will also host a scoping meeting from **4:30 pm to 6:30 pm on August 14, 2019, at the West Sacramento City Hall Galleria, 1110 West Capitol Avenue, West Sacramento, CA 95691; the initial scoping meeting planned for July 30, 2019 has been canceled.** Interested persons may also submit comments at the scoping meeting.



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10Jul2019 RS

Notice of Preparation

To: State Clearinghouse, County Clerk, Responsible and Trustee Agencies, and Interested Parites
(Address) *See distribution list*

From: West Sacramento Area Flood Control Agency
(Address) 1110 West Capitol Avenue
West Sacramento, CA 95691

Subject: Notice of Preparation of a Draft Environmental Impact Report

West Sacramento Area Flood Control Agency will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☐ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Greg Fabun at the address shown above. We will need the name for a contact person in your agency.

Project Title: Southport Sacramento River Early Implementation Project

Project Applicant, if any: not applicable

Date July 25, 2019

Signature

Title Flood Protection Manager

Telephone 916.617.4855

Reference: California Code of Regulations, Title 14. (CEQA Guidelines) Sections 15082(a), 15103, 15375.

Notice of Preparation of a
Supplemental Environmental Impact Report

Southport Sacramento River Early Implementation Project

The West Sacramento Area Flood Control Agency (WSAFCA), as the Lead Agency under the California Environmental Quality Act (CEQA), publicly announces its intent to initiate the preparation of a Supplemental Environmental Impact Report (Supplemental EIR) for use of the Sacramento Regional Wastewater Treatment Plant (SRWTP) Borrow Site (proposed project) for the Southport Sacramento River Early Implementation Project (EIP). The Supplemental EIR is a continuation of the Final EIR prepared for the Southport Sacramento River EIP (State Clearinghouse No. 2011082069) and associated Subsequent EIR for the Borrow One Site. The Supplemental EIR will contain only the information necessary to make the previous EIR adequate for use of the SRWTP Borrow Site. This focus meets the requirements for supplemental analysis under Section 15163 of the CEQA Guidelines.

Project Background

The Southport Sacramento River EIP implements flood risk-reduction measures along the Sacramento River South Levee in the City of West Sacramento, Yolo County, California. The study area encompasses the area of levee risk-reduction measure construction along the river corridor, roadway construction and/or relocation, and potential soil borrow sites. The project brings the levee up to standard with Federal and State flood protection criteria, as well as providing opportunities for ecosystem restoration and public recreation. WSAFCA prepared an EIR for the Southport Sacramento River EIP, which was certified in August 2014. WSAFCA also prepared a Subsequent EIR for use of the Borrow One Site, to provide an additional location for sourcing borrow material during project construction, which was certified in April 2016.

Construction of the Southport Sacramento River EIP features was substantially completed in 2018. Construction involved excavation of borrow material from sites identified in the EIR in the City of West Sacramento to supply fill materials. WSAFCA has identified the need to import up to 600,000 cubic yards (CY) of material to restore borrow sites excavated for the project to desired elevations and contours. Restoration of borrow sites is identified as a project activity in the EIR; however, potential borrow sites identified in the EIR were either used for project construction or are not currently available for sourcing fill material. Accordingly, fill material for restoration of the project borrow sites is proposed by WSAFCA to be sourced from surplus soil stockpiles at the SRWTP. Use of the SRWTP Borrow Site was not identified in the Southport Sacramento River EIP EIR or Subsequent EIR.

Purpose of the Notice of Preparation

WSAFCA has prepared this Notice of Preparation (NOP) for the Supplemental EIR to provide opportunity for comment from public agencies, stakeholders, organizations, and interested individuals on the scope of the environmental analysis addressing the potential effects of the proposed project. In accordance with the CEQA Guidelines, 14 CCR Section 15000 et seq., WSAFCA acting as Lead Agency is requesting written comments from public agencies, stakeholders, organizations and interested individuals on the scope and content of the environmental information that should be addressed in the Supplemental EIR.

Project Site and Location

The SRWTP Borrow Site is located approximately 1.5 miles east of Interstate 5 at the intersections of Dwight Road and Simms Road in unincorporated Sacramento County, California (Figure 1). The borrow site consists of surplus soil stockpiles at the southeast end of the large SRWTP property. Soil from the SRWTP Borrow Site would be transported to the Southport Sacramento River EIP Site. The Southport Sacramento River EIP Site consists of areas located along the Sacramento River South Levee and borrow sites east of Jefferson Boulevard in the City of West Sacramento, Yolo County, California (Figure 1).

Project Description

Since the Southport Sacramento River EIP EIR covered restoration of borrow sites, the proposed project is limited to hauling of fill material for restoration from the SRWTP Borrow Site. The EIR covered importing up to 2,400,000 CY of fill material from up to 20 miles away; however, without known quantities or location, the EIR did analyze all of the impacts. The EIR covered hauling to an extent from potential borrow sites within the City of West Sacramento. Use of the SRWTP Borrow Site requires additional hauling on roadways in the City of West Sacramento, Sacramento County, and the City of Elk Grove. Use of the SRWTP Borrow Site and additional hauling activities will be the focus of the Supplemental EIR. The surplus soil stockpiles proposed for use were generated from soil excavated during ongoing construction activities of the EchoWater Project at the SRWTP. Therefore, use of these stockpiles would not result in new ground disturbance. WSAFCA has confirmed soil is of suitable quality for the proposed project and the quantity of material needed for the proposed project–up to 600,000 CY–is available.

Issues to Be Addressed in the Supplemental EIR

It is anticipated that some of the environmental effects of the proposed project will not change from those of the Southport Sacramento River EIP EIR because no new ground disturbance is needed for use of the SRWTP Borrow Site. The impact categories below have been preliminarily identified for analysis in the Supplemental EIR.

- Water Quality and Groundwater Resources
- Geology, Seismicity, Soils, and Mineral Resources
- Land Use and Agriculture
- Utilities and Service Systems
- Transportation and Navigation
- Air Quality
- Climate Change
- Noise
- Vegetation and Wetlands
- Wildlife
- Visual Resources
- Public Health and Environmental Hazards
- Cultural Resources
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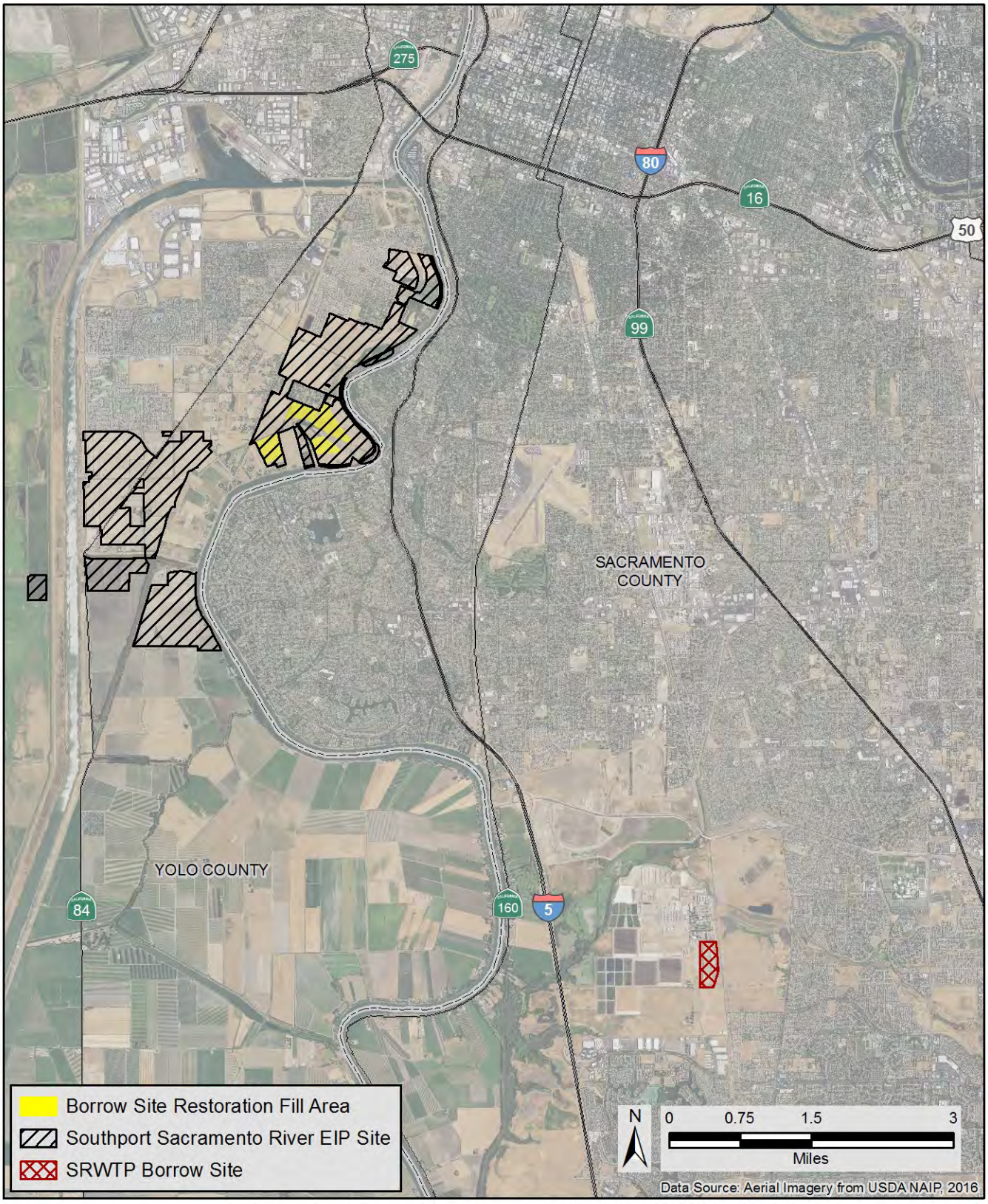
How to Comment

This NOP is being circulated for a period of 30 days, **beginning July 29, 2019, and ending August 27, 2019**. Comments regarding the scope of the environmental analysis to be conducted for the proposed project may be submitted during this timeframe. When submitting a comment, please include the name of a contact person in your agency or organization. Comments can be received by mail, e-mail, or fax to the address below:

Greg Fabun
West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, CA 95691
gregf@cityofwestsacramento.org

All comments must be received by August 27, 2019. The City will also host a scoping meeting from **4:30 pm to 6:30 pm on August 14 2019, at the West Sacramento City Hall Galleria, 1110 West Capitol Avenue, West Sacramento, CA 95691** where interested persons may also submit comments.



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Please send your response to Greg Fabun at the address shown above. We will need the name for a contact person in your agency.

Project Title: Southport Sacramento River Early Implementation Project

Project Applicant, if any: not applicable

Date July 12, 2019

Signature

Title Flood Protection Manager

Telephone 916.617.4855

Reference: California Code of Regulations, Title 14. (CEQA Guidelines) Sections 15082(a), 15103, 15375.

Notice of Preparation of a
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Greg Fabun
West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, CA 95691
gregf@cityofwestsacramento.org

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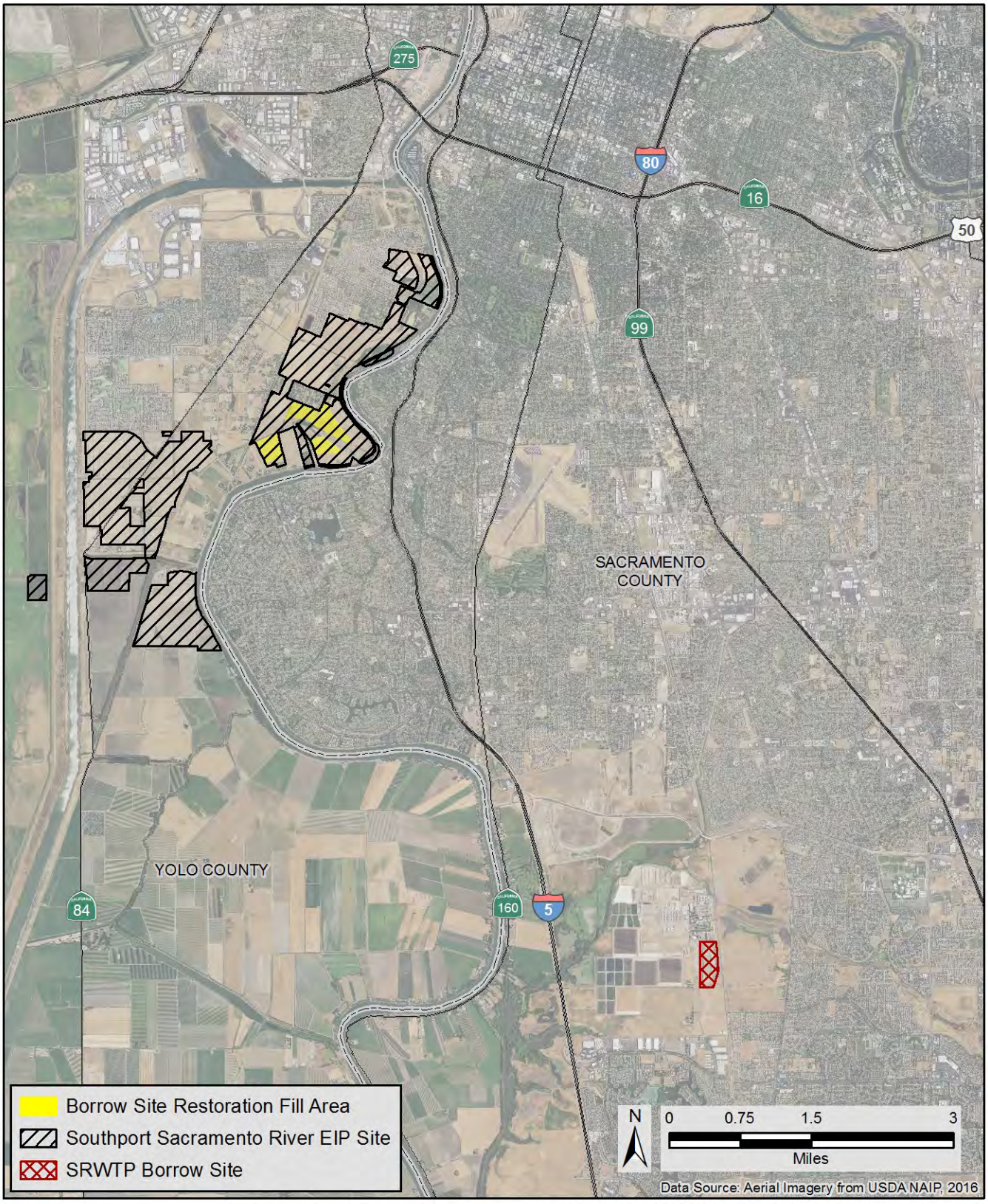

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10Jul2019 RS

Notice of Preparation of a Supplemental Environmental Impact Report

Distribution List

City of Elk Grove
Planning Director
8401 Laguna Palms Way
Elk Grove, CA 95758

California Department of Transportation,
Office of Environmental Management
Kendall Schinke
703 B Street
Marysville, CA 95901

City of Sacramento
Planning Director
915 I Street, New City Hall, 3rd Floor
Sacramento, CA 95814

Federal Highway Administration
NEPA/CEQA Compliance Dept.
1200 New Jersey Ave., SE
Washington, DC 20590

Office of Historic Preservation
Julianne Polanco
1725 23rd Street, Suite 100
Sacramento, CA 95816

Sacramento Air Quality Management District
Karen Huss
777 12th Street, Suite 300
Sacramento, CA 95814

Sacramento County Planning and Community Development Agency
Director
827 7th Street, Room 230
Sacramento, CA 95814

Sacramento Regional Wastewater Treatment Plant
Dan Wilson
8521 Laguna Station Road
Elk Grove, CA 95758

Sacramento Transportation Authority
801 12th Street, 5th Floor
Sacramento, California 95814

California State Clearinghouse,
1400 10th Street, Rm 121
Sacramento, CA 95814

U.S. Army Corps of Engineers
Attn: Planning Division (CESPK-PD-R)
1325 J Street
Sacramento, CA 95814

California Department of Water Resources
Division of Flood Management
Morgan O'Brien, Attn: Flood Risk Reduction Projects, Section B
3464 El Camino Avenue, Suite 200
Sacramento, CA 95821

Yolo County Planning Department
Planning Director
292 West Beamer Street
Woodland, CA 95695

Yolo County Transit Authority
350 Industrial Way
Woodland, CA 95776

Yolo-Sutter AQMD
Matthew Jones
1947 Galileo Court, Suite 103
Davis, CA 95618

Yolo County Clerk
Attn: Public Notices
625 Court Street, Room B01
Woodland, CA 95695

Sacramento County Clerk-Recorder
600 8th Street
Sacramento, CA 95814

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CITY OF
ELK GROVE
PROUD HERITAGE. BRIGHT FUTURE.

August 27, 2019

Mr. Greg Fabun
West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, CA 95691

RE: City of Elk Grove Comment on the Notice of Preparation of a Draft Environmental Impact Report for the Southport Sacramento River Early Implementation Project, Sacramento County, California

Dear Mr. Fabun:

The City of Elk Grove (City) received the Notice of Preparation (NOP) for the Draft Supplemental Environmental Impact Report, for the Southport Sacramento River Early Implementation Project (Project). As indicated in the NOP, the West Sacramento Area Flood Control Agency (WSAFCA) intends to utilize soil from the Sacramento Regional Wastewater Treatment Plant (SRWTP) Borrow Site for the Project. As it is likely that the Project will require use of City of Elk Grove roadways as a haul route to transport soil from the SRWTP, the City has the following comment, to ensure that City roadway infrastructure is not permanently damaged:

Should the Project require use of City of Elk Grove roadway infrastructure as haul routes, the WSAFCA shall be responsible for reconstructing any damaged curb, gutter, sidewalk and/or pavement along any haul route used for the Project, if the City has actual knowledge or reason to believe that such damage was caused by construction-related activity associated with the Project. If pavement replacement is necessary, as determined by the City, the WSAFCA may be required to grind, overlay, and/or slurry seal the damaged portion(s) in accordance with the City Improvement Standards and to the satisfaction of the City. The WSAFCA shall schedule an inspection with the City to document the pre-construction condition of existing surface infrastructure adjacent to and near the Project.

The City looks forward to working with the WSAFCA regarding use of the City's roadway infrastructure as a haul route for the Project. Please contact Jeff Werner, Engineering Services Manager, at jwerner@elkgrovecity.org or (916) 478-3602 regarding the above comment.

Sincerely,

Robert Murdoch, P.E.
Public Works Director
City of Elk Grove

Department of Transportation
Ron E. Vicari, Director

Divisions
Administration
Maintenance & Operations
Engineering & Planning

County of Sacramento

August 21, 2019

Greg Fabun
Flood Protection Manager
West Sacramento Area Flood Control Agency
1110 West Capitol Ave
West Sacramento, CA 95691

SUBJECT: COMMENTS ON SOUTHPORT SACRAMENTO RIVER EARLY IMPLEMENTATION PROJECT, NOTICE OF PREPARATION

Mr. Fabun:

We appreciate the opportunity to comment on this Notice of Preparation. We have the following comments and would ask that these comments be taken into consideration when preparing the EIR:

- Please provide detailed truck traffic information including:
  - typical haul routes
  - haul volumes and gross tonnage per truck
  - associated haul truck types
  - number and frequency of trucks
  - proposed hauling hours
  - associated roadway traffic volumes
- Based on the results of the project specific study, the project applicant should provide to Sacramento County a summary of the roadway impacts and proposed mitigation/remediation efforts that will be undertaken by the applicant to account for County roadway degradation and damage.
- Please coordinate any necessary construction traffic control and road closures that may be necessary with the Right of Way Management Section of the Department of Transportation.

Please enter into a maintenance agreement with the Maintenance and Operation Section of the Department of Transportation. This agreement shall state that any roadway damaged by project construction activities shall be repaired by or at the cost of the applicant.

Should you have any questions, please feel free to contact me at (916) 874-7052.

Sincerely,

Matthew G. Darrow, PE, TE, PTOE.
Principal Engineer
Department of Transportation

MGD/mp

Cc: Dan Shoeman, DOT
Lu Li, DOT
Hardeep Sidhu, DOT

CALIFORNIA
Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

30 July 2019

Greg Fabun
West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, CA 95691

CERTIFIED MAIL
7017 1070 0000 8876 8705

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, SOUTHPORT SACRAMENTO RIVER EARLY IMPLEMENTATION PROJECT, SCH#2019070378, YOLO COUNTY

Pursuant to the State Clearinghouse's 12 July 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Southport Sacramento River Early Implementation Project, located in Yolo County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be

approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers

seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.

There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

July 23, 2019

Greg Fabun
West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, CA 95691

RE: SCH# 2019070378 Southport Sacramento River Early Implementation Project Supplemental Environmental Impact Report, Yolo County

Dear Mr. Fabun:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   a. A brief description of the project.
   b. The lead agency contact information.
   c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
   d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
   a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   a. Alternatives to the project.
   b. Recommended mitigation measures.
   c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.
   d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
   b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Steven.Quinn@nahc.ca.gov.

Sincerely,

for

Steven Quinn
Associate Governmental Program Analyst

cc: State Clearinghouse

Appendix B. Air and Greenhouse Gas Emissions Modelling

WSAFCA Southport Levee Improvement Project

Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	124.00	Dwelling Unit	40.26	223,200.00	331

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2021
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

WSAFCA Southport Levee Improvement Project - Sacramento Metropolitan AQMD Air District, Annual

Project Characteristics -

Land Use - Assuming 124 units of single houses nearby to accounty for the borrow site size of 40 acres

Construction Phase - changed project year to 2020

Off-road Equipment - Set values to zero to avoid CalEEMod using default equipment set.

Off-road Equipment - Assuming equipment will operate the 10 hours per day.

Trips and VMT - No truck trips for site restoration

Grading - SRWTP Borrow Site

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves -

Area Coating -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Use a modern equipment fleet meeting at least Tier 2 engine standards for off-road heavy-duty diesel engines. Water exposed area's 2 times a day. Assuming 20% Reduction using oxidation Catalyst.

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	150660	131220
tblAreaCoating	Area_Residential_Interior	451980	393660
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
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tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
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tblConstructionPhase	NumDays	75.00	108.00
tblFireplaces	NumberNoFireplace	124.00	108.00
tblGrading	AcresOfGrading	67.50	40.00
tblGrading	MaterialImported	0.00	60,000.00
tblOffRoadEquipment	HorsePower	187.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblSolidWaste	SolidWasteGenerationRate	119.16	103.68
tblTripsAndVMT	HaulingTripLength	20.00	0.00

tblTripsAndVMT	HaulingTripLength	20.00	13.30
tblTripsAndVMT	HaulingTripNumber	7,500.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	40,000.00
tblTripsAndVMT	VendorTripLength	6.50	0.00
tblTripsAndVMT	VendorTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripLength	10.00	0.00
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tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	45.00	80.00
tblWater	IndoorWaterUseRate	8,079,099.18	7,036,634.77
tblWater	OutdoorWaterUseRate	5,093,345.13	4,436,139.31

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	0.1554	3.5147	1.1664	8.2200e-003	0.2574	0.0426	0.3000	0.0642	0.0395	0.1037	0.0000	785.9392	785.9392	0.0767	0.0000	787.8555
2021	0.0912	2.0531	0.6999	5.1700e-003	0.2352	0.0237	0.2589	0.0571	0.0220	0.0791	0.0000	494.8832	494.8832	0.0482	0.0000	496.0882
Maximum	**0.1554**	**3.5147**	**1.1664**	**8.2200e-003**	**0.2574**	**0.0426**	**0.3000**	**0.0642**	**0.0395**	**0.1037**	**0.0000**	**785.9392**	**785.9392**	**0.0767**	**0.0000**	**787.8555**

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	0.1174	3.5354	1.3916	8.2200e-003	0.2250	0.0343	0.2593	0.0582	0.0339	0.0921	0.0000	785.9391	785.9391	0.0767	0.0000	787.8554
2021	0.0708	2.1205	0.8511	5.1700e-003	0.2036	0.0211	0.2247	0.0513	0.0209	0.0722	0.0000	494.8831	494.8831	0.0482	0.0000	496.0882
Maximum	**0.1174**	**3.5354**	**1.3916**	**8.2200e-003**	**0.2250**	**0.0343**	**0.2593**	**0.0582**	**0.0339**	**0.0921**	**0.0000**	**785.9391**	**785.9391**	**0.0767**	**0.0000**	**787.8554**

	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	N20	CO2e
Percent Reduction	**23.67**	**-1.58**	**-20.17**	**0.00**	**12.99**	**16.36**	**13.39**	**9.77**	**10.83**	**10.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

WSAFCA Southport Levee Improvement Project - Sacramento Metropolitan AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2020	12-31-2020	3.6605	3.6434
2	1-1-2021	3-31-2021	2.1906	2.2386
		Highest	3.6605	3.6434

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	1.0322	0.0148	1.2816	7.0000e-005		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	2.0889	2.0889	2.0200e-003	0.0000	2.1395
Energy	0.0173	0.1476	0.0628	9.4000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	170.9510	170.9510	3.2800e-003	3.1300e-003	171.9669
Mobile	0.3694	1.5925	4.3776	0.0133	1.1213	0.0119	1.1332	0.3007	0.0112	0.3119	0.0000	1,220.4533	1,220.4533	0.0599	0.0000	1,221.9512
Waste						0.0000	0.0000		0.0000	0.0000	21.0461	0.0000	21.0461	1.2438	0.0000	52.1408
Water						0.0000	0.0000		0.0000	0.0000	2.4896	0.0000	2.4896	8.5700e-003	5.4100e-003	4.3172
Total	**1.4189**	**1.7549**	**5.7219**	**0.0143**	**1.1213**	**0.0309**	**1.1522**	**0.3007**	**0.0302**	**0.3308**	**23.5357**	**1,393.4931**	**1,417.0288**	**1.3176**	**8.5400e-003**	**1,452.5156**

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	1.0322	0.0148	1.2816	7.0000e-005		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	2.0889	2.0889	2.0200e-003	0.0000	2.1395
Energy	0.0173	0.1476	0.0628	9.4000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	170.9510	170.9510	3.2800e-003	3.1300e-003	171.9669
Mobile	0.3694	1.5925	4.3776	0.0133	1.1213	0.0119	1.1332	0.3007	0.0112	0.3119	0.0000	1,220.4533	1,220.4533	0.0599	0.0000	1,221.9512
Waste						0.0000	0.0000		0.0000	0.0000	21.0461	0.0000	21.0461	1.2438	0.0000	52.1408
Water						0.0000	0.0000		0.0000	0.0000	2.4896	0.0000	2.4896	8.5700e-003	5.4100e-003	4.3172
Total	**1.4189**	**1.7549**	**5.7219**	**0.0143**	**1.1213**	**0.0309**	**1.1522**	**0.3007**	**0.0302**	**0.3308**	**23.5357**	**1,393.4931**	**1,417.0288**	**1.3176**	**8.5400e-003**	**1,452.5156**

	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	N20	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 Restoration	Grading	10/1/2020	3/1/2021	5	108	
2	File Material Hauling	Building Construction	10/1/2020	3/1/2021	5	108	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

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
Site Restoration	Crawler Tractors	1	10.00	212	0.43
Site Restoration	Excavators	1	10.00	158	0.38
Site Restoration	Graders	0	0.00	0	0.00
Site Restoration	Off-Highway Trucks	1	10.00	402	0.38
Site Restoration	Rubber Tired Dozers	0	0.00	0	0.00
Site Restoration	Scrapers	0	0.00	0	0.00
Site Restoration	Sweepers/Scrubbers	1	10.00	64	0.46
Site Restoration	Tractors/Loaders/Backhoes	0	0.00	0	0.00
File Material Hauling	Cranes	0	0.00	0	0.00
File Material Hauling	Forklifts	0	0.00	0	0.00
File Material Hauling	Generator Sets	0	0.00	0	0.00
File Material Hauling	Tractors/Loaders/Backhoes	0	0.00	0	0.00
File Material Hauling	Welders	0	0.00	0	0.00

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 Restoration	4	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
File Material Hauling	0	80.00	0.00	40,000.00	14.00	6.50	13.30	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Restoration - 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					0.0274	0.0000	0.0274	3.2300e-003	0.0000	3.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0725	0.7636	0.4771	1.1900e-003		0.0336	0.0336		0.0309	0.0309	0.0000	104.2299	104.2299	0.0337	0.0000	105.0727
Total	**0.0725**	**0.7636**	**0.4771**	**1.1900e-003**	**0.0274**	**0.0336**	**0.0610**	**3.2300e-003**	**0.0309**	**0.0342**	**0.0000**	**104.2299**	**104.2299**	**0.0337**	**0.0000**	**105.0727**

3.2 Site Restoration - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					0.0123	0.0000	0.0123	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0345	0.7843	0.7023	1.1900e-003		0.0253	0.0253		0.0253	0.0253	0.0000	104.2298	104.2298	0.0337	0.0000	105.0726
Total	**0.0345**	**0.7843**	**0.7023**	**1.1900e-003**	**0.0123**	**0.0253**	**0.0377**	**1.4500e-003**	**0.0253**	**0.0268**	**0.0000**	**104.2298**	**104.2298**	**0.0337**	**0.0000**	**105.0726**

3.2 Site Restoration - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Site Restoration - 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					0.0274	0.0000	0.0274	3.2300e-003	0.0000	3.2300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0424	0.4316	0.2956	7.6000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	66.3269	66.3269	0.0215	0.0000	66.8632
Total	**0.0424**	**0.4316**	**0.2956**	**7.6000e-004**	**0.0274**	**0.0187**	**0.0461**	**3.2300e-003**	**0.0172**	**0.0204**	**0.0000**	**66.3269**	**66.3269**	**0.0215**	**0.0000**	**66.8632**

3.2 Site Restoration - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					0.0123	0.0000	0.0123	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.4991	0.4469	7.6000e-004		0.0161	0.0161		0.0161	0.0161	0.0000	66.3268	66.3268	0.0215	0.0000	66.8631
Total	**0.0220**	**0.4991**	**0.4469**	**7.6000e-004**	**0.0123**	**0.0161**	**0.0285**	**1.4500e-003**	**0.0161**	**0.0176**	**0.0000**	**66.3268**	**66.3268**	**0.0215**	**0.0000**	**66.8631**

3.2 Site Restoration - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 File Material Hauling - 2020

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	0.0703	2.7422	0.5928	6.7700e-003	0.2029	8.7700e-003	0.2117	0.0538	8.3900e-003	0.0622	0.0000	657.8751	657.8751	0.0423	0.0000	658.9323
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	0.0126	8.9400e-003	0.0966	2.6000e-004	0.0271	1.9000e-004	0.0273	7.2200e-003	1.7000e-004	7.3900e-003	0.0000	23.8342	23.8342	6.5000e-004	0.0000	23.8505
Total	**0.0829**	**2.7511**	**0.6894**	**7.0300e-003**	**0.2300**	**8.9600e-003**	**0.2390**	**0.0610**	**8.5600e-003**	**0.0696**	**0.0000**	**681.7093**	**681.7093**	**0.0429**	**0.0000**	**682.7829**

3.3 File Material Hauling - 2020

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	0.0703	2.7422	0.5928	6.7700e-003	0.1877	8.7700e-003	0.1965	0.0501	8.3900e-003	0.0585	0.0000	657.8751	657.8751	0.0423	0.0000	658.9323
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	0.0126	8.9400e-003	0.0966	2.6000e-004	0.0250	1.9000e-004	0.0252	6.7000e-003	1.7000e-004	6.8700e-003	0.0000	23.8342	23.8342	6.5000e-004	0.0000	23.8505
Total	**0.0829**	**2.7511**	**0.6894**	**7.0300e-003**	**0.2127**	**8.9600e-003**	**0.2217**	**0.0568**	**8.5600e-003**	**0.0653**	**0.0000**	**681.7093**	**681.7093**	**0.0429**	**0.0000**	**682.7829**

3.3 File Material Hauling - 2021

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	0.0414	1.6163	0.3480	4.2600e-003	0.1905	4.9200e-003	0.1954	0.0493	4.7000e-003	0.0540	0.0000	413.9060	413.9060	0.0264	0.0000	414.5655
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	7.4500e-003	5.1000e-003	0.0563	1.6000e-004	0.0173	1.2000e-004	0.0174	4.5900e-003	1.1000e-004	4.7000e-003	0.0000	14.6503	14.6503	3.7000e-004	0.0000	14.6596
Total	**0.0488**	**1.6214**	**0.4043**	**4.4200e-003**	**0.2078**	**5.0400e-003**	**0.2128**	**0.0539**	**4.8100e-003**	**0.0587**	**0.0000**	**428.5563**	**428.5563**	**0.0268**	**0.0000**	**429.2250**

3.3 File Material Hauling - 2021

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	0.0414	1.6163	0.3480	4.2600e-003	0.1753	4.9200e-003	0.1802	0.0456	4.7000e-003	0.0503	0.0000	413.9060	413.9060	0.0264	0.0000	414.5655
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	7.4500e-003	5.1000e-003	0.0563	1.6000e-004	0.0159	1.2000e-004	0.0160	4.2600e-003	1.1000e-004	4.3700e-003	0.0000	14.6503	14.6503	3.7000e-004	0.0000	14.6596
Total	**0.0488**	**1.6214**	**0.4043**	**4.4200e-003**	**0.1912**	**5.0400e-003**	**0.1962**	**0.0498**	**4.8100e-003**	**0.0546**	**0.0000**	**428.5563**	**428.5563**	**0.0268**	**0.0000**	**429.2250**

4.0 Operational Detail - Mobile

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	0.3694	1.5925	4.3776	0.0133	1.1213	0.0119	1.1332	0.3007	0.0112	0.3119	0.0000	1,220.4533	1,220.4533	0.0599	0.0000	1,221.9512
Unmitigated	0.3694	1.5925	4.3776	0.0133	1.1213	0.0119	1.1332	0.3007	0.0112	0.3119	0.0000	1,220.4533	1,220.4533	0.0599	0.0000	1,221.9512

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,180.48	1,228.84	1068.88	3,006,057	3,006,057
Total	1,180.48	1,228.84	1,068.88	3,006,057	3,006,057

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.555851	0.039752	0.205040	0.120748	0.020349	0.005402	0.018507	0.022668	0.002052	0.002157	0.005939	0.000618	0.000915

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	0.0173	0.1476	0.0628	9.4000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	170.9510	170.9510	3.2800e-003	3.1300e-003	171.9669
NaturalGas Unmitigated	0.0173	0.1476	0.0628	9.4000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	170.9510	170.9510	3.2800e-003	3.1300e-003	171.9669

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	3.2035e+006	0.0173	0.1476	0.0628	9.4000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	170.9510	170.9510	3.2800e-003	3.1300e-003	171.9669
Total		**0.0173**	**0.1476**	**0.0628**	**9.4000e-004**		**0.0119**	**0.0119**		**0.0119**	**0.0119**	**0.0000**	**170.9510**	**170.9510**	**3.2800e-003**	**3.1300e-003**	**171.9669**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	3.2035e+006	0.0173	0.1476	0.0628	9.4000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	170.9510	170.9510	3.2800e-003	3.1300e-003	171.9669
Total		**0.0173**	**0.1476**	**0.0628**	**9.4000e-004**		**0.0119**	**0.0119**		**0.0119**	**0.0119**	**0.0000**	**170.9510**	**170.9510**	**3.2800e-003**	**3.1300e-003**	**171.9669**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.04703e+006	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.04703e+006	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0322	0.0148	1.2816	7.0000e-005		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	2.0889	2.0889	2.0200e-003	0.0000	2.1395
Unmitigated	1.0322	0.0148	1.2816	7.0000e-005		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	2.0889	2.0889	2.0200e-003	0.0000	2.1395

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	0.1216					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8717					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0388	0.0148	1.2816	7.0000e-005		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	2.0889	2.0889	2.0200e-003	0.0000	2.1395
Total	**1.0322**	**0.0148**	**1.2816**	**7.0000e-005**		**7.0600e-003**	**7.0600e-003**		**7.0600e-003**	**7.0600e-003**	**0.0000**	**2.0889**	**2.0889**	**2.0200e-003**	**0.0000**	**2.1395**

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	0.1216					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8717					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0388	0.0148	1.2816	7.0000e-005		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	2.0889	2.0889	2.0200e-003	0.0000	2.1395
Total	**1.0322**	**0.0148**	**1.2816**	**7.0000e-005**		**7.0600e-003**	**7.0600e-003**		**7.0600e-003**	**7.0600e-003**	**0.0000**	**2.0889**	**2.0889**	**2.0200e-003**	**0.0000**	**2.1395**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.4896	8.5700e-003	5.4100e-003	4.3172
Unmitigated	2.4896	8.5700e-003	5.4100e-003	4.3172

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	7.03663 / 4.43614	2.4896	8.5700e-003	5.4100e-003	4.3172
Total		**2.4896**	**8.5700e-003**	**5.4100e-003**	**4.3172**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	7.03663 / 4.43614	2.4896	8.5700e-003	5.4100e-003	4.3172
Total		**2.4896**	**8.5700e-003**	**5.4100e-003**	**4.3172**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	21.0461	1.2438	0.0000	52.1408
Unmitigated	21.0461	1.2438	0.0000	52.1408

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	103.68	21.0461	1.2438	0.0000	52.1408
Total		**21.0461**	**1.2438**	**0.0000**	**52.1408**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	103.68	21.0461	1.2438	0.0000	52.1408
Total		**21.0461**	**1.2438**	**0.0000**	**52.1408**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

WSAFCA Southport Levee Improvement Project

Sacramento Metropolitan AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	124.00	Dwelling Unit	40.26	223,200.00	331

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2021
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

WSAFCA Southport Levee Improvement Project - Sacramento Metropolitan AQMD Air District, Summer

Project Characteristics -

Land Use - Assuming 124 units of single houses nearby to accounty for the borrow site size of 40 acres

Construction Phase - changed project year to 2020

Off-road Equipment - Set values to zero to avoid CalEEMod using default equipment set.

Off-road Equipment - Assuming equipment will operate the 10 hours per day.

Trips and VMT - No truck trips for site restoration

Grading - SRWTP Borrow Site

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves -

Area Coating -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Use a modern equipment fleet meeting at least Tier 2 engine standards for off-road heavy-duty diesel engines. Water exposed area's 2 times a day. Assuming 20% Reduction using oxidation Catalyst.

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	150660	131220
tblAreaCoating	Area_Residential_Interior	451980	393660
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	740.00	108.00
tblConstructionPhase	NumDays	75.00	108.00
tblFireplaces	NumberNoFireplace	124.00	108.00
tblGrading	AcresOfGrading	67.50	40.00
tblGrading	MaterialImported	0.00	60,000.00
tblOffRoadEquipment	HorsePower	187.00	0.00
tblOffRoadEquipment	HorsePower	247.00	0.00
tblOffRoadEquipment	HorsePower	367.00	0.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	HorsePower	231.00	0.00
tblOffRoadEquipment	HorsePower	89.00	0.00
tblOffRoadEquipment	HorsePower	84.00	0.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	HorsePower	46.00	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.00
tblOffRoadEquipment	LoadFactor	0.40	0.00
tblOffRoadEquipment	LoadFactor	0.48	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.00
tblOffRoadEquipment	LoadFactor	0.29	0.00

tblOffRoadEquipment	LoadFactor	0.20	0.00
tblOffRoadEquipment	LoadFactor	0.74	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.00
tblOffRoadEquipment	LoadFactor	0.45	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblRoadDust	CARB_PM_VMT	True	False
tblSolidWaste	SolidWasteGenerationRate	119.16	103.68
tblTripsAndVMT	HaulingTripLength	20.00	0.00

tblTripsAndVMT	HaulingTripLength	20.00	13.30
tblTripsAndVMT	HaulingTripNumber	7,500.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	40,000.00
tblTripsAndVMT	VendorTripLength	6.50	0.00
tblTripsAndVMT	VendorTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripLength	10.00	0.00
tblTripsAndVMT	WorkerTripLength	10.00	14.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	45.00	80.00
tblWater	IndoorWaterUseRate	8,079,099.18	7,036,634.77
tblWater	OutdoorWaterUseRate	5,093,345.13	4,436,139.31

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	4.7222	104.2569	35.2655	0.2519	7.7190	1.2849	9.0038	1.9679	1.1916	3.1596	0.0000	26,540.9386	26,540.9386	2.5295	0.0000	26,604.1756
2021	4.3550	95.7995	33.2049	0.2491	10.7627	1.1235	11.8862	2.7149	1.0421	3.7569	0.0000	26,261.3800	26,261.3800	2.4993	0.0000	26,323.8614
Maximum	**4.7222**	**104.2569**	**35.2655**	**0.2519**	**10.7627**	**1.2849**	**11.8862**	**2.7149**	**1.1916**	**3.7569**	**0.0000**	**26,540.9386**	**26,540.9386**	**2.5295**	**0.0000**	**26,604.1756**

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	3.5721	104.8846	42.0895	0.2519	6.8935	1.0336	7.9271	1.8010	1.0219	2.8228	0.0000	26,540.9386	26,540.9386	2.5295	0.0000	26,604.1756
2021	3.3828	99.0126	40.4076	0.2491	9.6632	1.0021	10.6653	2.4806	0.9917	3.4723	0.0000	26,261.3799	26,261.3799	2.4993	0.0000	26,323.8614
Maximum	**3.5721**	**104.8846**	**42.0895**	**0.2519**	**9.6632**	**1.0336**	**10.6653**	**2.4806**	**1.0219**	**3.4723**	**0.0000**	**26,540.9386**	**26,540.9386**	**2.5295**	**0.0000**	**26,604.1756**

	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	N20	CO2e
Percent Reduction	**23.38**	**-1.92**	**-20.49**	**0.00**	**10.42**	**15.48**	**11.00**	**8.57**	**9.85**	**8.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668
Energy	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Mobile	2.6798	8.7956	28.3650	0.0829	6.6902	0.0685	6.7588	1.7888	0.0642	1.8530		8,390.1500	8,390.1500	0.3920		8,399.9495
Total	**8.5281**	**9.7227**	**38.9616**	**0.0886**	**6.6902**	**0.1904**	**6.8807**	**1.7888**	**0.1861**	**1.9749**	**0.0000**	**9,441.1253**	**9,441.1253**	**0.4296**	**0.0189**	**9,457.5072**

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	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668
Energy	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Mobile	2.6798	8.7956	28.3650	0.0829	6.6902	0.0685	6.7588	1.7888	0.0642	1.8530		8,390.1500	8,390.1500	0.3920		8,399.9495
Total	**8.5281**	**9.7227**	**38.9616**	**0.0886**	**6.6902**	**0.1904**	**6.8807**	**1.7888**	**0.1861**	**1.9749**	**0.0000**	**9,441.1253**	**9,441.1253**	**0.4296**	**0.0189**	**9,457.5072**

	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	N20	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 Restoration	Grading	10/1/2020	3/1/2021	5	108	
2	File Material Hauling	Building Construction	10/1/2020	3/1/2021	5	108	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

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
Site Restoration	Crawler Tractors	1	10.00	212	0.43
Site Restoration	Excavators	1	10.00	158	0.38
Site Restoration	Graders	0	0.00	0	0.00
Site Restoration	Off-Highway Trucks	1	10.00	402	0.38
Site Restoration	Rubber Tired Dozers	0	0.00	0	0.00
Site Restoration	Scrapers	0	0.00	0	0.00
Site Restoration	Sweepers/Scrubbers	1	10.00	64	0.46
Site Restoration	Tractors/Loaders/Backhoes	0	0.00	0	0.00
File Material Hauling	Cranes	0	0.00	0	0.00
File Material Hauling	Forklifts	0	0.00	0	0.00
File Material Hauling	Generator Sets	0	0.00	0	0.00
File Material Hauling	Tractors/Loaders/Backhoes	0	0.00	0	0.00
File Material Hauling	Welders	0	0.00	0	0.00

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 Restoration	4	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
File Material Hauling	0	80.00	0.00	40,000.00	14.00	6.50	13.30	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Restoration - 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					0.5077	0.0000	0.5077	0.0598	0.0000	0.0598			0.0000			0.0000
Off-Road	2.1962	23.1379	14.4566	0.0360		1.0185	1.0185		0.9371	0.9371		3,481.6315	3,481.6315	1.1260		3,509.7823
Total	**2.1962**	**23.1379**	**14.4566**	**0.0360**	**0.5077**	**1.0185**	**1.5262**	**0.0598**	**0.9371**	**0.9969**		**3,481.6315**	**3,481.6315**	**1.1260**		**3,509.7823**

3.2 Site Restoration - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated 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					0.2285	0.0000	0.2285	0.0269	0.0000	0.0269			0.0000			0.0000
Off-Road	1.0461	23.7655	21.2805	0.0360		0.7673	0.7673		0.7673	0.7673	0.0000	3,481.6315	3,481.6315	1.1260		3,509.7823
Total	**1.0461**	**23.7655**	**21.2805**	**0.0360**	**0.2285**	**0.7673**	**0.9957**	**0.0269**	**0.7673**	**0.7942**	**0.0000**	**3,481.6315**	**3,481.6315**	**1.1260**		**3,509.7823**

3.2 Site Restoration - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Restoration - 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					0.5077	0.0000	0.5077	0.0598	0.0000	0.0598			0.0000			0.0000
Off-Road	2.0182	20.5525	14.0778	0.0360		0.8887	0.8887		0.8176	0.8176		3,481.5668	3,481.5668	1.1260		3,509.7170
Total	**2.0182**	**20.5525**	**14.0778**	**0.0360**	**0.5077**	**0.8887**	**1.3964**	**0.0598**	**0.8176**	**0.8774**		**3,481.5668**	**3,481.5668**	**1.1260**		**3,509.7170**

3.2 Site Restoration - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated 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					0.2285	0.0000	0.2285	0.0269	0.0000	0.0269			0.0000			0.0000
Off-Road	1.0461	23.7655	21.2805	0.0360		0.7673	0.7673		0.7673	0.7673	0.0000	3,481.5668	3,481.5668	1.1260		3,509.7170
Total	**1.0461**	**23.7655**	**21.2805**	**0.0360**	**0.2285**	**0.7673**	**0.9957**	**0.0269**	**0.7673**	**0.7942**	**0.0000**	**3,481.5668**	**3,481.5668**	**1.1260**		**3,509.7170**

3.2 Site Restoration - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 File Material Hauling - 2020

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	2.0970	80.8737	17.2972	0.2071	6.3596	0.2606	6.6202	1.6822	0.2493	1.9315		22,178.0632	22,178.0632	1.3787		22,212.5317
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	0.4291	0.2454	3.5118	8.8500e-003	0.8517	5.7200e-003	0.8574	0.2259	5.2700e-003	0.2311		881.2439	881.2439	0.0247		881.8616
Total	**2.5261**	**81.1191**	**20.8090**	**0.2160**	**7.2113**	**0.2663**	**7.4776**	**1.9081**	**0.2546**	**2.1627**		**23,059.3070**	**23,059.3070**	**1.4035**		**23,094.3933**

3.3 File Material Hauling - 2020

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	2.0970	80.8737	17.2972	0.2071	5.8801	0.2606	6.1407	1.5645	0.2493	1.8138		22,178.0632	22,178.0632	1.3787		22,212.5317
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	0.4291	0.2454	3.5118	8.8500e-003	0.7850	5.7200e-003	0.7908	0.2095	5.2700e-003	0.2148		881.2439	881.2439	0.0247		881.8616
Total	**2.5261**	**81.1191**	**20.8090**	**0.2160**	**6.6651**	**0.2663**	**6.9314**	**1.7740**	**0.2546**	**2.0286**		**23,059.3070**	**23,059.3070**	**1.4035**		**23,094.3933**

3.3 File Material Hauling - 2021

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	1.9376	75.0269	15.9071	0.2046	9.4033	0.2293	9.6326	2.4292	0.2193	2.6485		21,928.6197	21,928.6197	1.3511		21,962.3964
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	0.3992	0.2202	3.2200	8.5500e-003	0.8517	5.5500e-003	0.8572	0.2259	5.1100e-003	0.2310		851.1935	851.1935	0.0222		851.7480
Total	**2.3367**	**75.2471**	**19.1271**	**0.2132**	**10.2550**	**0.2348**	**10.4898**	**2.6551**	**0.2244**	**2.8795**		**22,779.8132**	**22,779.8132**	**1.3733**		**22,814.1444**

3.3 File Material Hauling - 2021

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	1.9376	75.0269	15.9071	0.2046	8.6497	0.2293	8.8790	2.2442	0.2193	2.4635		21,928.6197	21,928.6197	1.3511		21,962.3964
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	0.3992	0.2202	3.2200	8.5500e-003	0.7850	5.5500e-003	0.7906	0.2095	5.1100e-003	0.2146		851.1935	851.1935	0.0222		851.7480
Total	**2.3367**	**75.2471**	**19.1271**	**0.2132**	**9.4348**	**0.2348**	**9.6696**	**2.4537**	**0.2244**	**2.6782**		**22,779.8132**	**22,779.8132**	**1.3733**		**22,814.1444**

4.0 Operational Detail - Mobile

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	2.6798	8.7956	28.3650	0.0829	6.6902	0.0685	6.7588	1.7888	0.0642	1.8530		8,390.1500	8,390.1500	0.3920		8,399.9495
Unmitigated	2.6798	8.7956	28.3650	0.0829	6.6902	0.0685	6.7588	1.7888	0.0642	1.8530		8,390.1500	8,390.1500	0.3920		8,399.9495

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,180.48	1,228.84	1068.88	3,006,057	3,006,057
Total	1,180.48	1,228.84	1,068.88	3,006,057	3,006,057

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.555851	0.039752	0.205040	0.120748	0.020349	0.005402	0.018507	0.022668	0.002052	0.002157	0.005939	0.000618	0.000915

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	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
NaturalGas Unmitigated	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909

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					
Single Family Housing	8776.72	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Total		**0.0947**	**0.8088**	**0.3442**	**5.1600e-003**		**0.0654**	**0.0654**		**0.0654**	**0.0654**		**1,032.5549**	**1,032.5549**	**0.0198**	**0.0189**	**1,038.6909**

5.2 Energy by Land Use - NaturalGas

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					
Single Family Housing	8.77672	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Total		**0.0947**	**0.8088**	**0.3442**	**5.1600e-003**		**0.0654**	**0.0654**		**0.0654**	**0.0654**		**1,032.5549**	**1,032.5549**	**0.0198**	**0.0189**	**1,038.6909**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668
Unmitigated	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668

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	0.6665					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7765					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3106	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565		18.4205	18.4205	0.0179		18.8668
Total	**5.7536**	**0.1184**	**10.2524**	**5.4000e-004**		**0.0565**	**0.0565**		**0.0565**	**0.0565**	**0.0000**	**18.4205**	**18.4205**	**0.0179**	**0.0000**	**18.8668**

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	0.6665					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7765					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3106	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565		18.4205	18.4205	0.0179		18.8668
Total	**5.7536**	**0.1184**	**10.2524**	**5.4000e-004**		**0.0565**	**0.0565**		**0.0565**	**0.0565**	**0.0000**	**18.4205**	**18.4205**	**0.0179**	**0.0000**	**18.8668**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

WSAFCA Southport Levee Improvement Project

Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	124.00	Dwelling Unit	40.26	223,200.00	331

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2021
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

WSAFCA Southport Levee Improvement Project - Sacramento Metropolitan AQMD Air District, Winter

Project Characteristics -

Land Use - Assuming 124 units of single houses nearby to accounty for the borrow site size of 40 acres

Construction Phase - changed project year to 2020

Off-road Equipment - Set values to zero to avoid CalEEMod using default equipment set.

Off-road Equipment - Assuming equipment will operate the 10 hours per day.

Trips and VMT - No truck trips for site restoration

Grading - SRWTP Borrow Site

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves -

Area Coating -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Use a modern equipment fleet meeting at least Tier 2 engine standards for off-road heavy-duty diesel engines. Water exposed area's 2 times a day. Assuming 20% Reduction using oxidation Catalyst.

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	150660	131220
tblAreaCoating	Area_Residential_Interior	451980	393660
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	OxidationCatalyst	0.00	20.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	740.00	108.00
tblConstructionPhase	NumDays	75.00	108.00
tblFireplaces	NumberNoFireplace	124.00	108.00
tblGrading	AcresOfGrading	67.50	40.00
tblGrading	MaterialImported	0.00	60,000.00
tblOffRoadEquipment	HorsePower	187.00	0.00
tblOffRoadEquipment	HorsePower	247.00	0.00
tblOffRoadEquipment	HorsePower	367.00	0.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	HorsePower	231.00	0.00
tblOffRoadEquipment	HorsePower	89.00	0.00
tblOffRoadEquipment	HorsePower	84.00	0.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	HorsePower	46.00	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.00
tblOffRoadEquipment	LoadFactor	0.40	0.00
tblOffRoadEquipment	LoadFactor	0.48	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.00
tblOffRoadEquipment	LoadFactor	0.29	0.00

tblOffRoadEquipment	LoadFactor	0.20	0.00
tblOffRoadEquipment	LoadFactor	0.74	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.00
tblOffRoadEquipment	LoadFactor	0.45	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblRoadDust	CARB_PM_VMT	True	False
tblSolidWaste	SolidWasteGenerationRate	119.16	103.68
tblTripsAndVMT	HaulingTripLength	20.00	0.00

tblTripsAndVMT	HaulingTripLength	20.00	13.30
tblTripsAndVMT	HaulingTripNumber	7,500.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	40,000.00
tblTripsAndVMT	VendorTripLength	6.50	0.00
tblTripsAndVMT	VendorTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripLength	10.00	0.00
tblTripsAndVMT	WorkerTripLength	10.00	14.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	45.00	80.00
tblWater	IndoorWaterUseRate	8,079,099.18	7,036,634.77
tblWater	OutdoorWaterUseRate	5,093,345.13	4,436,139.31

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	4.7981	106.6091	36.4577	0.2463	7.7190	1.2973	9.0163	1.9679	1.2036	3.1715	0.0000	25,950.1293	25,950.1293	2.6095	0.0000	26,015.3656
2021	4.4227	97.8040	34.2984	0.2436	10.7627	1.1350	11.8977	2.7149	1.0530	3.7679	0.0000	25,675.5613	25,675.5613	2.5765	0.0000	25,739.9732
Maximum	**4.7981**	**106.6091**	**36.4577**	**0.2463**	**10.7627**	**1.2973**	**11.8977**	**2.7149**	**1.2036**	**3.7679**	**0.0000**	**25,950.1293**	**25,950.1293**	**2.6095**	**0.0000**	**26,015.3656**

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	3.6481	107.2368	43.2817	0.2463	6.8935	1.0461	7.9396	1.8010	1.0338	2.8348	0.0000	25,950.1293	25,950.1293	2.6095	0.0000	26,015.3656
2021	3.4505	101.0170	41.5011	0.2436	9.6632	1.0135	10.6768	2.4806	1.0027	3.4833	0.0000	25,675.5612	25,675.5612	2.5765	0.0000	25,739.9732
Maximum	**3.6481**	**107.2368**	**43.2817**	**0.2463**	**9.6632**	**1.0461**	**10.6768**	**2.4806**	**1.0338**	**3.4833**	**0.0000**	**25,950.1293**	**25,950.1293**	**2.6095**	**0.0000**	**26,015.3656**

	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	N20	CO2e
Percent Reduction	**23.02**	**-1.88**	**-19.82**	**0.00**	**10.42**	**15.32**	**10.99**	**8.57**	**9.75**	**8.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668
Energy	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Mobile	2.0207	9.4534	26.1727	0.0748	6.6902	0.0695	6.7597	1.7888	0.0651	1.8539		7,577.6751	7,577.6751	0.3874		7,587.3599
Total	**7.8690**	**10.3806**	**36.7693**	**0.0805**	**6.6902**	**0.1914**	**6.8816**	**1.7888**	**0.1870**	**1.9758**	**0.0000**	**8,628.6505**	**8,628.6505**	**0.4250**	**0.0189**	**8,644.9175**

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	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668
Energy	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Mobile	2.0207	9.4534	26.1727	0.0748	6.6902	0.0695	6.7597	1.7888	0.0651	1.8539		7,577.6751	7,577.6751	0.3874		7,587.3599
Total	**7.8690**	**10.3806**	**36.7693**	**0.0805**	**6.6902**	**0.1914**	**6.8816**	**1.7888**	**0.1870**	**1.9758**	**0.0000**	**8,628.6505**	**8,628.6505**	**0.4250**	**0.0189**	**8,644.9175**

	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	N20	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 Restoration	Grading	10/1/2020	3/1/2021	5	108	
2	File Material Hauling	Building Construction	10/1/2020	3/1/2021	5	108	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

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
Site Restoration	Crawler Tractors	1	10.00	212	0.43
Site Restoration	Excavators	1	10.00	158	0.38
Site Restoration	Graders	0	0.00	0	0.00
Site Restoration	Off-Highway Trucks	1	10.00	402	0.38
Site Restoration	Rubber Tired Dozers	0	0.00	0	0.00
Site Restoration	Scrapers	0	0.00	0	0.00
Site Restoration	Sweepers/Scrubbers	1	10.00	64	0.46
Site Restoration	Tractors/Loaders/Backhoes	0	0.00	0	0.00
File Material Hauling	Cranes	0	0.00	0	0.00
File Material Hauling	Forklifts	0	0.00	0	0.00
File Material Hauling	Generator Sets	0	0.00	0	0.00
File Material Hauling	Tractors/Loaders/Backhoes	0	0.00	0	0.00
File Material Hauling	Welders	0	0.00	0	0.00

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 Restoration	4	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
File Material Hauling	0	80.00	0.00	40,000.00	14.00	6.50	13.30	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Restoration - 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					0.5077	0.0000	0.5077	0.0598	0.0000	0.0598			0.0000			0.0000
Off-Road	2.1962	23.1379	14.4566	0.0360		1.0185	1.0185		0.9371	0.9371		3,481.6315	3,481.6315	1.1260		3,509.7823
Total	**2.1962**	**23.1379**	**14.4566**	**0.0360**	**0.5077**	**1.0185**	**1.5262**	**0.0598**	**0.9371**	**0.9969**		**3,481.6315**	**3,481.6315**	**1.1260**		**3,509.7823**

3.2 Site Restoration - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated 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					0.2285	0.0000	0.2285	0.0269	0.0000	0.0269			0.0000			0.0000
Off-Road	1.0461	23.7655	21.2805	0.0360		0.7673	0.7673		0.7673	0.7673	0.0000	3,481.6315	3,481.6315	1.1260		3,509.7823
Total	**1.0461**	**23.7655**	**21.2805**	**0.0360**	**0.2285**	**0.7673**	**0.9957**	**0.0269**	**0.7673**	**0.7942**	**0.0000**	**3,481.6315**	**3,481.6315**	**1.1260**		**3,509.7823**

3.2 Site Restoration - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Restoration - 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					0.5077	0.0000	0.5077	0.0598	0.0000	0.0598			0.0000			0.0000
Off-Road	2.0182	20.5525	14.0778	0.0360		0.8887	0.8887		0.8176	0.8176		3,481.5668	3,481.5668	1.1260		3,509.7170
Total	**2.0182**	**20.5525**	**14.0778**	**0.0360**	**0.5077**	**0.8887**	**1.3964**	**0.0598**	**0.8176**	**0.8774**		**3,481.5668**	**3,481.5668**	**1.1260**		**3,509.7170**

3.2 Site Restoration - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated 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					0.2285	0.0000	0.2285	0.0269	0.0000	0.0269			0.0000			0.0000
Off-Road	1.0461	23.7655	21.2805	0.0360		0.7673	0.7673		0.7673	0.7673	0.0000	3,481.5668	3,481.5668	1.1260		3,509.7170
Total	**1.0461**	**23.7655**	**21.2805**	**0.0360**	**0.2285**	**0.7673**	**0.9957**	**0.0269**	**0.7673**	**0.7942**	**0.0000**	**3,481.5668**	**3,481.5668**	**1.1260**		**3,509.7170**

3.2 Site Restoration - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 File Material Hauling - 2020

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	2.1884	83.1679	19.0852	0.2026	6.3596	0.2731	6.6327	1.6822	0.2613	1.9435		21,695.1672	21,695.1672	1.4621		21,731.7184
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	0.4136	0.3034	2.9160	7.7700e-003	0.8517	5.7200e-003	0.8574	0.2259	5.2700e-003	0.2311		773.3306	773.3306	0.0214		773.8649
Total	**2.6020**	**83.4713**	**22.0012**	**0.2104**	**7.2113**	**0.2788**	**7.4901**	**1.9081**	**0.2665**	**2.1746**		**22,468.4978**	**22,468.4978**	**1.4834**		**22,505.5833**

3.3 File Material Hauling - 2020

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	2.1884	83.1679	19.0852	0.2026	5.8801	0.2731	6.1532	1.5645	0.2613	1.8258		21,695.1672	21,695.1672	1.4621		21,731.7184
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	0.4136	0.3034	2.9160	7.7700e-003	0.7850	5.7200e-003	0.7908	0.2095	5.2700e-003	0.2148		773.3306	773.3306	0.0214		773.8649
Total	**2.6020**	**83.4713**	**22.0012**	**0.2104**	**6.6651**	**0.2788**	**6.9439**	**1.7740**	**0.2665**	**2.0406**		**22,468.4978**	**22,468.4978**	**1.4834**		**22,505.5833**

3.3 File Material Hauling - 2021

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	2.0191	76.9794	17.5562	0.2001	9.4033	0.2407	9.6441	2.4292	0.2303	2.6595		21,447.0179	21,447.0179	1.4313		21,482.8008
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	0.3853	0.2721	2.6644	7.5000e-003	0.8517	5.5500e-003	0.8572	0.2259	5.1100e-003	0.2310		746.9766	746.9766	0.0192		747.4553
Total	**2.4045**	**77.2515**	**20.2206**	**0.2076**	**10.2550**	**0.2463**	**10.5013**	**2.6551**	**0.2354**	**2.8905**		**22,193.9945**	**22,193.9945**	**1.4505**		**22,230.2562**

3.3 File Material Hauling - 2021

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	2.0191	76.9794	17.5562	0.2001	8.6497	0.2407	8.8905	2.2442	0.2303	2.4745		21,447.0179	21,447.0179	1.4313		21,482.8008
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	0.3853	0.2721	2.6644	7.5000e-003	0.7850	5.5500e-003	0.7906	0.2095	5.1100e-003	0.2146		746.9766	746.9766	0.0192		747.4553
Total	**2.4045**	**77.2515**	**20.2206**	**0.2076**	**9.4348**	**0.2463**	**9.6810**	**2.4537**	**0.2354**	**2.6891**		**22,193.9945**	**22,193.9945**	**1.4505**		**22,230.2562**

4.0 Operational Detail - Mobile

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	2.0207	9.4534	26.1727	0.0748	6.6902	0.0695	6.7597	1.7888	0.0651	1.8539		7,577.6751	7,577.6751	0.3874		7,587.3599
Unmitigated	2.0207	9.4534	26.1727	0.0748	6.6902	0.0695	6.7597	1.7888	0.0651	1.8539		7,577.6751	7,577.6751	0.3874		7,587.3599

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,180.48	1,228.84	1068.88	3,006,057	3,006,057
Total	1,180.48	1,228.84	1,068.88	3,006,057	3,006,057

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.555851	0.039752	0.205040	0.120748	0.020349	0.005402	0.018507	0.022668	0.002052	0.002157	0.005939	0.000618	0.000915

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	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
NaturalGas Unmitigated	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909

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					
Single Family Housing	8776.72	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Total		**0.0947**	**0.8088**	**0.3442**	**5.1600e-003**		**0.0654**	**0.0654**		**0.0654**	**0.0654**		**1,032.5549**	**1,032.5549**	**0.0198**	**0.0189**	**1,038.6909**

5.2 Energy by Land Use - NaturalGas

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					
Single Family Housing	8.77672	0.0947	0.8088	0.3442	5.1600e-003		0.0654	0.0654		0.0654	0.0654		1,032.5549	1,032.5549	0.0198	0.0189	1,038.6909
Total		**0.0947**	**0.8088**	**0.3442**	**5.1600e-003**		**0.0654**	**0.0654**		**0.0654**	**0.0654**		**1,032.5549**	**1,032.5549**	**0.0198**	**0.0189**	**1,038.6909**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668
Unmitigated	5.7536	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565	0.0000	18.4205	18.4205	0.0179	0.0000	18.8668

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	0.6665					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7765					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3106	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565		18.4205	18.4205	0.0179		18.8668
Total	**5.7536**	**0.1184**	**10.2524**	**5.4000e-004**		**0.0565**	**0.0565**		**0.0565**	**0.0565**	**0.0000**	**18.4205**	**18.4205**	**0.0179**	**0.0000**	**18.8668**

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	0.6665					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7765					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3106	0.1184	10.2524	5.4000e-004		0.0565	0.0565		0.0565	0.0565		18.4205	18.4205	0.0179		18.8668
Total	**5.7536**	**0.1184**	**10.2524**	**5.4000e-004**		**0.0565**	**0.0565**		**0.0565**	**0.0565**	**0.0000**	**18.4205**	**18.4205**	**0.0179**	**0.0000**	**18.8668**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation