NOTICE OF PREPARATION

December 17, 2009

TO: Responsible and Trustee Agencies/Interested Parties

FROM: City of San Buenaventura Engineering Division 501 Poli Street, Room 120 Ventura, California 93002

SUBJECT: Notice of Preparation of a Draft Program Environmental Impact Report for the Foster Park Embankment Protection and Restoration Project (Ref.: EIR-2520)

The City of San Buenaventura will be the Lead Agency and will prepare an environmental impact report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. If a Responsible or Trustee agency, 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 probable environmental effects are contained in the attached copy of the Initial Study. This information is also available at the following Internet site: http://www.cityofventura.net/community_development/planning/environmental_planning

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 Karen Whitehouse at the City of San Buenaventura at the address shown above. Please indicate the name of a contact person in your agency. Or e-mail questions or responses to kwhitehouse@ci.ventura.ca.us.

PROJECT TITLE: Foster Park Embankment Protection and Restoration Project.

PROJECT APPLICANT: City of San Buenaventura

Signature: Aren B. Whitehouse

Karen Whitehouse Title: Senior Civil Engineer Telephone: (805) 658-4756

Ref.: Appendix I, California Code of Regulations, Title 14 (2005)



Foster Park Embankment Protection and Restoration Initial Study/NOP

Prepared For:

The City of San Buenaventura Engineering Division 501 Poli Street Ventura, California 93002 (805) 658-4756 Contact: Karen Whitehouse, Project Engineer

Prepared By:

Impact Sciences, Inc. 813 Camarillo Springs Road, Suite A Camarillo, California 93012 (805) 437-1900 Contact: Daryl Koutnik, Principal

December 2009

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CITY OF San Buenaventura INITIAL STUDY

I. <u>BACKGROUND</u>:

Α.	Case No.:	EIR-2520
В.	Lead Agency Name/Address:	City of San Buenaventura Engineering Division 501 Poli Street, Room 120 P.O. Box 99, Ventura, California 93002
	Staff Planner/Telephone Number:	Karen Whitehouse Senior Civil Engineer (805) 658-4756
	Project Applicant Name/Address:	City of San Buenaventura P.O. Box 99 Ventura, California 93002

C. Project Description:

This initial study analyzes the impacts associated with the construction and operation of the embankment protection and restoration system (proposed project) of the western and eastern banks of the Ventura River, which is located northwest of the City of San Buenaventura and south of the community of Casitas Springs. In western Ventura County near Foster Park, the Ventura River runs in a primarily north-south direction. The Ventura River typically may run dry during the summer months and it typically experiences flash flooding during the winter months due to the coastal rainfall patterns located in the area. In the winters of 1969 and 2005, the river flooded dramatically, eroding the river bank in the location of the proposed project site, property was damaged along with water supply facilities for the City of San Buenaventura (City) and the Ojai Valley Sanitary District (OVSD) trunk sewage line.

The City of San Buenaventura, in partnership with OVSD, will develop an embankment protection and restoration project of the areas north of Foster Park where existing water supply and trunk sewage infrastructure was damaged or exposed due to the 1969 and 2005 floods. The proposed project is a cooperative effort between the City, OVSD, and the Federal Emergency Management Agency (FEMA). FEMA will be providing funding to complete the proposed project for protection of vital infrastructures of water supply and wastewater conveyance. The proposed project will protect 1,200 feet of land on the west bank of the Ventura River through the use of three selectively placed spur dikes, and 2,000 feet of land on the east bank of the Ventura River north of Foster Park and west of Highway 33 through the combination of rip rap and one small spur dike at the north end and five spur dikes south of the rip rap. The primary goals of the proposed project are to

- protect water and sewer infrastructure at the proposed project site, as well as the recreational and transportation corridor in the project area; and
- protect and enhance steelhead and riparian habitat, as well as revegetate and restore areas temporarily disturbed by the proposed project area.

The design of the proposed project combines the protection of service infrastructure with the opportunity for restoring and improving the steelhead habitat corridor along this reach of the Ventura River, as well as improving and providing further protection to the migration route of the species that use the river to breed. The proposed project will provide protection of the critical utilities for wastewater conveyance of the OVSD.

The proposed project will be developed using the Spur-Dike method, which was determined to be the Least Environmentally Damaging Practicable Alternative (LEDPA), as designated by the criteria established by the U.S. Corps of Engineers (USACE) 404 permit process.¹ The Spur-Dike method will include the development of six spur dikes along the eastern embankment and three spur dikes along the western embankment. Additionally, embankment protection will be developed using rip rap along the eastern bank of the Ventura River from the Fresno Canyon Flood Mitigation Improvements area to approximately 800 feet south in order to protect the OVSD sewer trunk line.

Hawks and Associates, "Foster Park Embankment Protection and Restoration Draft Technical Design Memorandum," The City of San Buenaventura, (June 10, 2009), 7 and revised in "Draft Response to Comments and Revised LEDPA," (September 4, 2009) and in "Ventura River Embankment Protection and Restoration – 70% Design Plans and Costs for the West Bank (PW 897)" (November 16, 2009).

The Spur-Dike method will stabilize the river bank for the protection of three City of San Buenaventura water wells, one test well, and the connecting pipelines with the best combination of the main essential elements, as required by the USACE 404 permit process; these elements include the smallest permanent disturbance area in the project site and adjacent to the project site being impacted, providing the greatest opportunity for local native plant recruitment, the most opportunity for enhancement and stabilization of riparian habitat, the least impact on steelhead migration routes occurring in this reach of the Ventura River, and the low cost of the proposed project.

During construction of the proposed project, it will be necessary to temporarily divert the flow of the Ventura River away from the construction footprints on the eastern and western banks of the river. Surface flow in the Ventura River along the Foster Park Reach is currently located along various low and high flow channels along the western and eastern river banks. Flow of the river will be diverted to facilitate the construction of the project and minimize the impacts to water quality and the fish and wildlife habitat associated with the bank protection construction. The proposed diversion channel will be relatively linear, approximately 1,000 feet in length, and located within the center of the Ventura River channel. The development of the diversion channel will consist of the following components:

- The diversion channel will be graded by dozers, which will excavate native river cobble from the channel and/or form a berm where needed between the diversion channel and the current low-flow channel.
- A berm will be established on the east and west side of the diversion channel. The diversion channel will be a maximum of 50 feet wide and contain a low-flow, rectangular "pilot channel" for extreme low flows (low flow during the construction period is estimated to range from 5 to 100 cubic feet per second).
- The slope and depth along the diversion alignment will vary and be designed to meet fishpassage criteria (minimum of 2 feet in depth and a maximum velocity of 3 feet per second).
- Woody debris will be added to the stream channel to enhance fish habitat, and the berms will be replanted with native willow, cottonwood, and other varieties, according to the final replanting plan under the supervision of a qualified biologist.
- The diversion channel will be completed while in a dry state and surface water will be diverted into the channel after completion, as required by Condition 32 of the California Department of Fish and Game Streambed Alteration Agreement.
- Measures will be taken to protect the diversion berm stream sides from possible erosion or downstream siltation (i.e., stream sides of diversion berms could be lined with plastic sheeting and anchored with gravel/sand bags).

Furthermore, the following protective measures will be implemented during the construction of the proposed project to minimize impacts to water quality, fish and wildlife, and plant habitat:

- Siltation of downstream areas will be minimized through the use of silt fencing between work areas and surface flow under the direction of a qualified biologist.
- Under the direction of a qualified biologist during the surface flow diversion process, block nets will be placed in surface flow both upstream and downstream to prevent fish (and endangered steelhead) and other aquatic species from entering the work area.
- Under the direction of a qualified biologist, Block nets will be removed once surface flow diversion is complete to maintain fish passage during construction.
- A nesting bird survey will be conducted prior to construction to identify any nesting sites or Endangered species in the area (bird nesting and foraging occurs from March 15 through September 15).
- A qualified biologist will conduct pre-construction plant and wildlife surveys prior to each phase of construction activities. In addition, the biologist will be on site during construction activities to monitor the presence/absence of special-status species.
- Native trees slated for removal will be inventoried and mitigated under the direction of a qualified biologist or botanist, as required by the California Department of Fish and Game Streambed Alteration Agreement. The final diversion alignment will be designed to minimize removal of native trees and provide opportunity for enhanced fish-passage habitat.
- Water quality will be monitored upstream and downstream of the surface flow diversion, including pH levels, temperature, dissolved oxygen levels, turbidity levels, and total suspended solids, and will be reported to the Los Angeles Regional Water Quality Control Board (LARWQCB) each month, as required by their permit.
- Surface flow will be diverted around the entire work area.
- The diversion channel will be excavated from downstream to upstream with flow diverted only when the new channel is completed. The diversion berm will be constructed of on-site alluvium of low silt content.
- Existing surface flow will be maintained to areas downstream of the work area to support aquatic life.
- A five-day clear weather forecast shall be available before conducting any construction within the active river channel, as required by the Stormwater Pollution Prevention Plan. Any work in progress within the river will be cleared from the channel prior to the predicted storm event.
- Refueling, maintenance, and cleaning of machinery will only occur in a staging area outside of the streambed to prevent accidental spills.
- All machinery will be inspected before the start of the day and throughout the day as necessary for fluid leaks. Fluid leaks will be cleaned by hand using dry cleaning techniques.

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors highlighted in bold below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages:

Aesthetics Agriculture Resources Air Quality	Geology/Soils Hazards/Hazardous Material Hydrology and Water Quality	Noise Population and Housing Public Services and Recreation
Biological Resources	Land Use and Planning	Transportation/Traffic
Cultural Resources	Mineral Resources	Utilities and Service Systems

III. <u>PROJECT SCOPE</u>:

- 1. Location: The proposed project is located on the Ventura River on a portion of land that is owned by and annexed within the City of San Buenaventura limits. Figure 1, Regional Location of the Proposed Project, shows the location of the proposed project within a regional context of the surrounding area. Figure 2, Location of Proposed Project, shows the location of the proposed project will be implemented. Figure 3, Proposed Project Design at the Project Site, shows the construction footprint of the proposed project along the eastern and western banks of the Foster Park reach of the Ventura River. The City-owned property where construction of the proposed project will occur is located approximately 6.5 miles north of the mouth of the Ventura River, 0.5 mile to the southwest of the community of Casitas Springs, and 0.06 mile north of Foster Park. As seen in Figure 3, construction of the proposed project will occur along 1,200 feet of riverbank on the western side of the Ventura River.
- 2. Assessor's Parcel Number: APN 0600220260
- 3. Land Use Characteristics and Adjacent Land Use: The proposed project is located along the western and eastern banks of the Ventura River near the Foster Park Area. The project site is owned by the City of San Buenaventura and is surrounded by unincorporated areas of Ventura County on all sides. The City owns the unincorporated land (161 acres) to the north of the project area (APN 0600220200). The City also owns the unincorporated land (1 acre) to the east of the project south of the Edison facility (APN 0600220270). The project property area is approximately 35 acres; it will include development of embankment protection and restoration techniques along 1,200 feet of the western bank of the Ventura River, and 2,000 feet of bank on the eastern side of the Ventura River. The land within the project footprint of the proposed project site is relatively flat, and is typical of the riverine topography associated with the Ventura River. The existing river bank conditions were most recently reshaped within the proposed project site by the January and February 2005 flood events, which caused progressive erosion and slope failures along the eastern and western banks and carved out a large portion of the east and west banks of the river that undermined and damaged the utility infrastructure.

The project site is located adjacent to and within the Ventura River floodplain. This area is primarily unincorporated Ventura County and is designated as Open Space, according to the Ventura County General Plan Land Use Map. This area is absent of development and is the primary flow path of the Ventura River. The community of Casitas Springs is located northeast of the proposed project site. Casitas Springs, located in unincorporated Ventura County, and consists of single-family residential units and a few commercial retail uses. The Ventura County General Plan Land Use Map designates the community of Casitas Springs as Existing Community. Highway 33, which is located to the east of the proposed project site, is the main thoroughfare for motorists traveling between the City of San Buenaventura and the City of Ojai located. Beyond Highway 33, hills rise above the Ventura River Corridor.

The Ventura County General Plan designates the area to the east of the proposed project site as Open Space. Foster Park is located to the south of the proposed project site. A small parking lot is located to the southeast of the proposed project, allowing visitors access to Foster Park and its amenities. Foster Park and the Ventura River south of the proposed project are located in unincorporated Ventura County, and the Ventura County General Plan Land Use Map designates this area as Open Space.

The Casitas Vista Road crosses the Ventura River and floodplain south beyond Foster Park, allowing motorists to access residential uses to the west of the proposed project site. A small community of residential units is located to the west and southwest of the proposed project site, in unincorporated Ventura County. The Ventura County General Plan designates this area as Existing Community.

The Nye Ranch property is located adjacent to and to the west of the proposed project site. The Nye property consists of residential units along with farming outhouses. An active agricultural field (also adjacent to and west of the proposed project site) is owned and operated under the Nye Ranch property. The Ventura County General Plan Land Use Map designates these areas as Rural and Open Space, respectively.

- 4. General Plan Land Use Designation: According to the Ventura County General Plan the proposed project site is owned by the City of San Buenaventura and designated as Open Space–Urban Reserve. The City of San Buenaventura currently does not designate the area of the proposed project site under the City of San Buenaventura General Plan Land Use Map.
- **5. Current and Proposed Zoning:** The proposed project site is zoned under the City of San Buenaventura as Open Space.



SOURCE: Impact Sciences, Inc. - October 200

FIGURE 1



145-015•10/09



SOURCE: Impact Sciences, Inc. - October 2009

FIGURE 2

Location of Proposed Project



n APPROXIMATE SCALE IN FEET

SOURCE: Hawks & Associates - December 2009

FIGURE 3

Proposed Project Design at the Project Site

- 6. Discretionary Permits and Approvals Required: The anticipated implementation of the proposed project will require several permits, as briefly described below:
 - United States Army Corps of Engineers (USACE) 404 Permit. Section 404 of the Federal Clean Water Act regulates areas defined as "waters of the United States (U.S.)" and regulates all activities within the banks of the river. The permit is triggered when materials are to be moved or placed in waters of the U.S. Part of the 404 Permit is consultation with National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS).
 - Regional Water Quality Control Board (RWQCB) 401 Water Quality Certification. Section 401 of the Federal Clean Water Act specifies that states must certify that any activity subject to a federal permit also meet all state water quality standards related to discharges from the project. The permit is triggered when a USACE 404 Permit is necessary.
 - RWQCB Waste Discharge Requirements and National Pollution Discharge Elimination System (NPDES) Permit. Required for all waste discharges from groundwater dewatering.
 - California Department of Fish and Game (CDFG) Streambed Alteration Agreement. CDFG Sections 1600–1616 regulate adverse activities that would alter the flow, bed, banks, channel, or riparian areas of a river, stream, or lake and affect fish and wildlife.
 - Ventura County Public Works Agency (VCPWA) Grading Permit. Required for any project involving moving more than 50 cubic yards of earth.
 - State Water Resources Control Board (SWRCB) General Construction Permit. Required for all construction activities and will require a Storm Water Pollution Prevention Plan (SWPPP).
 - Ventura County Watershed Protection District (VCWPD) Watercourse Permit. Required for all projects in a VCWPD red-line stream that will alter the stream in any way or is within the floodway.
- 7. Approvals required by other public agencies: None.

IV. <u>CONCLUSION AND ACTION</u>:

On the basis of the information contained in this Initial Study/Environmental Assessment, the Planning Commission finds that:

- ____ The proposed project is EXEMPT from further CEQA review under Section _____ of the *State CEQA Guidelines*.
- ____ The project, as proposed, WOULD NOT have a significant effect on the environment, and a PROPOSED NEGATIVE DECLARATION will be prepared and forwarded to the Planning Commission for approval of a FINAL NEGATIVE DECLARATION.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the attached mitigation measures and monitoring program have been added to the project. A PROPOSED MITIGATED NEGATIVE DECLARATION will be prepared and forwarded to the City Council for approval of a FINAL MITIGATED NEGATIVE DECLARATION.
- ____ The proposed project MAY have a significant effect on the environment and an EXPANDED INITIAL STUDY/ENVIRONMENTAL ASSESSMENT will be prepared to address:
- <u>X</u> The proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT should be prepared.
- ____ The proposed project is a SUBSEQUENT USE of a previously prepared EIR and any environmental impacts have been addressed in EIR-____.
- ____ On the basis of the information contained in the Initial Study, and on the record as a whole, a finding has been made that there is no evidence that there will be an adverse effect on fish or wildlife habitats or resources pursuant to Section 3 of EIRC Resolution No. 93-5.
- ___ (Other)

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a

fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factor as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. Negative Declaration: "Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion within this Initial Study identifies the following:
 - a) The earlier analysis used and where it is available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. The explanation of each issue should identify: (a) The significance criteria or threshold, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance

This Initial Study has been prepared in accordance with the *State CEQA Guidelines* and relevant provisions of the California Environmental Quality Act (CEQA) of 1970, as amended. Section 15063(c) of the *State CEQA Guidelines* defines an Initial Study

as the proper preliminary method of analyzing the potential environmental consequences of a project. Among the purposes of an Initial Study are

- 1. to provide the Lead Agency (the City of San Buenaventura) with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration;
- 2. to enable the Lead Agency to modify a project, mitigating adverse impacts, thus avoiding the need to prepare an EIR (if possible); and
- 3. assist in the preparation of an EIR, if one is required.

V. ENVIRONMENTAL IMPACT EVALUATION:

A. <u>Aesthetics</u>:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
 Have a substantial adverse effect on a scenic vista? 			Х	
 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? 				Х
3. Substantially degrade the existing visual character or quality of the site and its surroundings?			х	
 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? 				Х

Impact Discussion:

1. No Impact. The proposed project will include construction of embankment protection devices along the western and eastern bank of the Ventura River near Foster Park, south of the community of Casitas Springs. The area around the project site consists of riverine habitat with an abundance of vegetation. The Nye Ranch property, which consists of an agricultural field and residential units, is located to the west of the project site. Highway 33 is located to the east of the proposed project site, and the residential community of Casitas Springs is located north of the project site. The project site is located within the Ventura River canyon, with hills rising above the site on its western and eastern sides, and along the riverbanks of the Ventura River, which is the lowest in elevation surrounding the project site. Motorists traveling north and south along Highway 33 as they approach the project site will continue to have unobstructed views of the hillsides to the west (the hillsides of Foster Park) and east of the proposed project site during the construction and operation of the proposed project. This is primarily due to the elevation of the proposed project site being lower than the surrounding hillsides. Furthermore, the proposed project does not include the

development of residential units, commercial uses, industrial uses, or other such uses that would block views of the surrounding hillsides in the area. The Ojai Valley hiking/biking trail begins in Foster Park and commences in the north in the City of Ojai. The hiking/biking trail is an alternate route that is used by residents in the Ojai Valley for recreational purposes. The Ojai Vallev hiking/biking trail is located adjacent to the proposed project, between the proposed project's eastern footprint and Highway 33. During construction of the proposed project, people using the Ojai Valley hiking/biking trail will be subject to the sights and sounds of construction activities involved with the development of the spur dikes and embankment protection measures along the eastern footprint of the proposed project. Even though the proposed project will not permanently obscure scenic resources in the area for people using the trail, temporary impacts on scenic resource will exist for people using the Ojai Valley hiking/biking trail system to the east of the eastern footprint of the proposed project. Since there will be temporary obstructions of the Ventura River and other scenic resources for people using the Oiai Valley hiking/biking trail, impacts would be considered temporary in nature and would result in impacts that are less than significant.

- 2. No Impact. The proposed project is located on a Foster Park reach of the Ventura River north of the Foster Park boundary line, west of Highway 33, north of the Casitas Vista Road overcrossing, and south of the community of Casitas Springs. The proposed project is not located within a state scenic highway; therefore, the proposed project would not damage trees, rock outcroppings, or historic buildings within a state scenic highway. The closest state designated scenic highway is the portion of Highway 33, that extends 6.4 miles north of State Route 150 to the Santa Barbara County line. The stretch of Highway 33 adjacent to the project site is considered an Eligible State Scenic Highway, but is not officially designated as one by the State of California.² No impacts would occur, and no further analysis will be required.
- **3.** Less than significant impact. The project site is located on both sides of the bank of the Ventura River. The Ventura River passes from within the Los Padres National Forest, through agricultural land, environmentally significant open space land, and several small communities (including Casitas Springs and the City of San Buenaventura) before discharging to the Pacific Ocean. The entire length of the Ventura River consists of a riparian corridor that supports a wide variety of wildlife and vegetation, and provides opportunities for recovery of the southern steelhead and other species in Southern California. The Ventura River in the area of the proposed project has extreme fluctuations in flow due to the semi-arid nature of the weather pattern in the area. The river banks in the area of the proposed project have been highly susceptible to erosion, specifically during the flash-flood events of 1969 and 2005. The existing river bank conditions in the project area were most

² California Scenic Highway Mapping System, Scenic Route, http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed September 23, 2009.

recently reshaped by the January and February 2005 flood events, which caused progressive erosion and slope failures, thus carving out a large portion of the east and west banks in the project site. These floods caused the river bed in the area of the proposed project to widen by 200 feet and, furthermore, strip vegetation and beneficial habitat out of the proposed project area. Under existing conditions, the proposed project area has scarce amounts of vegetation, and it has a more barren appearance than other portions of the Ventura River near the proposed project site. Development of the proposed project will include the construction of embankment protection devices along the eastern and western banks of the river, which will introduce a natural appearance similar to that of the surrounding riparian habitat in the Ventura River using rocks and native vegetation to stabilize the bank. Approximately three spur dikes on the western bank and six spur dikes on the eastern bank, combined with some rip-rap, will be developed to enhance the appearance of the proposed project site with the creation of suitable riparian vegetation. Furthermore, the proposed project will incorporate a revegetation plan to restore the proposed project site to the natural vegetative state of the area, similar to the natural vegetative state of the whole of the Ventura River. The revegetation plan will include the use of species that are native to the area, including arroyo willow, narrowleaf willow, mulefat, red willow, white alder, California sycamore, and black cottonwood along riparian areas of the proposed project, plus mulefat, California black walnut, and coast live oak along the upland areas of the proposed project site. Upon completion of the proposed project, the vegetation associated with the proposed project will grow in over a period of three to five years, providing a more natural vision to the land located in this portion of the Ventura River watershed. Since the proposed project will enhance-rather than degrade—the visual characteristic of the surrounding landscape, impacts from implementation of the proposed project will be less than significant. No further analysis will be required.

4. No impact. The proposed project consists of the development of an embankment protection and restoration system along the western and eastern banks of the Ventura River in the Foster Park area. The proposed project will include the development of three spur dikes along the river's western bank and six spur dikes and rip rap along its eastern bank. The spur dikes and the embankment stabilization will be developed using natural rocks and vegetation. The area of the proposed project, under current conditions, does not produce light or glare. Similarly, upon completion of the proposed project, the components of the project are not expected to produce light or glare beyond what is currently experienced on the project site. This is due to the use of natural rocks and vegetation for development of the components of the proposed project. No impacts would occur, and no further analysis will be required.

Mitigation/Residual Impact(s): Based on the above discussion, project implementation would have no impacts with regard to the Aesthetics issue area. As such, no mitigation measures are required.

B. Agricultural Resources:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				Х
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				Х
3. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non- agricultural use?				х

Impact Discussion:

1. No Impact. The proposed project consists of the development of an embankment protection system along the Ventura River in the northwest corner of the City of San Buenaventura, adjacent to Foster Park. The construction project is located along the eastern and western banks of the Ventura River. According to the California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP), the proposed project is not located on soil that is considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.³ The proposed project is located on land that is categorized as Other Land, according to the FMMP.⁴ The closest Prime Farmland is located directly adjacent to the proposed project site, west of the westem banks of the Ventura River; however, the proposed project is not expected to convert this Prime Farmland to an urbanized use. In fact, the proposed project will enhance

³ California Department of Conservation, Farmland Mapping and Monitoring Program, ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2006/. Ventura County Map, 2006.

⁴ The Other Land category provided by the California Department of Conservation Farmland Mapping and Monitoring Program consists of low-density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as other land.

the protection of this Prime Farmland by providing a buffer against the floodwaters that can infiltrate the land adjacent to the project site that is considered Prime Farmland during 50- and 100-year floods. Therefore, no impacts are expected to occur, and no further analysis will be required.

- 2. No Impact. The proposed project site is located within the confines of the Ventura River. Specifically, embankment protection will be developed along the western and eastern portion of the Foster Park reach of the Ventura River. The proposed project site is not under a Williamson Act Contract.⁵ The closest Williamson Act Contracted land is located to the east of the project site, east of Highway 33, approximately 345 feet from the proposed project site. This land is designated as Williamson Act Non-Prime Agricultural Land, which is considered land enrolled in the Williamson Act Program under the California Land Conservation Act, but does not meet the criteria to be designated as Prime agricultural land. Furthermore, the County of Ventura designates the proposed project as an Open Space–Urban Reserve land use and Open Space zoning. Therefore, implementation of the proposed project will not conflict with Williamson Act Contracted lands or land zoned as agriculture. There will be no impacts associated with the implementation of the proposed project, and no further analysis will be required.
- **3.** No Impact. As discussed above, the proposed project will include the development of bank restoration techniques along the Foster Park reach of the Ventura River. As the land of the proposed project consists mainly of river-bottom soils, and riverine vegetation, the productivity of the project site for agricultural use is not feasible. A small portion of agricultural land is adjacent (to the west) to the proposed project site; however, the development of the embankment protection and restoration is not expected to disrupt the agricultural activity on this land. Furthermore, the proposed project upon its completion will enhance the protection of the agricultural land from floodwaters that could occur within this reach of the Ventura River. The land adjacent to the project site is not expected to be converted to urbanized land uses due to the development of the proposed project. Therefore, there will be no impacts associated with the development of the project, and no further analysis will be required.

Mitigation/Residual Impact(s): Based on the above discussion, project implementation would have no impacts with regard to the Agricultural Resources issue area. No mitigation measures are required.

⁵ California Department of Conservation, Williamson Act Program, Ventura County Williamson Act 2006 to 2007 Map, ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Map%20and%20PDF/Ventura/ventura%20wa%2006_07.pdf. Accessed August 7, 2009.

C. Air Quality:

Would the project:		Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Conflict with or obstruct implementation of the applicable air quality plan?			х	
2.	Violate any air quality standards or contribute substantially to an existing or projected air quality violation?			х	
3.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			Х	
4.	Expose sensitive receptors to substantial pollutant concentrations?	х			
5.	Create objectionable odors affecting a substantial number of people?				Х
6.	Would the project result in greenhouse gas emissions that would hinder or delay the County's ability to meet the State's climate change goals?			х	

Impact Discussion:

1. Less than significant impact. The California Air Resources Board (CARB) is the state agency responsible for complying with the requirements of the federal Clean Air Act Amendments of 1990 (CAAA) and the California Clean Air Act (CCAA). CARB has divided the state into air basins and has delegated authority within each air basin to local air pollution control districts and air quality management districts. The proposed project is located in Ventura County, which is in the South Central Coast Air Basin (Basin) and, therefore, falls under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). In conjunction with the Southern California Association of Governments (SCAG), the VCAPCD is responsible for formulating and implementing air pollution control strategies in Ventura County. The VCAPCD is required to develop an air quality management plan (AQMP), which demonstrates how the region will attain the air quality standards set forth in the CAAA. The AQMP must be approved by CARB and is then incorporated into the State Implementation Plan (SIP), along with AQMPs and clean air plans from other air districts. The portions of the SIP relevant to the federal CAAA must be approved by the United States Environmental Protection Agency (U.S. EPA).

The VCAPCD's Final 2007 Ventura County Air Quality Management Plan (AQMP) was adopted by the VCAPCD Board in May 2008. It establishes a comprehensive air pollution control program leading to the attainment of the State and federal air quality standards in Ventura County. Ventura County is in nonattainment for the State 1-hour ozone (O₃) standard, serious nonattainment for the federal 8-hour ozone standard, and nonattainment for the state 24-hour and annual respirable particulate matter (PM_{10}) standards. In February 2008, CARB formally requested that the U.S. EPA reclassify (bump up) Ventura County from moderate to serious nonattainment (one classification level) for the 8-hour ozone standard. This was necessary because the AQMP could not demonstrate attainment of the 8-hour ozone standard by the prior deadline. The reclassification would extend the attainment deadline under the CAAA from June 15, 2010, to June 15, 2013. Although Ventura County would have more time to attain the standard, the serious classification requires Ventura County to meet the requirements of that higher classification, many of which are more stringent than for moderate areas. The U.S. EPA formally reclassified Ventura County effective June 19, 2008. In anticipation of the reclassification, the Final 2007 AQMP was prepared to satisfy the more stringent requirements for serious areas.

The VCAPCD adopted the Ventura County Air Quality Assessment Guidelines (Guidelines) in 2003, which is an advisory document that provides lead agencies with a methodology for evaluating air quality impacts under CEQA. The Guidelines recommend specific thresholds for determining whether a project may have a significant adverse impact on regional air quality. Projects that exceed the thresholds are considered to individually and cumulatively jeopardize attainment of the National Ambient Air Quality Standards (NAAQS) as defined in the federal

CAAA. As demonstrated below in the next subsection, potential impacts on local and regional air quality due to development of the proposed project are anticipated to be less than significant, falling below the established VCAPCD significance thresholds Because operation of the project would not exceed the VCAPCD significance thresholds, the proposed project would not increase the frequency or severity of existing air quality violations, neither cause or contribute to new air quality violations, nor delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP. Therefore, the proposed project would be consistent with the AQMP.

Additionally, projects that are consistent with growth forecasts identified by SCAG are considered consistent with the AQMP growth projections. This is because the growth projections by SCAG form the basis of the land use and transportation control portions of the AQMP. The proposed project would not cause an increase in population and is considered to be consistent with SCAG growth projections. Therefore, the proposed project would not increase population figures over those that have been planned for the area, would be consistent with the AQMP growth forecasts for this area, would be considered consistent with the AQMP, and would not jeopardize attainment of state and federal ambient air quality standards in the County. Based on the above discussion, the proposed project would not conflict with applicable regional plans or policies adopted by agencies with jurisdiction over the project and would be less than significant with respect to this criterion.

- 2. Less than significant impact. Air quality within the project area is regulated by the VCAPCD, whose guidelines recommend specific thresholds for determining the level of significance for project-specific developments within Ventura County. Projects exceeding any of the VCAPCD thresholds in the long term are considered to have significant impacts. The following are the thresholds for reactive organic compounds (ROC),⁶ nitrogen oxide (NO_X), and other criteria pollutants that the VCAPCD has determined will individually and cumulatively jeopardize attainment of the federal standards, and thus have a significant adverse impact on air quality in Ventura County:
 - a. Reactive Organic Compounds (ROC): 25 pounds per day.
 - b. Nitrogen Oxides (NO_x): 25 pounds per day.
 - c. A project that may cause an ambient air quality standard (state or federal) to be exceeded, or makes a substantial contribution to an already exceeded air quality standard. Substantial is defined as making measurably worse an existing state or federal ambient air quality standard that is exceeded.

The emission limits above apply to operational emissions. Construction emissions of ROC and NO_X are not counted toward the significance thresholds

⁶ For purposes of this assessment, ROC is synonymous with the term volatile organic compounds (VOC) and reactive organic gases (ROG) used in other air district's CEQA guidance as discussed in this report.

because they are considered by VCAPCD to be temporary. However, the VCAPCD recommends implementing mitigation measures if construction ROC or NOX emissions would be more than 25 pounds per day.

The proposed project includes the construction of an embankment protection and the restoration of the Foster Park section of the Ventura River located in the City of Ventura, California, which is prone to flooding. The embankment protection and restoration project would protect 1,162 feet on the west river bank, and 2,035 feet on the east bank using the Spur-Dike method. This method would include the development of six spur dikes along the river's eastern embankment and five spur-dikes along the western embankment. In addition, the east bank protection would include an 800-foot reach. The embankment design is aimed at protecting critical utilities owned by the City of San Buenaventura (water wells) and the Ojai Valley Sanitation District (sewer trunk line). To ensure a proper restoration of the river, a temporary diversion channel would also be constructed. The project would be constructed in three phases. The first phase would include the clearing and grubbing of the embankment and diversion areas in March 2010; the second phase would include the preparation of the River diversion/lowflow channel in April 2010; and the third phase would include the construction of the embankment protection lasting from May to November 2010.

Construction of the proposed project would generate temporary air emissions in the project vicinity. During development of the proposed project, construction-related emissions would occur from on-site heavy-duty construction equipment, worker vehicles, and haul trucks. These activities would generate exhaust emissions of ROC, NO_X, carbon monoxide (CO), sulfur oxide (SO_X), PM₁₀, fine particulate matter (PM_{2.5}) and fugitive dust (PM₁₀ and PM_{2.5}). The emissions would vary depending on the construction schedule, activities being performed at the site, and the site location relative to paved access roads. In addition, soil conditions and meteorological conditions, such as rain and wind, would also influence the creation and dispersion of dust.

The construction emissions associated with the proposed project were estimated using the URBEMIS2007 Environmental Management Software. URBEMIS2007 is a program that calculates air emissions from land use sources and incorporates CARB's EMFAC2007 model for on-road vehicle emissions and OFFROAD2007 model for off-road vehicle emissions. The model also incorporates factors specific to the Basin and the VCAPCD. Project-specific data were used in the URBEMIS2007 model where available. The project applicant provided the estimated construction schedule. The number and types of construction equipment, vendor trips (e.g., transportation of building materials), and worker trips were based on values provided in the URBEMIS2007 model. The project applicant also provided the amount of fill-material for the 800-linear-foot embankment (11,000 cubic yards), and the amount of imported rock rip rap for the spur dikes and the embankment protection (23,000 cubic yards). The total grading area was estimated to be 36 acres. In order to account for fugitive dust suppression for grading activities in the URBEMIS2007 model, it was assumed

the project contractor would comply with VCAPCD fugitive dust mitigation measures by applying water a minimum of two times per day on exposed surfaces. **Table 1**, **Estimated Unmitigated Construction Emissions**, shows the construction emissions that would result from the proposed project.

	Maximum Emissions in Pounds Per Day					
Construction Phase	ROC	NO _x	CO	SOx	PM ₁₀	PM _{2.5}
Phase 1	4.20	33.73	18.59	0.00	141.99	30.93
Phase 2	4.20	33.73	18.59	0.00	58.29	13.45
Phase 3	4.47	37.74	19.98	0.01	22.13	6.01
Maximum Daily Emissions	4.47	37.74	19.98	0.01	141.99	30.93
VCAPCD Operational Threshold:	25	25	-	-	-	-
Exceeds Threshold?	NO	YES	-	-	-	-

Table 1 Estimated Unmitigated Construction Emissions

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in Appendix C.

Totals in the table may not appear to add exactly due to rounding in the computer model calculations.

Construction of the proposed project would exceed VCAPCD's Operational Threshold of 25 pounds per day for NO_X . The VCAPCD recommends taking the following mitigation measures to address ozone precursor emissions from construction motor vehicles if construction ROC or NO_X emissions would be more than 25 pounds per day:

- Minimize equipment idling time.
- Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
- Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.
- Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.

Construction of the proposed project, as seen in **Table 1**, would emit over 25 pounds per day of PM_{10} . Phase 3 PM_{10} emissions are likely overestimated by URBEMIS2007 because the rock rip-rap to be imported is treated as soil. The VCAPCD regulates fugitive dust emissions generated as part of any operation, disturbed surface area, or man-made condition capable of generating fugitive dust, including bulk material handling, earthmoving, construction storage piles, unpaved roads, track-out, and construction activities through Rule 55, which became effective on October 8, 2008. The following discusses the requirements of Rule 55 that are generally applicable to all projects that involve earthmoving activities.

Visible Dust Beyond the Property Line: No person shall cause or allow the emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source, or beyond 50 feet from the property line if there is not an adjacent public street or road.

Opacity: No person shall cause or allow the emission of fugitive dust from any applicable source such that the dust causes 20 percent opacity or greater during each observation and the total duration of such observations (not necessarily consecutive) is a cumulative 3 minutes or more in any 1 hour. Only opacity readings from a single source shall be included in the cumulative total used to determine compliance.

Track-Out: No person shall allow track-out to extend 25 feet or more in length unless at least one of the following three control measures is utilized. All track-out shall be removed at the conclusions of each workday or evening shift and shall be subject to the same condition regarding PM₁₀-efficient street sweepers, as outlined in measure c below.

The use of blowers for removal of track-out is expressly prohibited under any circumstances.

- a. *Track-Out Area Improvement*. Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with public paved surface, and extend for a centerline distance of at least 100 feet, with an acceptable width to accommodate traffic ingress and egress at the site.
- b. Track-Out Prevention: Check and clean the undercarriage and wheels on all vehicles before leaving unpaved surface, or install a properly functioning and well-maintained track-out control device(s) that prevent track-out of soil onto paved public roads.
- c. *Track-Out Removal*: Remove track-out from pavement as soon as possible but no later than 1 hour after it has been deposited on the paved road. If a street sweeper is used to remove any track-out, only PM₁₀-efficient street sweepers certified to meet South Coast Air Quality Management District Rule 1186 requirements shall be used. The make and model information and certification documentation of any sweeper used shall be made available upon request.

Rule 55 has requirements applicable to specific earthmoving activities. The following discuss the requirements applicable to the proposed project:

- a. **Earthmoving**: No person shall engage in earthmoving activities in a manner that creates visible dust emissions over 100 feet in length.
- b. Bulk Material Handling Facilities Track-Out Prevention: No person shall conduct an active operation with a monthly import or export of 2,150 cubic

yards or more of bulk material without using at least one of the following measures at each vehicle egress from the site to a public paved road:

- i. Install a pad consisting of washed gravel (minimum size: 1 inch) maintained in a clean condition to a depth of at least 6 inches and extending at least 30 feet wide and at least 50 feet long.
- ii. Pave the surface at least 100 feet long and at least 20 feet wide.
- iii. Utilize a wheel-shaker/wheel-spreading device, also known as a rumble gate, consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and of sufficient width to allow all wheels of vehicle traffic to travel over grate to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- iv. Install and utilize a wheel-washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- v. Any other control measure or device that prevents track-out onto public paved roads.
- c. **Truck Hauling**: No person (including facility or site operator) shall load or allow the loading of bulk materials or soil onto outbound trucks unless at least one of the following dust prevention techniques is used:
 - i. Use properly secured traps or cargo covering that covers the entire surface area of the load or use a container-type enclosure.
 - ii. Maintain a minimum of 6 inches of freeboard below the rim of the truck bed where the load touches the sides of the cargo area and ensure that the peak of the load does not extend above any part of the upper edge of the cargo area.
 - iii. Water or otherwise treat the bulk material to minimize loss of material to wind or spillage.
 - iv. Other effective dust prevention control measures.
- d. **Storage Pile Conditional Exemption**: The Visible Dust Beyond the Property Line and Opacity requirements shall not apply to fugitive dust from storage piles if the operator has implemented at least one of the following control measures:
 - i. Wind Sheltering: Enclose material in a three- or four-sided barrier equal to the height of the material.
 - ii. Watering: Apply water at a sufficient quantity and frequency to prevent wind-driven dust.
 - iii. Chemical Stabilization: Apply a non-toxic dust suppressant that complies with all applicable air and water quality government standards at a sufficient quantity and frequency to prevent wind driven dust.

iv. Covering: Install and anchor tarps, plastic, or other material to prevent wind-driven dust.

The proposed project's construction and operation activities would comply with the applicable provisions of Rule 55, listed above. These measures would help reduce fugitive dust emissions from project construction. The implementation of the above mitigation measures would reduce construction emissions to a less than significant level.

Operational emissions of the proposed project would be produced from periodic maintenance trucks visiting the project site to maintain the embankment protection structures. These infrequent operational emissions are not expected to exceed the VCAPCD operational threshold of 25 pounds per day for ROC and NOX. Therefore, operational emissions would be less than significant.

- **3. Less than significant impact.** According to the VCAPCD Guidelines, the project would have a cumulative significant impact if:
 - Any cumulative project group that may cause an ambient air quality standard (state or federal) to be exceeded, or makes a substantial contribution to an already exceeded air quality standard;
 - Any individual project with emissions greater than 2 pounds per day of ROC or 2 pounds per day of NO_X that is found to be inconsistent with the AQMP will have a significant cumulative air quality impact; and
 - Any General Plan Amendment or revision that would provide directly or indirectly for increased population growth above that forecasted in the most recently adopted AQMP will have a significant cumulative air quality impact.⁷

The proposed project would not have a significant air quality impact and would not result in a substantial temporary or permanent increase in ambient air quality levels in the project vicinity. The construction emissions, after the implementation of mitigation measures, would result in a less than significant impact. Operation of the project would result in minor emissions from infrequent maintenance trucks visiting the project site. Furthermore, on September 27, 2007, CARB adopted its State Strategy for California's 2007 SIP to achieve the emission reductions needed for all areas of the state, including Ventura County, to attain the federal 8-hour ozone standard. The control measures in CARB's State Strategy target passenger vehicles, trucks, construction equipment, and other equipment types. The State Strategy will reduce ozone levels statewide, thereby ensuring progress towards the ozone standard throughout California. To the extent that the passenger vehicles, trucks, and construction equipment will comply with the State Strategy, the project will conform with the Final Ventura County 2007 AQMP. The operation of the proposed project would not cause emissions to exceed VCAPCD significance thresholds due to the nature of the project. Lastly, as the proposed project will not result in any population growth, the project will have a less than significant cumulative impact.

⁷ Ventura County Air Pollution Control District, *Ventura County Air Quality Assessment Guidelines*, (2003), 3-2.

- 4. Potentially significant impact. The proposed project is located in the Foster Park section of the Ventura River in Ventura County, California. Existing sensitive receptors are located approximately 230 feet to the southwest of the proposed spur dikes (200 feet from the embankment) and approximately 550 feet from the proposed spur dikes (450 feet from the embankment). As previously discussed, construction of the project is temporary, lasting approximately nine months, and would comply with VCAPCD's ROC and NO_x mitigation measures, as well as with Rule 55 to reduce ROC, NO_x , and fugitive dust emissions. Operational emissions would be emitted periodically from maintenance trucks and they are not expected to exceed VCAPCD's significance thresholds for ROC and NO_x. Nonetheless, as the proposed project involves the movement of substantial amounts of earthen materials using heavy-duty diesel-fueled construction equipment, the proposed project could potentially expose nearby sensitive receptors to substantial pollutant concentrations in the project's vicinity. Therefore, the project would have a potentially significant impact with respect to this criterion.
- 5. No impact. The proposed project is not expected to be a source of persistent odors. Construction of the project is temporary and is not expected to cause an odor nuisance. The operation of the proposed project requires the periodic visit of maintenance trucks to maintain the embankment protection structures but the trucks would not emit objectionable odors. Consequently, no significant impacts from odors are anticipated from the proposed project.
- 6. Less than significant impact. Construction of the proposed project would result in greenhouse gas (GHG) emissions. While numerical thresholds have not been adopted for GHG emissions, the Governor's Office of Planning and Research (OPR) recommends CEQA documents to provide estimated emissions from sources of GHG, including vehicular traffic and construction activities based on the availability of emission factors and data.

The proposed project would result in short-term, one-time emissions of GHGs during construction. These emissions—primarily, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O)—, are the result of fuel combustion by construction equipment and motor vehicles. The other primary GHGs (hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) are typically associated with specific industrial sources and are not expected to be emitted by the proposed project. The emissions of CO₂ were estimated using URBEMIS2007, using the same factors and assumptions as described above. However, URBEMIS2007 does not provide estimates of other GHGs associated with combustion, namely CH₄ and N₂O. Therefore, in order to account for emissions of these compounds, the following adjustments were made to the URBEMIS2007 emission calculations:

• Construction diesel trucks and equipment. The CO₂ emissions associated with offroad and on-road equipment were multiplied by a factor based on the assumption that CO₂ represents approximately 99.1 and 99.9 percent, respectively, of the CO₂e emissions. These assumptions were derived from information provided by the California Climate Action Registry⁸ and the California Energy Commission.⁹

 Motor vehicles: The CO₂ emissions associated with project-generated trips were multiplied by a factor based on the assumption that CO₂ represents 95 percent of the CO₂e emissions associated with passenger vehicles, which account for most of the project-related trips. This assumption was based on data provided by the U.S. EPA.¹⁰

At full buildout, the project would result in operational GHG emissions due to periodic maintenance trucks. These emissions, primarily CO_2 , CH_4 , and N_2O , are the result of fuel combustion emissions. Since maintenance truck trip to the site would occur infrequently and sporadically, GHG emissions from maintenance activities expected to be minimal and are not quantified.

Table 2, Estimated Unmitigated Construction GHG Emissions, lists the estimated GHG emissions from the proposed project's construction activities. The estimated emissions are reported in units of metric tons of CO_2 equivalent (MTCO₂e) per year. CO_2 equivalent incorporates impacts from GHGs other than CO_2 , which are primarily N₂O and CH₄ from this project.

	GHG Emissions
Construction Phase	(MTCO ₂ e/Year)
Phase 1	33.07
Phase 2	31.63
Phase 3	260.31
Construction Total	325.01

Table 2 Estimated Unmitigated Construction GHG Emissions

Source: Impact Sciences, Inc. (2009). Emissions calculations are provided in Appendix C.

At the time that this section was being prepared, no air agency or municipality had yet established project-level significance thresholds for GHG emissions relevant to the proposed project. Accordingly, while GHG emissions can be quantified, there is no guidance adopted by any federal, state, or local agency to determine significance for the proposed project under CEQA. Under CEQA, "the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based on the extent possible on scientific and factual data."¹¹ CEQA grants

¹¹ See State CEQA Guidelines Section 15064(b).

⁸ California Climate Action Registry, *General Reporting Protocol: Reporting Entity-Wide Greenhouse as Emissions Version 3.1*, (2009) 96, 100.

⁹ California Energy Commission, *Diesel Use in California*, Remarks by Commissioner James D. Boyd, (2002).

¹⁰ U.S. Environmental Protection Agency, Office of Transportation and Air Quality, Greenhouse Gas Emissions from a Typical Passenger Vehicle (EPA420-F-05-004), (2005) 4.

agencies with the general authority to adopt criteria for determining whether a given impact is "significant."¹²

When no guidance exists under CEQA, the agency may look to and assess general compliance with comparable regulatory schemes.¹³ OPR recommends that the lead agency determines significance of the impacts and, if significant impacts are found, impose mitigation measures that are necessary to reduce GHG emissions to a less than significant level. OPR has requested that CARB recommend a method for setting thresholds that lead agencies may adopt. On October 24, 2008, CARB staff released its Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under CEQA, which is a preliminary staff draft proposal for determining whether the emissions related to proposed new projects are significant impacts under CEQA. According to this proposal, the threshold for determining whether a project's emissions are significant is a stringent performance-based threshold to meet the requirements of Assembly Bill 32 (AB 32) Scoping Plan. If the project meets certain specific performance standards for several categories of emissions, including construction emissions and transportation, and the project emits no more than a certain to be determined amount of metric tons of carbon equivalents per year, the project's impact would not be significant. CARB nor the VCAPD have established specific performance standards for construction equipment. However, CARB has implemented, or is planning to implement, regulations with the intent of reducing combustion-related GHG emission from heavy-duty vehicles. Among these regulations include the Low Carbon Fuel Standard (LCFS) and measures targeting heavy- and medium-duty vehicles. On April 23, 2009, CARB adopted the LCFS for transportation fuels sold within the state. Executive Order S 1-07 sets a declining standard for GHG emissions measured in CO₂-equivalent gram per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California fuels by at least 10 percent by 2020. The proposed project would not hinder or delay implementation of the LCFS. Other performance standards and measures aimed at reducing GHG emissions from off-road equipment are yet to be developed.

As shown in **Table 2**, the project would result in relatively minor amounts of GHG emissions. In addition, the emissions would only occur in 2010, and would not be considered as long-term or ongoing emissions. Furthermore, the mitigation measures that would reduce air quality impacts related to ROC and NOX would also serve to reduce GHG emissions. As previously discussed, the GHG emissions associated with the project are primarily the result of fuel combustion. Reducing fuel combustion would reduce GHG emissions in addition to criteria air

¹² See California Public Resources Code Section 21082.

¹³ See Protect Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal. App. 4th 1099, 1107 ["[A] lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution.""]. Lead agencies can, and often do, use regulatory agencies' performance standards. A project's compliance with these standards usually is presumed to provide an adequate level of protection for environmental resources. See, e.g., Cadiz Land Co. v. Rail Cycle (2000) 83 Cal.App.4th 74, 99 (upholding use of regulatory agency performance standard).

pollutants. Therefore, while no numerical thresholds have been established to determine the significance of GHG emissions—because the project shall be required to include mitigation measures that reduce GHG emissions, and because the project would result in short-term, one-time emissions—,the project is considered to be less than significant with respect to this criterion.

Mitigation/Residual Impact(s): Construction of the proposed project would be required to implement the following mitigation measures in order to reduce ozone pre-cursor emissions (NO_X) and GHG emissions:

- 1. The contractor shall minimize equipment idling time during project construction.
- 2. The contractor shall maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
- 3 .The contractor shall lengthen the construction period during the smog season (May through October) or otherwise minimize the number of vehicles and equipment operating at the same time.
- 4. The contractor shall use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.
- 5. The contractor shall be required to comply with and implement applicable fugitive dust control measures in VCAPCD Rule 55. The contractor shall also be required to comply with applicable record keeping requirements in VCAPCD Rule 55. Records shall be retained by the contractor and/or project applicant for a minimum of two years and shall be made available to VCAPCD compliance personnel upon request.

Implementation of the above mitigation measures would reduce emissions to a less than significant level. Nonetheless, nearby sensitive receptors may be exposed to substantial pollutant concentrations. This is considered a potentially significant impact and further analysis in an EIR will be required.

D. Biological Resources:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? 	x			
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		х		
3. Have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means?		x		
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		х		
5. Conflict with local, regional, or state conservation plans or other local policies or ordinances protecting biological resources?		х		
Impact Discussion:

1. Potentially Significant Impact. Searches of the California Department and Fish and Game (CDFG) California Natural Diversity Database (CNDDB) and the California Native Plan Society (CNPS) Inventory of Rare and Endangered Plants were conducted to identify special-status plant or animal species known to occur in the area. The CNDDB lists historical and recently recorded occurrences of special-status plant and animal species, and the CNPS database lists historical and recent occurrences of special-status plant species. The database searches included the Ventura U.S. Geological Survey (USGS) 7.5-minute quadrangle, in which the project site is located, as well as the six surrounding quadrangles: Ojai, Saticoy, Oxnard, Matilija, White Ledge Peak, and Pitas Point.

Based upon review of the CNDDB and CNPS databases, 23 special-status plant and 26 special-status animal species have been reported from the seven-quad region containing the project site. Of these 49 species, one special-status animal (steelhead, Oncorhynchus mykiss irideus) is known to be present on the site, and 11 special-status plant and 14 special-status animal species could potentially utilize the site, based on habitat characteristics, geographic range, and elevation of the site. These 25 species include chaparral san-verbena (Abronia villosa var. aurita), aphanisma (Aphanisma blitoides), South Coast saltscale (Atriplex pacifica), Davidson's saltscale (Atriplex serenana var. davidsonii), southern tarplant (Centromadia parryi ssp. australis), Orcutt's pincushion (Chaenactis glabriuscula var. orcuttiana), salt marsh bird's-beak (Cordylanthus maritimus ssp. maritimus), Coulter's goldfields (Lasthenia glabrata ssp. coulteri), white rabbit-tobacco (Pseudognaphalium leucocephalum), California satintail (Imperata brevifolia), Sanford's arrowhead (Sagittaria sanfordii), monarch butterfly (Danaus plexippus), California red-legged frog (Rana draytonii), Coast Range newt (Taricha torosa torosa), southwestern pond turtle (Actinemys marmorata pallida), silvery legless lizard (Anniella pulchra pulchra), coastal western whiptail (Aspidoscelis tigris steinegeri), coast horned lizard (*Phrynosoma blainvillii*), tricolored blackbird (*Agelaius tricolor*), least Bell's vireo (Vireo bellii pusillus), pallid bat (Antrozous pallidus), Dulzura pocket mouse (Chaetodipus californicus femoralis), western mastiff bat (Eumops perotis californicus), hoary bat (Lasiurus cinereus), and American badger (Taxidea taxus).

Impacts to any of these species would require additional analysis within an EIR, and are considered potentially significant. If any of these species are found to occur on the project site, and if avoidance is not considered feasible, measures to mitigate potentially significant impacts can include, subject to approval by the appropriate resource agency, one or more of mitigation measures **BIO-1** through **BIO-13**. Impacts to federally or state-listed species (salt marsh bird's beak, steelhead, California red-legged frog, and least Bell's vireo) would require consultation with CDFG, the National Marine Fisheries Service (NMFS) or U.S. Fish and Wildlife Service (USFWS).

2. Potentially Significant Unless Mitigated. The site is undeveloped and shows signs of prior and ongoing disturbances, including erosion control (rip rap and bank armoring), unpaved roadways, and water wells. Vegetation consists of various associations of riparian woodland and scrub, alluvial scrub, coastal sage scrub, and sandbar and upland associated ruderal types.

Proposed Project Area

The area of the proposed spur dikes and revetment is predominantly natural in character and is dominated by riparian scrub and woodland and alluvial scrub vegetation. These areas are subject to periodic natural scouring by floodwaters and are in various stages of seral recovery from recent floods, the most extensive of which occurred in early 2005. Bankside riparian vegetation established since 2005 is impenetrable in many places and may exceed 30 feet in height. Dominant riparian trees and shrubs in these areas include blue elderberry (*Sambucus nigra* ssp. *Caerulea*), white alder (*Alnus rhombifolia*), Southern California black walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), red willow (*Salix laevigata*) and arroyo willow (*S. lasiolepis*).

Alluvial scrub areas have been recently scoured and exhibit a broader array of stand ages and vegetative diversity. Plants persisting in these areas include native and non-native annual and short-lived perennial species, such as Russian-thistle (*Salsola tragus*), fennel (*Foeniculum vulgare*), western ragweed (*Ambrosia psilostachya*), Mulefat (*Baccharis salicifolia*), horseweed (*Conyza Canadensis*), California aster (*Corethrogyne filaginifolia*), telegraph weed (*Heterotheca grandiflora*) California broomsage (*Lepidospartum squamatum*), short leaved cliff aster (*Malacothrix saxatilis var. tenuifolia*), Wright's cubweed (*Pseudognaphalium canescens*), deer weed (*Lotus scoparius*), white melilot (*Melilotus albus*), Spanish broom (*Spartium junceum*), California buckwheat (*Eriogonum fasciculatum*), tree tobacco (*Nicotiana glauca*), giant reed (*Arundo donax*), ripgut brome (*Bromus diandrus*) red brome (*B. madritensis* ssp. *rubens*), and smilo grass (*Piptatherum miliaceum*).

Wetland areas in perennially or nearly perennially inundated areas of channel depressions and eddies along the banks of the river support mulefat, weedy cudweed (*Gnaphalium luteoalbum*), salt heliotrope (*Heliotropium curassavicum*), willoherb (*Epilobium ciliatum*), goosetounge (*Plantago maritime*), water speedwell (*Veronica anagallis-aquatica*), smartweed (*Persicaria punctata*), willow dock (*Rumex sacilifolius*, black cottonwood, red willow, arroyo willow, nutsedge (*Cyperus eragrostis*), giant reed, Bermuda grass (*Cynodon dactylon*), saltgrass (*Distichlis spicata*), rabbit's foot grass (*Polypogon monspeliensis*) and narrowleaf cattail (*Typha domingensis*).

Sensitive habitats present on the site include all three of the above described habitat types. Impacts in this regard would be potentially significant absent of mitigation. To avoid significant impacts to sensitive vegetation types, it is recommended that the project design incorporates measures to retain naturally recruited riparian vegetation along dikes and revetment structures, and that a revegetation plan be developed, incorporating native species removal within the floodplain of the river, emphasizing the removal of fennel, Spanish broom, tree tobacco, giant reed, smilo grass as described in mitigation measure **BIO-14**.

- 1. Potentially Significant Unless Mitigated. The wetlands, channels and floodplain extending from the eastern extent of riparian vegetation to that on the west are subject to regulation by USACE, CDFG, or RWQCB. Impacts to these areas require further analysis within an EIR. Impacts in the regard are considered potentially significant. To avoid significant impacts to sensitive vegetation types, it is recommended that the project design incorporates measures to retain naturally recruited riparian vegetation along dikes and revetment structures, and that a revegetation plan be developed, incorporating non-native species removal within the floodplain of the river, emphasizing the removal of fennel, Spanish broom, tree tobacco, giant reed, and smilo grass, as described in mitigation measure BIO-14.
- 2. Potentially Significant Unless Mitigated. The project site supports habitat suitable for nesting native bird species. To avoid impacts to nesting birds during construction, it is recommended that a qualified biologist be retained to conduct nesting bird surveys within suitable nesting habitat prior to initiation of construction or ground disturbing activities, as described below in mitigation measure BIO-2. Impacts on nursery sites of non-avian native wildlife species would be avoided by implementation of mitigation measures BIO-3 through BIO-5. Impacts to nesting birds and nursery sites of non-avian animals would be less than significant with implementation of these mitigation measures and no further analysis would be required in an EIR.
- 3. Potentially Significant Unless Mitigated. The project site contains areas designated as critical habitat for steelhead and therefore lies within the boundaries of the pending Habitat Conservation Plan, Natural Community Conservation Plan, or approved local, regional or state habitat conservation plan. These impacts are therefore considered potentially significant and further analysis will be required within an EIR. Mitigation measures **BIO-6** through **BIO-10** are proposed to reduce these impacts to a level that is less than significant. However, further consultation with the NMFS is required and is currently in progress relative to the draft Steelhead Recovery Plan.

Mitigation/Residual Impact(s): The following mitigation measures shall be implemented:

Mitigation Measures

BIO-1:

A winter survey shall be conducted to determine use of the site by monarch butterflies. If monarch butterflies are found to use the site, development in areas adjacent to the

butterfly groves shall be sited and designed to prevent impacts, which would significantly degrade the areas. Removal of trees within the perimeter of the habitat area utilized by wintering monarch butterflies shall be prohibited unless it is determined by the City that such removal is necessary by reason of good forestry practice, disease of the tree, or safety considerations. Any such determinations, including tree maintenance or trimming, shall be accompanied by a written evaluation of the impacts of the proposed action on habitat resources by a qualified expert on the monarch butterfly. Such report and investigations shall be arranged by the City and paid for by the applicant as part of environmental review.

Construction within or on properties contiguous to the designated butterfly groves shall be prohibited during fall and winter months when the monarch butterflies are present. Removal or modification of trees within the groves shall not be permitted during these periods except when determined by the community development director to be a necessary emergency to protect human life or property.

BIO-2: To avoid impacts to nesting birds during construction, a qualified biologist shall be retained to conduct nesting bird surveys within suitable nesting habitat prior to initiation of construction activities. Specifically, if activities associated with construction or grading are planned during the bird nesting/breeding season, generally January through March early nesting birds (e.g., Cooper's hawks for or hummingbirds) and from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests. Pre-construction nesting bird surveys shall be conducted weekly, within 30 days prior to initiation of ground-disturbing activities to determine the presence/absence of active nests. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days before the start of clearance/construction work. Survevs shall include examination of trees, shrubs, and the ground, within grasslands, for nesting birds, as several bird species known to the area are shrub or ground nesters, including mourning doves. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than three days will have elapsed between the survey and around-disturbing activities.

Implementation of this mitigation measure would reduce impacts to monarch butterfly wintering sites to a less than significant level.

If active nests are located during pre-construction surveys, clearing and construction activities within 300 feet of the nest (500 feet for raptors) shall be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur. The results of the survey, and any avoidance measures taken, shall be submitted to the City of Ventura within 30 days of completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

Implementation of this mitigation measure would reduce impacts to nesting birds to a less than significant level.

BIO-3: No earlier than 30 days prior to the commencement of construction activities, a preconstruction survey, especially of tree cavities, shall be conducted by a qualified biologist to determine if active roosts of special-status bats are present on or within 300 feet of the Project disturbance boundaries. Should an active maternity roost be identified (the breeding season of native bat species in California generally extends from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, at the discretion of the biological monitor, until the roost is vacated and juveniles have fledged, as determined by the biologist.

Implementation of this mitigation measure would reduce impacts to bat roosts to a less than significant level.

BIO 4: Thirty days prior to construction, a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within a 100-foot buffer of the disturbance zone to identify and, if feasible, capture and relocate individuals of American badger in order to avoid or

minimize take of this special-status species. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. Results of the surveys and relocation efforts shall be provided to CDFG in an annual mitigation status report. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

BIO 5: Should the preconstruction survey for the American badger conducted under Mitigation Measure 5 result in identification of a occupied natal den in the construction disturbance zone, no construction-related activities shall occur that would cause a direct impact to the natal den until it is determined by a qualified biologist that young are no longer dependent on the natal den. If a natal den is identified within 100 feet of the construction disturbance zone, the den location will be clearly marked with fencing or flagging to ensure that inadvertent impacts to the den do not occur during construction, but not so as to inhibit normal behavioral activities (e.g., foraging) by the mother. The biologist shall serve as the construction monitor during those periods when construction activities will occur near occupied natal dens to ensure that no inadvertent impacts on the natal dens occur.

Implementation of mitigation measures **BIO-4** and **BIO-5** would reduce impacts to American badger to a less than significant level.

- **BIO 6:** Prior to initiating construction for the installation of bank protection, all construction sites and access roads within the riverbed, as well as all riverbed areas within 300 feet of the construction site and access road, shall be surveyed at the appropriate season by a qualified biologist for the presence of steelhead. The USACE and the CDFG shall be notified of the survey and shall have the option of attending. The biologist shall file a written report of the survey with the agency not in attendance within 14 days of the survey and no sooner than 30 days prior to any construction work in the riverbed.
- **BIO 7:** Construction work areas and proposed access roads shall be cleared of any steelhead immediately before the prescribed work is to be carried out, immediately before any equipment is moved into or through the stream or vegetation communities, and immediately before diverting any stream water. The removal of steelhead shall be conducted by a qualified biologist using procedures approved by the USACE and CDFG, and with the appropriate collection and handling

permits. Steelhead shall be relocated to nearby suitable vegetation communities. A plan to relocate these species shall be submitted to the USACE and the NMFS for review and approval no later than 30 days prior to construction. This plan can also be included in the Subnotification Letters submitted to the USACE and CDFG for individual project approvals. Under no circumstances shall steelhead be collected or relocated, unless NMFS personnel or their agents implement this measure.

BIO 8: When work in a flowing stream is unavoidable, the entire stream flow shall be diverted around the work area by a barrier, temporary culvert, new channel, or other means approved by CDFG and NMFS. All stream flows traversing a construction site or temporary access road shall be diverted around the site and under access roads. Location of the upstream and downstream diversion points shall be approved by CDFG and NMFS. A temporary diversion channel shall be constructed using the least damaging method possible, such as blading a narrow pilot channel through an open sandy river bottom. The removal of wetland and riparian vegetation to construct the channel shall be avoided to the greatest extent feasible. The temporary channel shall be connected to a natural channel downstream of the construction site prior to diverting the stream. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. The integrity of the channel and diversion shall be maintained throughout the construction period. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Diversion berms shall be constructed of on-site alluvium of low silt content, inflatable dams, sand bags, or other approved materials. Channel banks or barriers shall not be made of earth or other substances subject to erosion unless first enclosed by sheet piling, rock, rip rap, or other protective material. The enclosure and the supportive material shall be removed when the work is completed and removal shall normally proceed from downstream in an upstream direction. The stream channel alignment shall be restored after construction, in consultation with CDFG. A temporary stream diversion plan shall be included in the Sub-notification Letters submitted to the USACE and CDFG for individual project approvals.

BIO 9:	A qualified biologist shall be present when any stream diversion takes place, and shall patrol the areas both within, upstream, and downstream of the work area. A special status aquatic species protection and relocation plan shall be submitted for approval by CDFG and NMFS. The plan shall include the following:
	• A survey shall be conducted immediately before the prescribed work is to be carried out. Nets used for surveys shall be 0.125 inch maximum stretch mesh.
	• Any individuals found will be moved out of the area and held until work is completed. If necessary, individuals will be held in insulated boxes with aerators to assure their survival.
	• Blocking nets similar to those used in the survey shall be placed upstream of the work area to ensure that no individuals swim downstream into the area. Nets will also be placed downstream, if necessary.
	• Qualified biologists will patrol the areas upstream and downstream of the work area to rescue any individuals stranded by diversion of the stream water. If stream diversion is intended in the work area, more people shall be used for downstream patrol.
	• When work is completed, individuals shall be replaced into the stream in a manner and place to assure their survival. Individuals that are collected shall be relocated to suitable habitat downstream of the work area.
	• A report of all activities and findings, along with all field notes, will be submitted to CDFG and NMFS.
	Under no circumstances shall steelhead be collected or relocated, unless NMFS personnel or their agents implement this measure.
BIO 10:	Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or placed in locations that may be subject to normal storm flows during periods when storm flows can reasonably be expected to occur.
	Implementation of mitigation measures BIO-6 through BIO-10 would reduce impacts to steelhead to a less than significant level.
BIO 11:	Prior to initiating construction, all proposed construction sites and access roads within the riverbed, as well as all riverbed areas within 300 feet of the construction site and access road, shall be surveyed at the appropriate season, as

determined in consultation with the USACE, USFWS, and CDFG, by a qualified biologist for the presence of California red legged frog, coast range newt, and southwestern pond turtle. The USACE and the CDFG shall be notified of the survey and shall have the option of attending. The biologist shall file a written report of the survey with the agency not in attendance within 14 days of the survey and no sooner than 30 days prior to any construction work in the riverbed.

BIO 12: Construction work areas and proposed access roads shall be cleared of any of the species listed in **BIO-11** immediately before the prescribed work is to be carried out, immediately before any equipment is moved into or through the stream or vegetation communities, and immediately before diverting any stream water. The removal of such species shall be conducted by a qualified biologist using procedures approved by the USACE, USFWS, and CDFG, and with the appropriate collection and handling permits. Species shall be relocated to nearby suitable habitat. A plan to relocate these species shall be submitted to the Corps and CDFG for review and approval no later than 30 days prior to construction and need to remove these species. This plan can also be included in the Subnotification Letters submitted to the Corps and CDFG for individual project approvals.

Implementation of mitigation measures **BIO-8** through **BIO-12** would reduce impacts to special-status aquatic amphibian and reptile species to a less than significant level.

BIO-13: Thirty days prior to construction activities qualified biologists shall conduct surveys to capture and relocate individual silvery legless lizard, coastal western whiptail, coast horned lizard, and Dulzura pocket mouse in order to avoid or minimize take of these special status species. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. Results of the surveys and relocation efforts shall be provided to CDFG in an annual mitigation status report. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

Implementation of this mitigation measure would reduce impacts to special-status upland reptile and small mammal species to a less than significant level.

BIO-14: A habitat replacement plan shall be developed to replace, at a minimum 1:1 ratio, areas of sensitive vegetation types

impacted by project development. The plan shall specify, at a minimum, the following:

- The location of mitigation sites
- The quantity and species of plants to be planted
- Procedures for creating additional vegetation communities
- Methods for the removal of non-native plants
- A schedule and action plan to maintain and monitor the enhancement/restoration area
- A list of criteria by which to measure success of the mitigation sites (e.g., percent cover of native species, survivorship/establishment of plantings, wildlife use)
- Measures to exclude unauthorized entry into the creation/ enhancement areas; and
- Contingency measures in the event that mitigation efforts are not successful.

The plan shall provide for the 1:1 replacement of any Southern California black walnut or coast live oak trees to be removed from the riparian corridor. The plan shall be subject to the approval of the CDFG and the USACE and approved prior to the impact to riparian resources.

As an alternative to the creation/restoration of vegetation communities to compensate for permanent removal of riparian vegetation communities, the applicant or its designee (with approval of the USACE and CDFG) may control invasive exotic plant species elsewhere within the Ventura River watershed. The weed control sites shall be selected in a coordinated, logical manner to ensure that the giant reed and other invasive weeds are controlled to improve and expand wildlife and endangered species habitat, reduce flooding, erosion, and fire hazards, improve water quality; and potentially increase stream flow/water quantity in the Ventura River. Removal areas shall be kept free of exotic plant species for 5 years after initial treatment.

Implementation of mitigation measure **BIO-14** would reduce impacts to sensitive vegetation types to a less than significant level.

E. Cultural Resources:

W	ould the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				х
2.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5?			х	
3.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			х	
4.	Disturb any human remains, including those interred outside of formal cemeteries?			х	

Impact Discussion:

1. No impacts. No known historical resources are located on the proposed project site. Studies have been conducted in the past to determine the closest historical structures located near the proposed project site. One historic site, CA-VEN-1109H, was located within a 0.5-mile radius of the proposed project site, in Foster Park, south of the project site.¹⁴ CA-VEN-1109H is the first and only railroad spur that entered the Ojai Valley, and it was developed in 1898.¹⁵ However, the area of the railroad spur has been abandoned by the Southern Pacific Railroad and has been converted into an equestrian/bicycle trail south of the proposed project site.¹⁶ Construction of the proposed project is not expected to disturb CA-VEN-1109H, nor will the operation of the proposed will not be required.

¹⁴ URS Corporation, Draft Environmental Impact Report Avenue Water Treatment Plant/Foster Park Facility Improvements Project, City of San Buenaventura, Public Works Department, (November 2003), 4-42

¹⁵ URS Corporation, Draft Environmental Impact Report Avenue Water Treatment Plant/Foster Park Facility Improvements Project, City of San Buenaventura, Public Works Department, (November 2003), 4-42

¹⁶ URS Corporation, Draft Environmental Impact Report Avenue Water Treatment Plant/Foster Park Facility Improvements Project, City of San Buenaventura, Public Works Department, (November 2003), 4-42

- 2. Less than significant impact. The proposed project would involve excavation of the western and eastern banks of the Ventura River, in order to prepare the banks for the development of the spur dikes associated with the proposed project. The proposed project site is located in an area that was the historic territory of the Chumash Indian tribe. Studies have been conducted to determine the location of any archaeological sites within 0.5 mile of Foster Park, an area that includes the proposed project site.¹⁷ Based on these past studies, no known archaeological sites are located within or near the proposed project site.¹⁸ However, previously undiscovered archaeological resources could be unearthed or disturbed during construction of the proposed project, resulting in a potentially significant impact. If this were to occur, implementation of mitigation measure CUL-1 would reduce impacts to less than significant.
- 3. Less than significant impact. As described above, the construction of the proposed project would require excavation of the areas where spur dikes and embankment stabilization will occur on the western and eastern banks of the Ventura River. Flooding events occur within the project site, which would allow paleontological resources from areas upstream of the project site to break loose and be deposited in the area over time. Sedimentation buildup within the Ventura River watershed area near the proposed project could have possibly covered fossils and other paleontological artifacts in the proposed project's area. Previously undiscovered paleontological resources could be unearthed or disturbed during site excavation and construction preparation. If this were to occur, implementation of mitigation measure **CUL-1** would reduce impacts to less than significant and no further analysis would be required in an EIR.
- 4. Less than significant impact. The project site is not known to have been previously used as a burial ground. However, as discussed above, members of the Chumash Indian tribe have lived along the Ventura River in the past, and could have used areas along the river as burial grounds. Furthermore, due to the flood events that take place within the Ventura River floodplain, the possibility that human remains have been unearthed by flood events upstream of the proposed project site, and subsequently deposited in the area of the proposed project site, does exist. In the event that human remains are encountered during site excavation and construction, such resources would be treated in accordance with state and federal guidelines for disclosure, recovery, and preservation, as appropriate. With implementation of this standard requirement, the impact would be less than significant, and no further analysis of this topic would be required in an EIR.

Mitigation/Residual Impact(s): The following mitigation measure will be implemented. With implementation of mitigation measure **CUL-1** impacts will be reduced to less than significant.

¹⁷ URS Corporation, Draft Environmental Impact Report Avenue Water Treatment Plant/Foster Park Facility Improvements Project, City of San Buenaventura, Public Works Department, (November 2003), 4-42

¹⁸ URS Corporation, Draft Environmental Impact Report Avenue Water Treatment Plant/Foster Park Facility Improvements Project, City of San Buenaventura, Public Works Department, (November 2003), 4-42

Mitigation Measures

CUL-1

Should archaeological/paleontological resources be discovered during earthmoving activities, work shall cease and no further disturbance shall occur in the immediate vicinity of the uncovered resource and an area 50 feet diameter the in of find. and а archaeologist/paleontologist shall be contacted to investigate the find and, if deemed necessary, collect paleontological uncovered resources, curate any resources collected with an appropriate reposition, and file a report with the City of San Buenaventura Planning Department documenting archaeological/ any paleontological resources that found. are Upon completion of the field investigation, collection of the resources, if necessary, and clearance of the find by the archaeologist/paleontologist, earthmoving and construction activities can resume.

F. Geology and Soils:

W	ould the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				х
	a. Rupture of a known earthquake fault?				
	b. Strong seismic ground shaking?			х	
	 c. Seismic-related ground failure, including liquefaction or landslides? 				х
	d. Seismic-related inundation from tsunami or seiche?				Х
2.	Result in substantial soil erosion or loss of topsoil?			х	
3.	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			х	
4.	Be located on expansive soil creating substantial risk to life or property?			х	
5.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				Х

Impact Discussion:

- 1a. No Impact. According to the City of San Buenaventura 2005 General Plan EIR, the project site is not located on a known fault, nor does it lie within a known fault hazard zone. The closest fault to the proposed project site is the Red Mountain Fault, located approximately 0.5 mile to the south of the project site. This fault is classified as active and areas of the fault lying outside the City of Ventura boundary limits are located within an Alquist-Priolo Zone. Potentially significant impacts could occur at the project site if the embankment protection structures that are built with implementation of the proposed project were to be located on an active fault zone, which could lead to a rupture in the land. Since the proposed project is not located within the boundaries of a fault or fault zone, rupture from a fault on the project site is not expected to occur. No impacts would occur, and further analysis is not required.
- **1b.** Less than significant Impact. The proposed project is located in a part of Southern California that has active faults. The closest fault to the project site is the Red Mountain Fault, 0.5 mile south of the project site. A number of active faults are also located within or adjacent to the City of San Buenaventura. Future earthquake activity in the area, such as ground shaking, could cause the embankment protection structures on the project site to crack or be damaged. However, the proposed project will be required to comply with development standards as provided by the City, and construction codes applicable to spur dike development. Therefore, impacts would be reduced to a less than significant level with respect strong seismic ground shaking. No further analysis is required.
- **1c.** No Impacts. The proposed project is located along the eastern and western banks of the Ventura River, near Foster Park and the community of Casitas Springs. According to the California Geologic Survey, ¹⁹ the proposed project is located in an area that is susceptible to liquefaction during a seismic event. However, the proposed project site is not located in an area that is susceptible to seismically induced landslides.²⁰ The proposed project will be located on flat land and will not be subject to failure from seismically induced landslides. Upon completion of the proposed project, a system of spur dikes will be developed and located on the eastern and western banks of this reach of the Ventura River. Engineering techniques will ensure that the spur dikes that are developed as part of the proposed project take into consideration the possibility of failure from seismically induced liquefaction hazards. With these engineering techniques used in the development of the proposed project, it is expected that failure from seismically induced liquefaction will not occur due to implementation of the proposed project. No impacts would occur and no further analysis is required.

¹⁹ California Department of Conservation, California Geologic Survey, Seismic Hazard Zone Map, Ventura Quadrangle, http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_vent.pdf. Accessed August 11, 2009.

²⁰ California Department of Conservation, California Geologic Survey, Seismic Hazard Zone Map, Ventura Quadrangle, http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_vent.pdf. Accessed August 11, 2009.

- 1d. No Impacts. According to the City of San Buenaventura General Plan Final EIR²¹ the proposed project site is not located within an area that is subject to a seismically induce tsunami or a seismically induced seiche. The tsunami threat in the City of Ventura is confined to along the immediate coast, and a short distance up the Ventura River. The proposed project is located approximately 6.5 miles from the mouth of the river, which is considered to far of a distance for a tsunami to impact the area. Furthermore, the proposed project is not located adjacent to a body of water that could experience a seismically induced seiche. The closest body of water to the proposed project site is Lake Casitas, approximately 1.2 miles to its northwest. Since the proposed project is not susceptible to damage associated with a seismically induced tsunami or seismically induced seiche, no impacts are expected to occur. Therefore, no further analysis will be required.
- 2. Less than significant impact. The proposed project is located along the eastern and western banks of the Ventura River in the Foster Park area. During the January and February 2005 flood events, the Foster Park reach of the Ventura River experienced severe erosion along the proposed project site, exposing and damaging water wells owned by the City and a sewer pipe owned by OVSD. As typical with any river system, large amounts of sediment are deposited and eroded during high flood stages. According to the Web Soil Survey of the United States Department of Agriculture, Riverwash (RW) is the main soil within the proposed project site. With development of the proposed project, embankment protection will be developed along the western and eastern banks of the Ventura River. Development of the proposed spur dikes will reduce the amount of top soil and erosion that occurs along the banks of the Ventura River in the Foster Park reach. The spur dikes will reduce the flow and speed of floodwater that occurs within the proposed project site during 2-, 5-, 10-, 50-, 100-, and 500-year flooding events. The HEC-RAS hydraulic analysis that has been conducted shows no impacts to water surface elevations for the areas upstream or downstream of the project area. Upon completion of the proposed project, the embankment protection and restoration devices developed will decrease the rate at which soil erosion occurs. Therefore, impacts are expected to be less than significant and no further analysis will be required.
- 3. Less than significant impact. As described above, the construction footprint of the proposed project site is located along the eastern and western banks of the Ventura River in the Foster Park reach area. The soil in this area is composed mostly of Riverwash (RW), according to the United States Department of Agriculture Natural Resources Conservation Service.²² Riverwash occurs in and along channels of perennial and intermittent streams. The material is typically about 60 inches deep and consists of highly stratified, water-deposited layers of

²¹ City of San Buenaventura, City of San Buenaventura General Plan Final EIR, Rincon Consultants, August 2005, pg. 4.6-15.

²² United States Department of Agriculture Natural Resources Conservation, Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/. Accessed August 18, 2009.

stony and gravelly sand that contain relatively small amounts of silt and clay. This soil is subject to scouring or cutting as well as to deposition, depending on the streamflow and bedload. According to the Ventura County General Plan, the proposed project site is in an area that is not subject to landslides.²³ This is mainly due to the fact that the proposed project is located in and along the edges of a riverbed with a flat topography. Furthermore, according to the Ventura County General Plan, the proposed project site is not located in an area that is subject to subsidence.²⁴ The proposed project site, however, is within an area that is subject to liquefaction, according to the Ventura County General Plan.²⁵ As discussed above, the project applicant will be required to have a geotechnical report conducted for the area of the project site. Upon geotechnical review, the spur dikes and embankment protection that will be located on the western and eastern side of the Ventura River will be constructed and engineered to specifications that would reduce the structures from being damaged due to the type of geological formation on which they are developed. Therefore, impacts are expected to be less than significant, and no further analysis will be required.

- 4. Less than significant impact. The proposed project site is located within the Ventura River along the eastern and western banks near the Foster Park area. According to the Ventura County General Plan, the proposed project site is not located within an area of expansive soil.²⁶ The resources most often affected by expansive soils are structures. Even though expansive soils are scattered throughout the County, their potential impact on structures is limited to just a few developed areas of the Ojai Valley, Camarillo Hills, and areas around the community of Moorpark. The presence of expansive soils in the Ojai Valley area presents no threat, as soil tests and engineering solutions overcome the dangers from expansive soils. The components of the proposed project, including the spur dikes and the embankment protection will be engineered to reduce the impacts that could be associated with expansive soils. Furthermore, soil testing and a soil investigation will occur prior to the construction of the project to ensure that the components of the proposed project are not located on expansive soils. Therefore, impacts will be less than significant and no further analysis will be required.
- 5. No Impact. The proposed project consists of the construction of embankment protection and restoration techniques along a 2,000-foot-long reach of the Ventura River, west of Foster Park. The proposed project will not include the development of land uses that use septic tanks or alternative wastewater disposal systems. Therefore, no impacts would result in construction and implementation of the proposed project and no further analysis will be required.

²³ County of Ventura, Ventura County General Plan Hazards Appendix, County of Ventura Resource Management Agency Planning Division, (November 15, 2005), 42.

²⁴ County of Ventura, Ventura County General Plan Hazards Appendix, County of Ventura Resource Management Agency Planning Division, (November 15, 2005), 43.

²⁵ County of Ventura, Ventura County General Plan Hazards Appendix, County of Ventura Resource Management Agency Planning Division, (November 15, 2005), 24.

²⁶ County of Ventura, Ventura County General Plan Hazards Appendix, (November 15, 2005), 47.

Mitigation/Residual Impact(s): Based on the above discussion, project construction and operation would have no impacts with regard to the Geology and Soils issue area. As such, no mitigation measures are required.

G. Hazards and Hazardous Materials:

w	ould the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			х	
2.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			Х	
3.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?				х
4.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				х
5.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				Х
6.	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			х	

Impact Discussion:

- Less than Significant Impact. The proposed project will provide protection to 1. the critical utility facilities owned and operated by the City of San Buenaventura and the Ojai Valley Sanitation District. Construction of the five spur dikes along the western bank and six spur dikes along the eastern bank of the Foster Park reach of the Ventura River will not result in the transportation, use, or disposal of hazardous materials within the vicinity of the project site. Furthermore, the construction of the embankment protection along the eastern bank of the Ventura River will not result in the transportation, use, or disposal of hazardous materials. During construction, equipment such as bulldozers, haul trucks, excavators, and cranes will be used to construct the spur dikes and the embankment protection. Typical of construction equipment used during other projects, diesel fuel will be used in the construction equipment during the bank protection and restoration along this stretch of the Ventura River. Protection measures will be included during the construction process to ensure that diesel fuel from the construction equipment is not leaked or released into the Ventura River Floodplain or its vicinity. Since the proposed project is not expected to include the use or transport of hazardous materials that could create a hazard to the local community within the vicinity of the project site, the proposed project will result in a less than significant impact in regards to this criteria. No further analysis will be required.
- 2. Less Than Significant Impact. The goal of the proposed project is to protect infrastructure that is owned and operated by the City of San Buenaventura and the Ojai Valley Sanitation District. During 2005 flooding, the Ventura River topped its banks and damaged the water wells owned by the City of San Buenaventura and exposed (but did not damage) the sewer trunk line owned by the Ojai Valley Sanitation District. Upon construction of the five spur dikes along the western bank of the Ventura River, the six spur dikes along the eastern bank of the river and the 800 liner feet of embankment protection along the eastern bank of the river, the utilities within the area are expected to be protected from further damage during storm flooding within the Ventura River Channel. Furthermore, during construction the applicant will ensure that dewatering practices are in place to prevent contamination of the water and streambed within the Ventura Channel. These techniques will include the use of capture wells for any dewatering activity, which will be transported through piping to be treated at the Avenue Water Treatment Plant south of the project site. Therefore, construction of the proposed project is not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts will be less than significant and no further analysis will be required.
- **3.** No Impact. The proposed project will consist of the construction of spur dikes along the western and eastern banks of the Ventura River along the Foster Park reach. Additionally, an 800-foot stretch of embankment protection will be

developed along the eastern bank, providing protection to the OVSD raw sewage pipeline. Construction equipment such as front-end loaders, earthmovers, and dump trucks will be used during the development of the proposed project. The construction equipment will not carry hazardous materials and any emissions that will be emitted through the use of the construction equipment will be within standards of the VCAPCD for construction emissions. Furthermore, the proposed project is not within 0.25 mile of an existing school. The closest school is St. Gabriel Academy, a private school located at 325 East Oak View Avenue in the community of Oak View, approximately 2 miles northeast of the project site. The closest public school is De Anza Middle School, located at 2060 Cameron Street in Ventura, approximately 4.5 miles southeast of the project site. Since the proposed project site is not within 0.25 mile of a school, and considering that during the construction of the proposed project no hazardous materials will be handled or disposed of, there will be no impacts with implementation of the proposed project. Therefore, no further analysis will be required.

- 4. **No Impact.** The proposed project site is not located on a site or near an area that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The U.S. Environmental Protection Agency (U.S. EPA) maintains a list of all contaminated sites in the nation that are currently undergoing clean-up activities, or have in the past. This list is known as the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database. There are currently no active sites listed on the CERCLIS Database within the project site or near the project site.²⁷ The California Department of Toxic Substances Control (DTSC) also maintains a list of all contaminated sites in the state for which it is providing oversight and enforcement of clean-up activities. This list is known as the Cal-Sites Database. There are no currently active sites listed on the Cal-Sites Database on the project site or near the project site.²⁸ Since the proposed project is not located on or near a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, there will be no impacts. Therefore, no further analysis will be required.
- 5. No Impact. Construction of the proposed project will not interfere with emergency evacuation routes or an emergency evacuation plan within the area of the proposed project. The County Of Ventura provides evacuation plans in the event of a tsunami, and dam failure from Lake Casitas. The main evacuation routes near the project site include Highway 33 and Casitas Vista

²⁷ United State Environmental Protection Agency, Superfund Information Site Information, http://cfpub.epa.gov/ supercpad/cursites/srchrslt.cfm?start=1&CFID=25147&CFTOKEN=62720453&jsessionid=28301f5c9ee4538c77 6f2f541c295379d6d7. Accessed August 14, 2009.

²⁸ California Department of Toxic Substance Control, EnviroStor Database, Hazardous Waste and Substance Site List,

http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,ER AP,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+S ITE+LIST. Accessed August 14, 2009.

Road. The proposed project does not involve the reconfiguration of these two roads. During construction of the proposed project, construction workers will have access to the evacuation routes in the event of an emergency situation. Furthermore, the proposed project does not include the development of structures that will increase the population in its area, which could put people in harms way. No impacts will occur with construction and implementation of the proposed project, and no further analysis will be required.

6. Less Than Significant Impact. The proposed project site is located on the eastern and western banks of the Ventura River in the Foster Park reach. According to the CalFire Fire Hazard Safety Zone Mapping Program, the proposed project site is in a Local Responsibility Area (LRA) that is designated as an area of Moderate Fire Hazard.²⁹ This is primarily due to the type of vegetation and the location of residential units around the area of the project site. Furthermore, CalFire designates the land located to the west of the proposed project site as a Moderate Fire Hazard Severity Zone, which is located in a State Responsibility Area (SRA).³⁰ Land to the south and east of the project site is also in an SRA and is designated as a Very High Fire Hazard Severity Zone. Development and construction of the proposed project will include the use of machinery that has the ability to cause sparks, which in turn could start a fire on the project site. Best management practices (BMPs) will be implemented during the construction process to ensure that all construction equipment is updated with devices such as spark arrestors, which will reduce the possibility of a fire beginning on the project site. Additionally, brush and vegetation will be cleared from around the construction footprints along the western and eastern banks, which will ensure that if a fire does occur, there will be limited fuel within the project site that could spread a fire into a full conflagration. These BMPs will ensure that people or structures near the proposed project would not be subject to loss of injury or death from the construction of the proposed project possibly starting a fire. Impacts will be less than significant and no further analysis will be required.

Mitigation/Residual Impact(s): Based on the above discussion, project construction and operation would have no impacts with regard to the Hazards and Hazardous Materials issue area. As such, no mitigation measures are required.

²⁹ California Department of Forestry and Fire Protection, California Fire Hazard Severity Zone Map Update Project, Ventura County Fire Hazard Severity Zone Map, http://www.fire.ca.gov/fire.provertion/thsz_maps_ventura.php_Accessed August 14, 2000.

http://www.fire.ca.gov/fire_prevention/fhsz_maps/fhsz_maps_ventura.php. Accessed August 14, 2009.

³⁰ California Department of Forestry and Fire Protection, California Fire Hazard Severity Zone Map Update Project, Ventura County Fire Hazard Severity Zone Map, http://www.fire.ca.gov/fire_prevention/fhsz_maps/ fhsz_maps_ventura.php. Accessed August 14, 2009.

H. Hydrology and Water Quality:

w	ould the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Violate any water quality standards or waste discharge requirements?			x	
2.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?			Х	
3.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site?			Х	
4.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			Х	
5.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			x	
6.	Otherwise substantially degrade water quality?			х	
7.	Place housing within a 100-year flood plain?			Х	

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
8. Place within the 100-year flood plain structures that would impede or redirect flood flows?			х	
9. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, or involving inundation by seiche, tsunami, or mudflow?			х	

Impact Discussion:

1. Less than Significant Impact. Construction of the proposed project could alter the existing flow and quality of runoff due to the construction that will take place within the Ventura River flood plain area. The proposed project will ensure compliance with water quality standards through BMPs during construction of the proposed project. All construction machinery will be staged, maintained, and refueled in the Foster Park parking lot area to avoid the migration of oils and grease into the waterway in accordance with a Stormwater Pollution Prevention Plan (SWPPP) that will be developed prior to construction of the proposed project. A temporary access road will be developed for machinery mobilization from the staging area to the construction site(s). A National Pollutant Discharge Elimination System (NPDES) construction permit will be obtained prior to construction of the proposed project site and compliance with any Waste Discharge Requirements will be strictly followed.

It is anticipated that some dewatering will be necessary as part of the excavation of the toe of the spur dikes. The Regional Water Quality Control Board discourages wet construction and specifies that groundwater cannot be within 5 feet of the construction bottom unless authorized by the Regional Water Quality Control Board through an exception. The exception will require that all groundwater encountered during wet construction be treated. This will require a local set of dewatering capture wells (as shown in **Figure 4, Example of Dewatering Capture Well System**) that collect any water that contacts the equipment and pumps it to either the water treatment plant, the wastewater treatment facility, or a package treatment plant. This type of construction will ensure minimal contamination of groundwater and surface water in the area of the proposed project.

The project does not include manufacturing operations, which might discharge unusual or hazardous pollutants into the stormwater system surrounding the project site. Impacts are expected to be less than significant, and no further analysis will be required in an EIR.

2. Less than Significant Impact. The project would obtain its water for dust control from the Casitas MWD and the City of San Buenaventura, which manages local drinking water supplies from the Ventura River, Lake Casitas, and groundwater wells throughout the City.

The City of San Buenaventura does rely on groundwater near the proposed project site, specifically through its water well pumps that are located within the vicinity of the proposed project. The proposed project would not substantially deplete groundwater supplies during the limited construction period for use in dust control. Furthermore, since the proposed project site will be composed of mainly pervious surfaces in the construction of the spur dikes and embankment protection, it will provide for groundwater recharge back into the Ventura River. Impacts would be less than significant, and no further analysis of this topic is required.

- 3. Less Than Significant Impact. The proposed project will implement spur dikes and embankment protection along the western and eastern banks of the Ventura River in order to protect critical utilities owned by the City of San Buenaventura and Ojai Valley Sanitary District. The proposed project will ensure that the flow of the Ventura River during flooding will be confined to the main channel of the Ventura River. Although there will be some drainage pattern changes, the proposed project will not increase runoff and will not increase runoff flow into the Ventura River at the Foster Park reach. Furthermore, construction of the proposed project will take place during the summer months, when the Ventura River is at its low-flow stage, so flooding will not be likely during the construction period. While the project will temporarily confine the river flow through a diversion channel, this is not a permanent structure and river flow through this reach of the Ventura River will return to a natural course. Since the proposed project will not significantly alter the drainage pattern, impacts will be less than significant and no further analysis will be required in an EIR.
- 4. Less Than Significant Impact. Please see discussion 3 above.

Ventura River Flow Direction

West Bank Ventura River East Bank Ventura River

Excavator

"Wet" Construction Area

> Capture Wells

> > Piping to Water Treatment

Diversion Channel

ⁿ NOT TO SCALE

SOURCE: Hawks & Associates - June 2009

 $_{\mathsf{FIGURE}}4$

- Less Than Significant Impact. As discussed above, the proposed project 5. during construction could cause additional sources of polluted runoff. However, during construction, the proposed project will incorporate a dewatering system that will ensure that any water that comes into contact with construction equipment will be transferred to a treatment plant for treatment. Furthermore, best management practices (i.e., such as changing oil on construction equipment only in staging areas, using drip guards on construction equipment to ensure no oil drips into groundwater) will be used to ensure that construction equipment does not contaminate groundwater within the construction site. During operation of the proposed project, the development of spur dikes and the embankment protection will not include the use of materials that can add sources of polluted runoff to the Ventura River bed. Furthermore, the proposed project will not contribute or create runoff water that would exceed the capacity of existing or planned stormwater drainage systems. Impacts will be less than significant and no further analysis will be required in an EIR
- 6. Less Than Significant Impact. As discussed above, the proposed project could impact water quality during construction. However, the proposed project will include a dewatering system that will ensure that any groundwater disturbed by machinery during the construction process is collected and conveyed to a treatment plant. (Comment: Dewatering systems are prone to failure!) This will ensure that a minimal amount of pollutants will impact groundwater, and water quality will remain as it is under existing conditions. Impacts are expected to be less than significant, and no further analysis is required in an EIR.
- 7. Less Than Significant Impact. The construction of the proposed project includes the development of three spur dikes along the western bank of the Ventura River and six spur dikes, plus 800 feet of embankment protection along the eastern bank of the Ventura River. No housing will be constructed as part of the proposed project. The proposed project would redirect the flow of the Ventura River during flooding conditions, but is not expected to change the100-year flood plain limits within the vicinity of the project site. As the proposed project will not place housing within a 100-year flood plain, impacts will be less than significant and no further analysis will be required in an EIR.
- 8. Less Than Significant Impact. The proposed project will include the development of spur dikes and embankment protection along the eastern and western banks of the Ventura River. The proposed project is located within a 100-year flood plain, according to FEMA³¹. The development of the spur dikes and embankment protection is expected to confine the flow of the Ventura River into its natural channel, and is not expected to encourage floodwaters to

³¹ FEMA Map Service Center,

http://map1.msc.fema.gov/idms/IntraView.cgi?ROT=0&O_X=7204&O_Y=2648&O_ZM=0.129863&O_SX=807&O _SY=672&O_DPI=400&O_TH=21324303&O_EN=21360951&O_PG=1&O_MP=1&CT=0&DI=0&WD=10312&HT =10157&JX=945&JY=732&MPT=0&MPS=0&ACT=1&KEY=21323992&ITEM=1&PICK_VIEW_CENTER.x=615& PICK_VIEW_CENTER.y=202&R1=VIN. Accessed September 24, 2009.

traverse out to the 100-year flood plain limits. A final floodway analysis will be conducted for the proposed project to ensure that a change to the FEMA flood plain map will not be required. Since the proposed project is not expected to impede or redirect flows within a 100-year flood plain, impacts will be less than significant and no further analysis will be required.

9. Less Than Significant Impact. Due to the distance of the project site to the Pacific Ocean (approximately 9 miles to the south), the risk of inundation by tsunamis (seismically induced waves) is considered remote on the project site.³² Additionally, the project site is sufficiently distanced from major water-retaining structures (e.g., Lake Casitas) that the risk of inundation by a seiche (i.e., a large wave generated within an enclosed body of water in response to ground shaking) is considered low. Furthermore, the project site is not immediately located at the base of any hills or mountains and therefore would not be subject to mudflow. Impacts would be less than significant, and no further evaluation of this topic is required.

The proposed project is expected to better confine the Ventura River during flood events. The spur dikes proposed for the eastern and western banks are expected to direct water flow to the main channel of the Ventura River and away from the banks that could be eroded, and thus could cause flooding downstream. Since the embankment and protection devices of the proposed project are expected to reduce the risk of death or destruction during a flood, impacts will be less than significant and no further analysis would be required.

Mitigation/Residual Impact(s): Based on the above discussion, project construction and operation would have less than significant impacts with regard to the Hydrology and Water Quality issue area. As such, no mitigation measures are required.

³² San Buenaventura General Plan, Our Healthy and Safe Community, Chapter 7, August 2007.

I. Land Use and Planning:

W	ould the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Physically divide an established community?				Х
2.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, a specific plan, local coastal program, Hillside Management Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				Х
3.	Conflict with any applicable habitat conservation plan or natural community conservation plan?		х		

Impact Discussion:

1. No Impacts. The proposed project includes the development of spur dikes along the western and eastern banks of the Ventura River near Foster Park. The community of Casitas Springs is located to the north of the proposed project site, and the Nye Ranch property is located to the west of the proposed project site. The proposed project is intended to provide protection to the City-owned water wells and test wells, and OVSD in this reach of the Ventura River. The proposed project does not involve the vacation of any public streets or pedestrian accessways, and it would not include any street improvements that would result in a division within the project area. No impact would occur, and no further analysis of this topic is required.

A construction easement and Right to Enter and Construct permit would be needed signed by each Nye Ranch owner. If the project design changes substantially from the current proposal, an easement may be needed from the Nye Ranch owners.

2. No Impacts. The proposed project site is currently designated as Open Space, according to the Ventura County General Plan and the City of San Buenaventura. The area of land where the proposed project will be

implemented has been annexed into the City of San Buenaventura. Currently the project site consists of the eastern and western banks of the Ventura River along with existing water well utilities owned by the City of San Buenaventura and an existing sewer trunk line owned by the OVSD. The proposed project will incorporate the development of spur dikes along the eastern and western banks of the river, as well as embankment protection along the eastern bank of the river to provide protection to the critical utilities downstream. Furthermore, the proposed project will restore the habitat within the project site to the natural habitat of the Ventura River. Implementation of the proposed project will not include the change of any land use designations, or zoning within the proposed project site. There would be no conflict to land uses as there would be no change to land use or zoning designations within the project site. No impacts would occur and no further analysis within an EIR is needed.

3. Potentially Significant Unless Mitigated. The project site contains areas designated as critical habitat for steelhead and therefore lies within the boundaries of a pending Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. These impacts are therefore considered potentially significant. Mitigation measures are proposed in the biology section (BIO-6 through BIO-10) to reduce these impacts to a level that is less than significant. Further consultation with the National Marine Fisheries Service is required and in progress.

Mitigation/Residual Impacts: Implementation of mitigation measures **BIO-6** through **BIO-10** will reduce these impacts to a less than significant level. No further analysis will be required in an EIR.

J. Mineral Resources:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
 Result in the loss of availability of known mineral resource that would be of value to the region and the residents of the state? 				Х
2. Result in the loss of availability of a locally important mineral resource recovery site delineated on the General Plan, specific plan, or other land use plan?				х

Impact Discussion:

- 1. No Impacts. The proposed project is located within the Ventura River bed, and along the eastern and western banks of the river. According to the City of San Buenaventura General Plan Final EIR, the proposed project is not located in an area that has a known mineral resource that would be of value to the region and state residents. Since construction and implementation of the proposed project will include the development of embankment protection and restoration, the proposed project is not expected to result in the loss of availability of any know mineral resources. There would be no impacts and further analysis is not required.
- 2. No Impacts. As discussed above, the proposed project site is not located within an area that has a known mineral resource. Construction and implementation of the proposed project will not result in the loss of the availability of a locally important mineral resource recovery site. There would be no impacts and no further analysis is required.

Mitigation/Residual Impact(s): Based on the above discussion, project implementation would have no impacts with regard to the Mineral Resources issue area. As such, no mitigation measures are required.

K. <u>Noise</u>:

W	ould the project result in:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Exposure of persons to a generation of noise levels in excess of standards established in the General Plan or noise ordinance?	Х			
2.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Х			
3.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				х
4.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	х			

Impact Discussion:

1. Potentially Significant Impact. Excavation and construction activities would involve the use of heavy construction equipment known to generate noise in excess of community noise standards as set forth in the City of San Buenaventura General Plan, the City of San Buenaventura Municipal Code, the Ventura County General Plan, and the Ventura County Noise Ordinances. Sensitive uses, including residential units are located to the southwest and northwest of the proposed project site. Additionally, Foster Park is located to the project's south and southeast, and it may be exposed to ambient noise levels that exceed standards for outside recreation areas in Ventura County during construction of the proposed project. Additionally, implementation of the proposed project, during its construction, may increase daily vehicle trips along Highway 33, Santa Ana Road, and Casitas Vista Road. Increased vehicle trips during the construction period of the proposed project could have the potential to result in significant noise increases in excess of established standards along affected roadways. Therefore, construction of the proposed project has the potential to generate noise levels in excess of established standards. Further evaluation of potential noise impacts is required in an EIR.

Upon completion of the proposed project, the expected ambient noise level in the area is expected to return to a level similar to those existing prior to development of the proposed project. Features of the proposed project, including the spur dikes and the embankment protection techniques used on the eastern and western banks of the Ventura River in the Foster Park Reach, will not generate noise. Therefore, operation of the proposed project is not expected to increase the ambient noise level in the project vicinity in excess of established standards. No impacts would occur during operation and no further analysis would be required on noise generated from the operation of the proposed project.

- 2. Potentially Significant Impact. Ground vibrations from construction activities very rarely reach levels that can damage structures, but they can achieve an audible range and be felt in buildings very close to the project site. Residential units (which are considered sensitive receptors) are located to the northeast of the project site in Casitas Springs and in a community to the southwest of the project site. Construction of the proposed project may require construction activities and the use of construction equipment known to generate groundborne vibration. The groundborne vibration that could be produced during the construction of the proposed project would need to be evaluated to determine if vibration exceeds the standards as set forth in the City of San Buenaventura General Plan, the City of San Buenaventura Municipal Code, the Ventura County General Plan, and the Ventura County Ordinances. Therefore, further study of potential groundborne vibration during construction of the proposed project is required in an EIR.
- 3. No Impacts. As described above, the proposed project during its construction phase is expected to increase the ambient noise level in the area, compared to existing conditions. However, the increase in ambient noise will be temporary in nature during the 11 months of construction for the proposed project. Upon buildout of the proposed project, the spur dikes and embankment structures that will provide protection to the City's water well system and OVSD's sewage pipe are not expected to produce noise. The ambient noise in the area will return to near normal conditions, comparable to before development of the proposed project proceeded. The proposed project therefore will not create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. There will be no impacts and further analysis will not be required.

4. Potentially Significant Impact. Construction activities—including excavation and clearing of the western and eastern banks, and construction of the spur dikes and embankment protection—would involve the use of heavy construction equipment near sensitive receptors to the northeast, northwest, south, and southeast of the project site. A temporary increase in ambient noise in the area of the proposed project will result from the construction of the proposed project. Some weekend work may occur to facilitate project completion in a timely manner. Therefore, further evaluation of potential construction noise impacts is required in an EIR.

Mitigation/Residual Impact(s): The proposed project has the potential to increase ambient noise levels above existing conditions and above standards as set forth by the City of San Buenaventura General Plan, the City of San Buenaventura Municipal Code, the Ventura County General Plan, and the Ventura County Noise Ordinances. Further evaluation of potential construction noise impacts will be required in an EIR. Mitigation measures will be developed and implemented in accordance with the results of the analysis within the EIR.

L. Population and Housing:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
 Induce substantial population growth in an area, either directly or indirectly? 				х
 Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere? 				х

Impact Discussion:

- 1. No Impact. The proposed project will not include a residential component. The proposed project consists of the construction of embankment protection and the development of spur dikes along the Foster Park reach on the Ventura River. Any jobs associated with the construction of the proposed project would likely be filled by residents in the area of the proposed project site depending on the contractor selected by the City. The proposed project will not induce substantial population growth. Therefore, no impacts will occur and no further analysis is required.
- 2. No Impact. The proposed project is located along the eastern and western edge of the Ventura River south of Casitas Springs and north of the Casitas Vista Road bridge crossing. The proposed project is currently vacant and no residential units exist on the propose project site. The closest residential units are located adjacent to the proposed project site to the southwest, on the Nye property, and to the northeast in Casitas Springs. The proposed project will not displace housing or people. Therefore, no impacts will occur and no further analysis is required.

Mitigation/Residual Impact(s): Based on the above discussion, implementation of the proposed project will not result in impacts to the Population and Housing issue area. Therefore, no mitigation measures are required.

M. Public Services and Recreation:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following: 				Х
a. Fire protection?				
b. Police protection?				Х
c. Schools?				Х
d. Neighborhood or regional parks or other recreational facilities?				Х
e. Maintenance of public facilities including roads?			Х	
2. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				Х
3. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				х
Impact Discussion:

1a. No Impact. The proposed project site is located within the City of San Buenaventura and also located within the jurisdictional service boundaries of the City of San Buenaventura Fire Department (VFD). The proposed project site will be served by Fire Station 1, located at 717 North Ventura Avenue, approximately 5 miles south of the proposed project site. Fire Station 1 has firefighter and a paramedic engine company. VFD strives to maintain an average response time of 5 minutes to emergencies that occur within the City. The VFD maintains a Countywide mutual aid agreement with all fire protection agencies within Ventura County.

The land uses located adjacent to and surrounding the proposed project site are within unincorporated Ventura County and are therefore located within the jurisdictional boundaries of the Ventura County Fire Department (VCFD). In 2008 the VCFD had 471 uniformed personal within 31 fire stations in Ventura County. During 2008, the VCFD responded to 32,780 calls for service. The closest VCFD fire station to the proposed project is Station 23, located at 15 Kunkle Street in Oak View, approximately 1.8 miles north of the project site. It is expected that the VFD will be the first response units to the proposed project site, since the proposed project site is located within the City of San Buenaventura boundaries. Additional firefighting aid, if needed, would come from the VCFD and any other fire protection agencies within Ventura County.

As discussed above, the proposed project will not include the development of residential units or commercial units that would add to the population of the area being served by the VFD or the VCFD. The proposed project will include the construction of embankment protection and restoration of embankments along Foster Park reach of the Ventura River. During the construction of the embankment protection system along the Ventura River, construction equipment will be staged in the parking lot of the Foster Park recreational area, west of the proposed project site. The construction equipment that will be used during the development of the proposed project will be in accordance with VFD and VCFD standards and California Fire Code standards, so as not to accidently produce sparks that could ignite grass in the area of the proposed project site. Furthermore, upon completion of the proposed project, the embankment protection and restoration along this reach of the Ventura River will reduce the amount of flooding that occurs on adjacent land uses, including the Nye property, Foster Park, and Highway 33. This would also reduce the amount of calls for service to this area during high flood stages of the Ventura River from the VFD and VCFD. Since the proposed project is not expected to increase demand from the VFD and the VCFD, no new facilities would be needed, and VFD and VCFD performance objectives would remain the same upon implementation of the proposed project. Therefore, no impacts will occur.

1b. No Impact. The City of San Buenaventura Police Department (VPD) provides police protection services within the City of San Buenaventura, including the proposed project site. The VPD is divided into four service areas (beats). The proposed project is located northwest of Beat 1, which encompasses the northwest portion of the City of San Buenaventura and portions of the downtown area. The proposed project is not located within a Beat as designated by the VPD; however, the VPD would respond to the proposed project site since it is within the jurisdictional boundaries of the City of San Buenaventura. The closest police station to the proposed project site is located at 110 Olive Street in Ventura, approximately 5.5 miles south of the proposed project site. Similar to the VFD, VPD maintains a Countywide mutual aid agreement with all law enforcement agencies within Ventura County. The land that is adjacent and surrounded by the proposed project site is located within unincorporated Ventura County, therefore, the Ventura County Sheriff's Department provides police services around and adjacent to the proposed project site. It is assumed, since the proposed project is located within the City of San Buenaventura, VPD will be the first responders to the project site, in the event that law enforcement services are required. The Ventura County Sheriffs Department would provide supporting services if further support was needed.

As discussed above, the proposed project will not include the development of residential units or commercial units that will add to the population of the area being served by VPD or the Ventura County Sheriff's Department. The proposed project will include the construction of embankment protection and restoration of embankments along this particular reach of the Ventura River. During the construction of the embankment protection system along the Ventura River, construction equipment will be staged in the parking lot of the Foster Park recreational area, west of the proposed project site. It is expected that the construction equipment will be located in an area that is fenced and locked, to reduce the potential for construction equipment to be damaged or stolen by vandals. Since the proposed project is not expected to increase demand for police protection services from the VPD or Ventura County Sheriff's Department, no new facilities would be needed, and performance objectives of both police departments would remain the same upon implementation of the proposed project. Therefore, no impacts will occur.

1c. No Impact. The proposed project site is located within the boundaries of the Ventura Unified School District. The proposed project does not include the development of residential units that could contribute to the addition of students in elementary, middle, or high schools located within the Ventura Unified School District. Therefore, implementation of the proposed project will not increase the number of students in the area, and will not impact performance objectives of the Ventura Unified School District. No impacts will occur.

- 1d. No Impact. The proposed project is not located adjacent to or near any local parks. However, the proposed project is located directly north of the Foster Park regional park. Foster Park is owned and operated by the County of Ventura; it provides recreational opportunities including hiking, horseback riding, and biking. The proposed project will not include the development of residential units, which would increase the population of the area around the proposed project site. During construction of the proposed project, construction crew working on the project site may take time to rest in Foster Park; however, this would constitute a small incremental increase in the use of Foster Park. Furthermore, the proposed project will develop spur dikes and embankment protection methods north of Foster Park along the western and eastern banks of the Ventura River. Implementation of the proposed project will help protect the Foster Park facilities during flood events along the Ventura River. The spur dikes will cause a calming effect amid the water as it flows past Foster Park, reducing the amount of erosion that would be caused in the area. During construction and upon buildout of the proposed project, there will not be an increase in the use of local or regional parks that could reduce acceptable service ratios of the park system. Therefore, no impacts will occur and further analysis will not be required.
- 1e. Less Than Significant Impact. The proposed project is expected to provide protection to the City of San Buenaventura water wells and test wells, and the OVSD sewer trunk line from floods within the Foster Park portion of the Ventura River. The proposed project will not include the development of new roads; however, a temporary access road will be developed for construction purposes within the bed of the Ventura River. This temporary construction road will provide construction workers access to the eastern and western banks of the proposed project site, and will limit the intrusion of construction vehicles into the bed of the Ventura River during construction. Since the proposed project is expected to provide better protection to the water well facilities of the City of San Buenaventura and the sewer trunk line facilities of the OVSD during flood events, impacts are expected to be less than significant. Furthermore, no public streets will be developed or reconfigured during the construction of the proposed project. Therefore, further analysis will not be required.
- 2. No Impacts. As described above in impact discussion 1d, the proposed project is not located near any local parks. However, the proposed project is located north of Foster Park, a regional park owned and operated by the County of Ventura. During construction of the proposed project, construction workers may use Foster Park as an area to rest during lunch or breaks from construction work. Furthermore, the construction equipment used in the development of the proposed project will be staged in small area of the Foster Park parking lot. The proposed project, upon its completion, will not include residential units, which could add to the area's population, which in turn could create more visitors to Foster Park. Even though construction workers may use Foster Park, the time they spend in the park will be minimal. Therefore, the construction workers using Foster Park will not be there long enough to cause substantial physical

deterioration of the facilities in Foster Park. No impacts will occur and no further analysis will be required.

3. No Impacts. The proposed project consists of the development of 7 spur dikes on the western bank of the Ventura River and 11 spur dikes on the eastern bank of the Ventura River along the Foster Park reach. Additionally, 800-feet of bank protection will be developed along the eastern bank of the Ventura River to protect the OVSD sewage pipe that was damaged in the January and February 2005 floods. The proposed project will not include the development of a local or regional park or recreational facilities. Furthermore, the proposed project will not require that Foster Park, the regional park located south of the proposed project site, be expanded in a way that will impact the surrounding environment. The proposed project does not include the development of recreational facilities or expansion of recreational facilities that could impact the environment. Therefore, there will be no impacts and no further analysis will be required.

Mitigation/Residual Impact(s): Based on the above discussion, implementation of the proposed project will not result in impacts to the Public Services and Recreation issue areas. Therefore, no mitigation measures are required.

N. <u>Transportation/Traffic</u>:

W	ould the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1.	Exceed, either individually or cumulatively, a level of service standard established by the county congestions management agency for designated roads or highways?	X			
2.	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?		X		
3.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				x
4.	Result in inadequate emergency access?			Х	
5.	Result in inadequate parking capacity?				X
6.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			x	

Impact Discussion:

1. **Potentially Significant Impact.** Construction of the proposed project would generate temporary additional daily vehicle trips to and from the project site, potentially causing a temporary increase in traffic that is substantial in comparison to the existing traffic volume and capacity of the street system.

- 2. Potentially Significant Unless Mitigated. The Ventura County Transportation Commission (VCTC) is the congestion management agency for Ventura County. Construction of the proposed project may temporarily increase traffic in the vicinity of the project site and along arterial roadways near the project site. Therefore, construction of the proposed project could cause more intersections to exceed a level-of-service standard established by the VCTC for roadways or highways in the project area. Additional analysis is required in an EIR to define the extend of construction impacts to roads and highways designated by the VCTC.
- 3. No Impacts. As discussed above, the proposed project consists of the construction of spur dikes and embankment protection along the eastern and western banks of the Ventura River. The proposed project will not include the development of roadways with sharp curves or dangerous intersections. Furthermore, construction traffic accessing the proposed project site from Highway 33 and Santa Ana Road will not experience unusual traffic scenarios, such as farm equipment crossing Highway 33 or Santa Ana Road, since the majority of the area around the proposed project site consists or residential uses and open space. Since the construction and operation of the proposed project will not substantially increase hazards to road design features or incompatible uses on the local roadway system, no impacts are expected to occur. Therefore, no further analysis will be required.
- 4. Less Than Significant Impact. Since construction of the proposed project may increase traffic on Highway 33, Casitas Canyon Road, and Santa Ana Road as well as other local roadways that provide access to the site, additional discussion is required in an EIR to address that project design of off-peak travel would not obstruct emergency access.
- 5. No Impact. During the construction of the proposed project, construction equipment is expected to be staged in the Foster Park parking lot, located southeast of the proposed project site. The majority of the Foster Park parking lot will remain open during the construction period of the proposed project, allowing visitors to park their vehicles and access Foster Park. Since the proposed project will not include parking in its final design, and since the proposed project will stage construction equipment in a small area of the Foster Park parking lot, it is not expected to result in inadequate parking. The proposed project does not include development that would require parking uses upon buildout. There will be no impacts and no further analysis will be required.
- 6. Less Than Significant Impact. The VCTC provides most of the public transit service in the vicinity of the project site. No bus stops or bicycle racks are located adjacent of near to the proposed project. However, the proposed project will be located adjacent to the Ojai Bike and Walking Trail along the eastern bank of the Ventura River. Construction of the proposed project could cause temporary closures or obstructions along this trail that stretches from Foster Park to the City of Ojai. The EIR will discuss whether the proposed

project would interfere with operation of the Ojai Bike and Walking Trail during construction of the proposed project, and to determine that the project during construction would be consistent with all adopted policies, plans, and programs regarding alternative transportation established by the City of San Buenaventura and the VCTC.

Mitigation/Residual Impact(s): Potentially significant impacts could occur during construction of the proposed project. Therefore, additional analysis in an EIR will be required for Transportation and Circulation impacts during construction of the proposed project site.

O. <u>Utilities and Service Systems</u>:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
 Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? 			х	
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			Х	
3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				Х
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				Х
5. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				х
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			Х	
7. Comply with federal, state, and local statutes and regulations related to solid waste?			х	

Impact Discussion:

- Less Than Significant Impact. The proposed project will obtain a National 1. Pollutant Discharge Elimination System (NPDES) construction permit prior to implementation of the proposed project. It is anticipated that some dewatering will be necessary as part of the excavation of the toe and or spur dikes on the eastern and western banks of the Ventura River. The Regional Water Quality Control Board (RWQCB) discourages wet construction and specifies that groundwater cannot be within 5 feet of the construction bottom unless authorized by the RWQCB through an exception. In the case of the proposed project, the exception will require that all groundwater encountered during wet construction be treated at a local wastewater facility. The construction process of the proposed project would require a local set of dewatering (capture) wells that collect any water that contacts the construction equipment and would require the contaminated water to be pumped to the Avenue Water Treatment Plant, approximately 1.3 miles south of the project site. The applicant will be required by the RWQCB to develop a detailed wet construction plan prior to implementation of the proposed project. The RWQCB will review the developed wet construction plan prior to the implementation of the proposed project. The applicant will be required to abide by the requirements of the RWQCB prior to the issuance of the exception for wet construction proposed by the project. Since the applicant of the proposed project is expected to abide by the regulations as set forth by the RWQCB, impacts are expected to be less than significant. No further analysis will be required.
- 2. Less Than Significant Impact. Construction of the proposed project will require dewatering as part of the excavation of the toe and or the spur dikes along the western and eastern embankment of the Ventura River. Dewatering wells will be required to be developed during the construction of the proposed project. The dewatering wells will be located south of the excavation area for the spur dikes and the toes, allowing any water that comes into contact with construction machinery to be captured in the wells and prepared for routing to the Avenue Water Treatment Plant south of the proposed project. Piping will be developed during construction of the proposed project; this piping would connect to the 24-inch or 36-inch gravity lines in Foster Park that convey raw water to the Avenue Water Treatment Plant south of the proposed project. The Avenue Water Treatment Plant has a daily intake design capacity of approximately 10.0 million gallons per day. During construction, the proposed project is expected to produce water that will need to be treated on a daily basis during construction procedures. The expected amount of water could be up to 100 percent of the design intake capacity of the Avenue Water Treatment Plant. Therefore, the Avenue Water Treatment Plant will be able to accommodate the water that will need to be treated during the construction process of the proposed project. New water or wastewater treatment facilities or expansion of existing facilities will not be needed due to the construction of the proposed project. Impacts will be less than significant and no further analysis will be required.

- 3. No Impacts. Construction of the proposed project will include the development of a temporary dewatering system that will convey groundwater that comes into contact with construction machinery to the Avenue Water Treatment Plant for treatment. As discussed above, the Avenue Water Treatment Plan has a daily intake design capacity of approximately 10.0 million gallons per day. During construction, the proposed project is expected to contribute to the amount of water that needs treatment, however, the construction of the project would not require that the Avenue Water Treatment Plant be expanded. During operation of the proposed project, the spur dikes and embankment protection will not increase storm water runoff beyond the amount that occurs under existing conditions within the area of the project. Since the proposed project will not require the construction of new storm water drainage facilities or their expansion, no impacts will occur and further analysis on this topic will not be required in an EIR.
- 4. No Impacts. The proposed project site is currently served by the City of San Buenaventura for its water needs. The proposed project is not expected to increase development intensity on the project site; thus, it would not generate additional water demands that could not be met by the City of San Buenaventura. Water will be used during construction activities to suppress dust created during the construction process. This water will be brought onto the site through the use of water trucks, which will receive their water from the City of San Buenaventura. A City fire hydrant is located on Casitas Vista Road near the entrance to the County Foster Park No impacts are expected to occur and no further analysis will be required in an EIR.
- 5. No Impacts. Please see topic number 2 and 3 under this analysis section.
- Less Than Significant Impact. The proposed project site is located in an area 6. that is served indirectly by the Toland Road Landfill, through two transfer stations located in Ventura County. Any construction debris that will be disposed of during the construction process of the proposed project will be disposed of at the Gold Coast Transfer Station on Colt Street in Ventura. The Gold Coast Transfer Station has a daily intake capacity of 1,200 tons of solid waste per day. Solid waste is then transferred to Toland Road Landfill, which accepts construction/demolition waste and has a current daily capacity of 1,500 tons per day. The Toland Road Landfill has a remaining capacity of approximately 19,199,310 cubic vards per day. As discussed previously, the proposed project consists of the development of embankment protection and spur dikes along the western and eastern banks of the Ventura River. There are currently no structures on the project site that need to be demolished, which in turn will cause demolition debris that will need to be disposed of in the local transfer station and landfill. Prior to construction of the proposed project, clearing and grubbing will need to occur in order to remove existing vegetation and prepare the project site for construction. It is estimated that during this process approximately grubbing material will be removed from the project site and disposed of at the Toland Road Landfill, which accepts vegetative

material.³³ The grubbing material that would be disposed of at the Toland Road Landfill. Applicants of the proposed project have estimated the amount of fill material for the 800 linear feet embankment at 11,000 cubic yards and the amount of imported rock rip rap for the spur dikes and the embankment protection at 23,000 cubic yards. Any infill that is required will be obtained from the grading portion of the construction project in order to reduce the amount of construction debris that will be disposed of in local landfills. Since the proposed project is expected to create construction debris waste that can be disposed of and accommodated in the local Toland Road Landfill, impacts are expected to be less than significant and no further analysis will be required in an EIR.

7. Less Than Significant Impact. The proposed project is expected to dispose of grubbing material into the Toland Road Landfill. As discussed above, the amount of grub disposal per day will be less than the capacity of 1,500 tons per day currently allowed at the Toland Road Landfill. Since the landfill serving the proposed project will have enough capacity for disposal usage, impacts will be less than significant and no further analysis will be required in an EIR. The proposed project would comply with this and all other federal, state, and local statutes and regulations related to solid waste. The proposed project, during operation is not expected to generate any solid waste. Excavation material will be reused during the construction process of the spur dikes and the embankment protection system along the western and eastern sides of the Ventura River. Therefore, impacts will be less than significant and no further analysis will be required in an EIR.

Mitigation/Residual Impact(s): Based on the above discussion, implementation of the proposed project will not result in impacts to the Utilities and Service Systems issue area. Therefore, no mitigation measures are required and no further analysis will be required in an EIR.

³³ California Integrated Waste Management Board, Facility/Site Summary Details Toland Road Landfill, http://www.ciwmb.ca.gov/SWIS/56-AA-0005/Detail/. Accessed September 25, 2009.

P. <u>Mandatory Findings of Significance</u>:

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
 Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? 		Х		
 Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) 	x			
3. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?			х	

Findings Discussion:

1. Potentially Significant Unless Mitigated. Based on the findings of this initial study, the proposed project could affect endangered fauna or flora, impact the habitat or populations of fish or wildlife species, threaten a plant or animal community, and impact the range of a rare or endangered plant or animal. The proposed project is not expected to eliminate important examples of the major periods of California history or prehistory; however, further resource

investigations will be conducted as part of the EIR in order to verify this conclusion. Impacts could potentially be significant in this area without mitigation.

- 2. Potentially Significant Impacts. In conjunction with other development occurring in the community of Casitas Springs, City of San Buenaventura, and County of Ventura, the proposed project could result in significant cumulative environmental impacts. Additional analysis is required in an EIR to further define these potential cumulative impacts and identify design features and mitigation measures that could reduce potentially significant environmental impacts.
- 3. Less Than Significant Impact. Construction and implementation of the proposed project has the potential to result in temporary adverse effects on human beings, either directly or indirectly, due to air quality, noise, and traffic/construction circulation, and other impacts. Additional analysis is required in an EIR to further evaluate these adverse effects and identify design features that make this temporary impact less than significant.

VI. CIRCULATE TO THE FOLLOWING AGENCIES/PERSONS:

VENTURA COUNTY

Agricultural Commissioner	[]	Ventura County Clerk/Recorder* (hand deliver-1 original, 4 copies	[X]
Ventura County Watershed Protection District*	[X]	Local Agency Formation Commission (LAFCO)	[]
County of Ventura Resource Management Agency, Attn: Planning* Director (1 hard copy, 6 CDs)	[X]	Ventura County Transportation Commission* (VCTC)	[X]

ADJACENT COUNTIES

Kern County – Planning &	[]
Development Services	
County of Los Angeles	[]
Department of Regional Planning	
Impact Analysis Section	

County of Santa Barbara – Planning [] Division

ADJACENT CITIES

City of Oxnard

[] City of Ojai [X]

OTHER PUBLIC AGENCIES

[]	Ventura County Organization of Government (VCOG)	[X]
[X]	Ventura Regional Sanitation District*	[]
[X] []	South Coast Area Transit (SCAT)	[]
	[] [X] [X] []	 Ventura County Organization of Government (VCOG) Ventura Regional Sanitation District* South Coast Area Transit (SCAT) I

LIBRARIES

Avenue Branch Library*	[X]	H.P. Wright Branch Library*	[]
E.P. Foster Branch Library*	[X]		

STATE AGENCIES

California Coast Commission South Central Coast Area Office	[X]	Southern California Association of Governments (SCAG)* (3 copies)	[]
California Dept. of Fish & Game (Santa Barbara)	[X]	Caltrans District 7 Environmental Section	[X]
California Regional Water Quality Control Board California Integrated Waste Management Board, Permits	[X] []	State Department of Parks and Recreation Department of Boating & Waterways	[X] [X]
California Department of Toxic Substances Control	[]	State Clearinghouse (15 copies)	[X]

FEDERAL AGENCIES

	U.S. Army Corps of Engineers	[X]	U.S. Fish & Wildlife Services	[X]
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CITIZEN GROUPS

Audubon Society	[X]	Sierra Club	[X]
Building Industry Association Greater Los Angeles/Ventura Region of Southern California, Inc.	[]	California Trout	[X]
Environmental Coalition	[X]	Surfrider Foundation	[X]
Friends of the Ventura River	[X]	Environmental Defense Center	[X]
League of Women Voters	[]	Friends of the Santa Clara River	[]
Santa Ynez Band of Mission Indians	[]	Ventureano Canaliano Chumash	[]
Owl Clan Consultants	[]	Candelaria American Indian Council	[]
Montalvo Property Owners Association	[]	Ventura County Archaeological Society	[X]
Foothill Road Homeowners Association	[]	Westside Community Council	[X]
East Ventura Community Council	[X]	Downtown Community Council	[X]
Midtown Community Council	[X]	Pierpont Community Council	[X]

*Indicates agency/person always receives notice.

VII. LIST OF REFERENCES:

- A. City of San Buenaventura 2005 General Plan, August 8, 2005.
- B. County of Ventura Subsequent Environmental Impact Report Focused General Plan Update, June 22, 2005.
- C. County of Ventura, Ventura County General Plan, Ojai Valley Area Plan, Ventura County Planning Division, November 15, 2009.
- D. California Scenic Highway Mapping System, Scenic Route, http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm.
- E. California Department of Conservation, Farmland Mapping and Monitoring Program, ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2006/. Ventura County Map, 2006.
- F. California Department of Conservation, Williamson Act Program, Ventura County Williamson Act 2006 to 2007 Map, ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Map%20and%20PDF/Ventura/ventura%20wa% 2006_07.pdf.
- G. Ventura County Air Pollution Control District, Ventura County Air Quality Assessment Guidelines, (2003), 3-2.
- H. CEQA Guidelines Section 15064 (b)
- I. California Public Resources Code Section 210802
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- K. URS Corporation, Draft Environmental Impact Report Avenue Water Treatment Plan/Foster Park Facility Improvements Project, City of San Buenaventura, Public Works Department, November 2003.
- L. California Department of Conservation, California Geologic Survey, Seismic Hazard Zone Map, Ventura Quadrangle
- M. United states Department of Agriculture Natural Resources Conservation, Web Soil Survey.
- N. County of Ventura, Ventura County General Plan Hazards Appendix, County of Ventura Resource Management Agency Planning Division, November 15, 2005.
- O. United States Environmental Protection Agency Superfund Information Site.
- P. California Department of Toxic Substance Control, EnviroStor Database, Hazardous Waste and Substance Site List.
- Q. California Department of Forestry and Fire Protection, California Fire Hazard Severity Zone Map Update Project.
- R. FEMA Map Service Center.
- S. California Integrated Waste Management Board, Facility/Site Summary Details Toland Road Landfill.
- T. Hawks and Associates Foster Park Embankment Protection and Restoration Draft Technical Design Memorandum, City of San Buenaventura, June 10, 2009.

APPENDIX C

Air Quality Calculations

Equipment Type	CO ₂ Emission Factor ¹ (kg/gal)	CH₄ Emission Factor ^{2,3} (kg/gal)	N ₂ O Emission Factor ^{2,3} (kg/gal)	CO_2 to CO_2E Ratio (GWP $CH_4 = 21$) (GWP $N_2O = 310$)
Off-Road	10.15	0.00058	0.00026	0.991
On-Road	10.15	0.000031	0.000029	0.999
Vendor	10.15	0.000031	0.000029	0.999
Autos ⁴	n/a	n/a	n/a	0.950

Table GHG-1 Construction GHG Emission Factors

Sources:

1. California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.1, (2009) 96.

2. California Climate Action Registry, *General Reporting Protocol: Reporting Entity-Wide Greenhouse as Emissions Version 3.1*, (2009) 98-100.

3. California Energy Commission, *Diesel Use in California, Remarks by Commissioner James D. Boyd*, (2002). It was assumed that heavy duty on-road trucks have a fuel economy of 6 miles per gallon based on this data source.

4. US Environmental Protection Agency, Office of Transportation and Air Quality, *Emission Facts - Greenhouse Gas Emissions from a Typical Passenger Vehicle (EPA420-F-05-004)*, (2005) 4. Passenger vehicle CO₂ emissions are assumed to be 95% of GHG emissions on a CO₂ equivalent basis.

Construction	Equipment	Annual CO ₂	Annual CO ₂	CO ₂ to CO ₂ e	Annual CO ₂ e
Phase	Туре	Emissions ¹	Emissions	Ratio	Emissions
		(TOTIS CO ₂ /yr)			
		04.50	01.00	0.001	01.07
	Off-Road	34.59	31.38	0.991	31.67
1	On-Road	-	-	0.999	-
1	Vendor	-	-	0.999	-
1	Worker/Autos	1.47	1.33	0.950	1.40
Total Phase 1		36.06	32.71		33.07
2	Off-Road	33.08	30.01	0.991	30.28
2	On-Road	-	-	0.999	-
2	Vendor	-	-	0.999	-
2	Worker/Autos	1.41	1.28	0.950	1.35
Total Phase 2		34.49	31.29		31.63
3	Off-Road	228.57	207.36	0.991	209.25
3	On-Road	46.00	41.73	0.999	41.77
3	Vendor	-	-	0.999	-
3	Worker/Autos	9.73	8.83	0.950	9.29
Total Phase 3		284.30	257.91		260.31
Total		354.85	321.91		325.01

Table GHG-2 Construction GHG Emissions

Sources:

1. Estimated CO_2 emissions from URBEMIS2007.

Where:

CH ₄	Methane
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
gal	Gallons
GWP	Global warming potential
kg	Kilograms
MT	Metric ton
N ₂ O	Nitrous oxide
yr	Year

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 1 - Set-up Construction Staging Area, Stockpile Materials\Phase 1 -

Project Name: Foster Park Construction - Phase 1

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION	EMISSION	ESTIMATES	

	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	36.06
2010 TOTALS (tons/year mitigated)	36.06
Percent Reduction	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	<u>CO2</u>
2010	36.06
Fine Grading 03/01/2010-	36.06
Fine Grading Dust	0.00
Fine Grading Off Road Diesel	34.59
Fine Grading On Road Diesel	0.00
Fine Grading Worker Trips	1.47

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Phase Assumptions

Phase: Fine Grading 3/1/2010 - 3/31/2010 - Default Fine Site Grading Description Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 5041 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	<u>CO2</u>
2010	36.06
Fine Grading 03/01/2010-	36.06
Fine Grading Dust	0.00
Fine Grading Off Road Diesel	34.59
Fine Grading On Road Diesel	0.00
Fine Grading Worker Trips	1.47

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/1/2010 - 3/31/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 1 - Set-up Construction Staging Area, Stockpile Materials\Phase 1 -

Project Name: Foster Park Construction - Phase 1

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust P	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust P	M2.5 Exhaust	PM2.5
2010 TOTALS (lbs/day unmitigated)	4.20	33.73	18.59	0.00	684.84	1.80	686.64	143.02	1.65	144.68
2010 TOTALS (lbs/day mitigated)	4.20	33.73	18.59	0.00	140.20	1.80	141.99	29.28	1.65	30.93

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 3/1/2010-3/31/2010 Active	<u>4.20</u>	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	<u>684.84</u>	<u>1.80</u>	<u>686.64</u>	<u>143.02</u>	<u>1.65</u>	<u>144.68</u>
Fine Grading 03/01/2010-	4.20	33.73	18.59	0.00	684.84	1.80	686.64	143.02	1.65	144.68
Fine Grading Dust	0.00	0.00	0.00	0.00	684.84	0.00	684.84	143.02	0.00	143.02
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

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Phase Assumptions

Phase: Fine Grading 3/1/2010 - 3/31/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 5041 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 3/1/2010-3/31/2010 Active	<u>4.20</u>	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	<u>140.20</u>	<u>1.80</u>	<u>141.99</u>	<u>29.28</u>	<u>1.65</u>	<u>30.93</u>
Fine Grading 03/01/2010-	4.20	33.73	18.59	0.00	140.20	1.80	141.99	29.28	1.65	30.93
Fine Grading Dust	0.00	0.00	0.00	0.00	140.19	0.00	140.19	29.28	0.00	29.28
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/1/2010 - 3/31/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 1 - Set-up Construction Staging Area, Stockpile Materials\Phase 1 -

Project Name: Foster Park Construction - Phase 1

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust P	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust P	M2.5 Exhaust	PM2.5
2010 TOTALS (lbs/day unmitigated)	4.20	33.73	18.59	0.00	684.84	1.80	686.64	143.02	1.65	144.68
2010 TOTALS (lbs/day mitigated)	4.20	33.73	18.59	0.00	140.20	1.80	141.99	29.28	1.65	30.93

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 3/1/2010-3/31/2010 Active	4.20	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	<u>684.84</u>	<u>1.80</u>	<u>686.64</u>	<u>143.02</u>	<u>1.65</u>	<u>144.68</u>
Fine Grading 03/01/2010-	4.20	33.73	18.59	0.00	684.84	1.80	686.64	143.02	1.65	144.68
Fine Grading Dust	0.00	0.00	0.00	0.00	684.84	0.00	684.84	143.02	0.00	143.02
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

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Phase Assumptions

Phase: Fine Grading 3/1/2010 - 3/31/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 5041 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 3/1/2010-3/31/2010 Active	<u>4.20</u>	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	<u>140.20</u>	<u>1.80</u>	<u>141.99</u>	<u>29.28</u>	<u>1.65</u>	<u>30.93</u>
Fine Grading 03/01/2010-	4.20	33.73	18.59	0.00	140.20	1.80	141.99	29.28	1.65	30.93
Fine Grading Dust	0.00	0.00	0.00	0.00	140.19	0.00	140.19	29.28	0.00	29.28
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/1/2010 - 3/31/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 2 - Prepare River DiversionLow Flow Channel\Phase 2 - Construction.urb924

Project Name: Foster Park Construction - Phase 2

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report: CONSTRUCTION EMISSION ESTIMATES

	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	34.49
2010 TOTALS (tons/year mitigated)	34.49
Percent Reduction	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	<u>CO2</u>
2010	34.49
Fine Grading 04/01/2010-	34.49
Fine Grading Dust	0.00
Fine Grading Off Road Diesel	33.08
Fine Grading On Road Diesel	0.00
Fine Grading Worker Trips	1.41

9/15/2009 11:33:32 AM

Phase Assumptions

Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading Description Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 1576 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	<u>CO2</u>
2010	34.49
Fine Grading 04/01/2010- 04/30/2010	34.49
Fine Grading Dust	0.00
Fine Grading Off Road Diesel	33.08
Fine Grading On Road Diesel	0.00
Fine Grading Worker Trips	1.41

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

Page: 1 9/15/2009 11:32:41 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 2 - Prepare River DiversionLow Flow Channel\Phase 2 - Construction.urb924

Project Name: Foster Park Construction - Phase 2

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust PM	M10 Exhaust	PM10	PM2.5 Dust PM	12.5 Exhaust	PM2.5
2010 TOTALS (lbs/day unmitigated)	4.20	33.73	18.59	0.00	275.97	1.80	277.77	57.64	1.65	59.29
2010 TOTALS (lbs/day mitigated)	4.20	33.73	18.59	0.00	56.50	1.80	58.29	11.80	1.65	13.45

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 4/1/2010-4/30/2010 Active	<u>4.20</u>	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	275.97	<u>1.80</u>	<u>277.77</u>	<u>57.64</u>	<u>1.65</u>	<u>59.29</u>
Fine Grading 04/01/2010-	4.20	33.73	18.59	0.00	275.97	1.80	277.77	57.64	1.65	59.29
Fine Grading Dust	0.00	0.00	0.00	0.00	275.97	0.00	275.97	57.63	0.00	57.63
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

9/15/2009 11:32:41 AM

Phase Assumptions

Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 1576 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 4/1/2010-4/30/2010 Active	<u>4.20</u>	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	<u>56.50</u>	<u>1.80</u>	<u>58.29</u>	<u>11.80</u>	<u>1.65</u>	<u>13.45</u>
Fine Grading 04/01/2010-	4.20	33.73	18.59	0.00	56.50	1.80	58.29	11.80	1.65	13.45
Fine Grading Dust	0.00	0.00	0.00	0.00	56.49	0.00	56.49	11.80	0.00	11.80
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 2 - Prepare River DiversionLow Flow Channel\Phase 2 - Construction.urb924

Project Name: Foster Park Construction - Phase 2

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust PM	M10 Exhaust	PM10	PM2.5 Dust PM	12.5 Exhaust	PM2.5
2010 TOTALS (lbs/day unmitigated)	4.20	33.73	18.59	0.00	275.97	1.80	277.77	57.64	1.65	59.29
2010 TOTALS (lbs/day mitigated)	4.20	33.73	18.59	0.00	56.50	1.80	58.29	11.80	1.65	13.45

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 4/1/2010-4/30/2010 Active	<u>4.20</u>	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	275.97	<u>1.80</u>	<u>277.77</u>	<u>57.64</u>	<u>1.65</u>	<u>59.29</u>
Fine Grading 04/01/2010-	4.20	33.73	18.59	0.00	275.97	1.80	277.77	57.64	1.65	59.29
Fine Grading Dust	0.00	0.00	0.00	0.00	275.97	0.00	275.97	57.63	0.00	57.63
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

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Phase Assumptions

Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 1576 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 4/1/2010-4/30/2010 Active	<u>4.20</u>	<u>33.73</u>	<u>18.59</u>	<u>0.00</u>	<u>56.50</u>	<u>1.80</u>	<u>58.29</u>	<u>11.80</u>	<u>1.65</u>	<u>13.45</u>
Fine Grading 04/01/2010-	4.20	33.73	18.59	0.00	56.50	1.80	58.29	11.80	1.65	13.45
Fine Grading Dust	0.00	0.00	0.00	0.00	56.49	0.00	56.49	11.80	0.00	11.80
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 3 - Construct Embankment Protection\Phase 3 - Construction.urb924

Project Name: Foster Park Construction - Phase 3

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	284.30
2010 TOTALS (tons/year mitigated)	284.30
Percent Reduction	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	<u>CO2</u>
2010	284.30
Fine Grading 05/01/2010-11/30/2010	284.30
Fine Grading Dust	0.00
Fine Grading Off Road Diesel	228.57
Fine Grading On Road Diesel	46.00
Fine Grading Worker Trips	9.73

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Phase Assumptions

Phase: Fine Grading 5/1/2010 - 11/30/2010 - Default Fine Site Grading Description
Total Acres Disturbed: 36
Maximum Daily Acreage Disturbed: 9
Fugitive Dust Level of Detail: Low
Onsite Cut/Fill: 71.43 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day
On Road Truck Travel (VMT): 150.33
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	<u>CO2</u>
2010	284.30
Fine Grading 05/01/2010-11/30/2010	284.30
Fine Grading Dust	0.00
Fine Grading Off Road Diesel	228.57
Fine Grading On Road Diesel	46.00
Fine Grading Worker Trips	9.73

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 5/1/2010 - 11/30/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by: PM10: 55% PM25: 55%

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 3 - Construct Embankment Protection\Phase 3 - Construction.urb924

Project Name: Foster Park Construction - Phase 3

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	<u>PM2.5</u>
2010 TOTALS (lbs/day unmitigated)	4.47	37.74	19.98	0.01	98.46	1.95	100.41	20.57	1.79	22.36
2010 TOTALS (lbs/day mitigated)	4.47	37.74	19.98	0.01	20.18	1.95	22.13	4.22	1.79	6.01

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 5/3/2010-11/30/2010 Active	<u>4.47</u>	<u>37.74</u>	<u>19.98</u>	<u>0.01</u>	<u>98.46</u>	<u>1.95</u>	<u>100.41</u>	<u>20.57</u>	<u>1.79</u>	<u>22.36</u>
Davs: 152 Fine Grading 05/01/2010-	4.47	37.74	19.98	0.01	98.46	1.95	100.41	20.57	1.79	22.36
Fine Grading Dust	0.00	0.00	0.00	0.00	98.43	0.00	98.43	20.56	0.00	20.56
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.27	4.02	1.40	0.01	0.02	0.15	0.18	0.01	0.14	0.15
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

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Phase Assumptions

Phase: Fine Grading 5/1/2010 - 11/30/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 71.43 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 150.33

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 5/3/2010-11/30/2010 Active	<u>4.47</u>	<u>37.74</u>	<u>19.98</u>	<u>0.01</u>	<u>20.18</u>	<u>1.95</u>	<u>22.13</u>	4.22	<u>1.79</u>	<u>6.01</u>
Davs: 152 Fine Grading 05/01/2010-	4.47	37.74	19.98	0.01	20.18	1.95	22.13	4.22	1.79	6.01
11/30/2010 Fine Grading Dust	0.00	0.00	0.00	0.00	20.15	0.00	20.15	4.21	0.00	4.21
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.27	4.02	1.40	0.01	0.02	0.15	0.18	0.01	0.14	0.15
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 5/1/2010 - 11/30/2010 - Default Fine Site Grading Description

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:
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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: Z:\Arpi Arman\145.15 Foster Park Project\Emissions\Phase 3 - Construct Embankment Protection\Phase 3 - Construction.urb924

Project Name: Foster Park Construction - Phase 3

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
2010 TOTALS (lbs/day unmitigated)	4.47	37.74	19.98	0.01	98.46	1.95	100.41	20.57	1.79	22.36
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Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 5/3/2010-11/30/2010 Active	<u>4.47</u>	<u>37.74</u>	<u>19.98</u>	<u>0.01</u>	<u>98.46</u>	<u>1.95</u>	<u>100.41</u>	<u>20.57</u>	<u>1.79</u>	22.36
Days: 152 Fine Grading 05/01/2010-11/30/2010	4.47	37.74	19.98	0.01	98.46	1.95	100.41	20.57	1.79	22.36
Fine Grading Dust	0.00	0.00	0.00	0.00	98.43	0.00	98.43	20.56	0.00	20.56
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.27	4.02	1.40	0.01	0.02	0.15	0.18	0.01	0.14	0.15
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

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Phase Assumptions

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Total Acres Disturbed: 36

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Low

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Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	PM2.5
Time Slice 5/3/2010-11/30/2010 Active	<u>4.47</u>	<u>37.74</u>	<u>19.98</u>	<u>0.01</u>	<u>20.18</u>	<u>1.95</u>	22.13	<u>4.22</u>	<u>1.79</u>	<u>6.01</u>
Davs: 152 Fine Grading 05/01/2010-11/30/2010	4.47	37.74	19.98	0.01	20.18	1.95	22.13	4.22	1.79	6.01
Fine Grading Dust	0.00	0.00	0.00	0.00	20.15	0.00	20.15	4.21	0.00	4.21
Fine Grading Off Road Diesel	4.16	33.67	17.48	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Fine Grading On Road Diesel	0.27	4.02	1.40	0.01	0.02	0.15	0.18	0.01	0.14	0.15
Fine Grading Worker Trips	0.03	0.06	1.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00

Construction Related Mitigation Measures

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