Santa Barbara County Flood Control and Water Conservation District

# Final Mitigated Negative Declaration
# Cold Springs Debris Basin Expansion Project

**19NGD-00000-00015**
**SCH 2019129053**

**January 23, 2020**


**Lead Agency and Project Proponent**

County of Santa Barbara, Public Works Department, Flood Control and Water Conservation District
130 E. Victoria Street, Suite 200
Santa Barbara, CA 93101

Contact: Maureen Spencer
(805) 568-3440

**Prepared by**

Wood Environment and Infrastructure Solutions, Inc.
104 West Anapamu Street, Suite 204A
Santa Barbara, CA 93101

Contact: David Stone
(805) 962-0992 x 229

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# 1.0 REQUEST/PROJECT OVERVIEW

The County of Santa Barbara Flood Control and Water Conservation District (District) proposes to expand the existing Cold Spring Debris Basin (Basin) from approximately 1.5 acres to approximately 2.4 acres in order to increase flood protection for downstream properties (see Figure 1, Project Location Map below). The Cold Spring Debris Basin Improvements Project (Project) in the Montecito area of Santa Barbara County would increase the area of the basin westward. The expanded Basin would be subject to existing facility Maintenance permits issued to the District by state and federal regulatory agencies.

## 1.1 PROJECT LOCATION

The Project site is located in the First Supervisorial District, in the Montecito Community Plan Area (Figure 1). The Basin is slightly northwest of the residential parcel identified as 1013 East Mountain Drive.

The Project site consists of the existing approximately 1.5-acre Cold Springs Debris Basin maintained by the Santa Barbara County Flood Control District, which is roughly bisected in a north-south direction by Cold Springs Creek. The existing basin and 0.9-acre expansion area are within APN 013-220-001 (3.45 acres) and 013-060-033 (4.31 acres).

## 1.2 PUBLIC DRAFT MND COMMENT LETTERS

In compliance with the California Environmental Quality Act (CEQA) Guidelines Section 15073, the District established a 30-day public review period between December 13, 2020 and January 17, 2020. The Notice of Availability (NOA) of the Draft Mitigated Negative Declaration (MND) was provided in Attachment C.

CEQA Guidelines Section 15074(b) requires the decision-making body to consider comments received on the Draft MND when approving the project.

Comment letters were received from the following parties and are provided in Attachment D.:

- Rick G. Draeger, Regional Engineer, Department of Water Resources, Division of Safety and Dams. December 31, 2019.
- Heidi George, Los Padres National Forest. January 17, 2020.
- Louis Andaloro, Santa Barbara Urban Creeks Council. January 17, 2020.

Scott Morgan, Director, Governor's Office and Planning and Research, State Clearinghouse and Planning Unit, communicated that the District had complied with State Clearinghouse review requirements for draft environmental documents pursuant to CEQA (January 15, 2020). This letter, though not commenting on the adequacy of the Draft MND, is also included in Attachment D.

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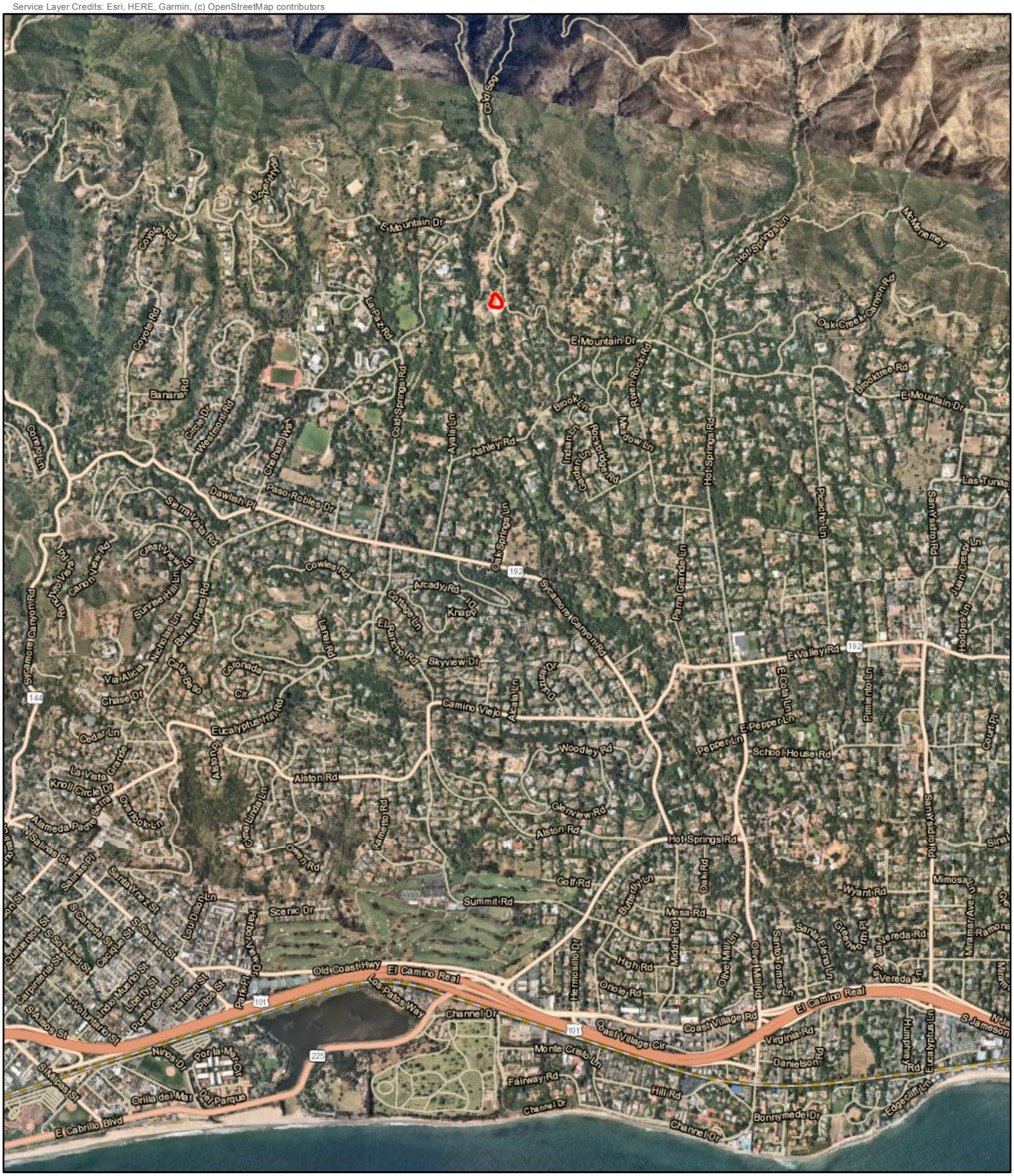


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1 inch = 2,000 feet

0 1,000 2,000 Feet

wood.

Cold Springs Debris Basin

# FIGURE 1

Project Vicinity
Cold Springs Debris Basin Expansion
Santa Barbara County, CA.

Responses to each of these comment letters is provided in Attachment D. None of these comments resulted in revisions to the Draft MND.

# 2.0 PROJECT DESCRIPTION

## Debris Basin Maintenance Background

The Basin is a District-owned facility located along Cold Springs Creek in Montecito (Figure 2). The engineered facility was constructed in 1964 by the U.S. Army Corps of Engineers after the Coyote Fire burned a large percentage of the watershed. The Basin was designed to trap flood debris in anticipation of accelerated erosion of the denuded, 2,562-acre Cold Springs Creek watershed. The typically perennial Cold Springs Creek originates in the Santa Ynez Mountains and is capable of flows up to 3,800 cubic feet per second (cfs) during a 100-year return period precipitation event.

The Basin has been maintained since its construction in 1964; maintenance activities have been directed by the District's *Routine Debris Basin Maintenance Program* since 1966. Revisions to the District's Maintenance Program were evaluated for compliance with the California Environmental Quality Act (CEQA) in the *Updated Routine Maintenance Program Final Environmental Impact Report* [PEIR] 01-EIR-01 (Santa Barbara County 2001). Subsequent refinements to the Maintenance Program were provided in the *Updated Debris Basin Maintenance and Removal Plan* (Santa Barbara County 2017), which was tiered off the PEIR 01-EIR-01. The proposed Debris Basin expansion is also tiered from this Program EIR.

The Basin has been maintained since its construction in 1964 and under the current *Routine Debris Basin Maintenance Program* since 1996. Since 1994, the Basin has filled and been desilted twice in 1995, and once in 1998, 2005 and 2018. Approximately 3,000 cubic yards of sediment were removed in anticipation of increased post-fire debris and sediment flows after the 2008 Tea Fire. After the Thomas Fire burned the watershed above the basin in December 2017, all vegetation was removed from the basin in anticipation of increased flows, debris and sediment from the burned watershed.. During the winter of 2019, sediment from the burned watershed continued to be deposited during storm events and approximately 6,000 cubic yards of sediment was removed from the basin.

Routine debris basin maintenance undertaken by the District (and evaluated in FEIR 01-EIR-1) ensures that the creek effectively flows through the outlet structure and keeps clear any obstructive vegetation to minimize plugging of the outlet works. Maintenance of the outlet works ensures that the debris basin passes all low and moderate flows so that the basin doesn't incrementally fill in and avoid reducing its effectiveness. A 15-foot-wide pilot channel is created using heavy equipment and maintained. The pilot channel extends from the upstream end of the basin to the outlet structure where it increases in width to 30 feet. Material dislodged during the

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1 inch = 150 feet
0 75 150
Feet

wood.

Proposed Expansion Area
Existing Debris Basin

# FIGURE 2

Existing Cold Springs Debris Basin
and Expansion Area Overview
Cold Springs Debris Basin Expansion
Santa Barbara County, CA.

pilot channel establishment is redeposited in windrows along the sides to help contain the flows within the pilot channel. Pilot channel establishment and the windrowed material affect an area approximately 30-feet wide, except immediately upstream of the outlet structure where the pilot channel and windrowed material affect an area approximately 45-feet wide. The pilot channel is maintained using hand tools unless flows eliminate the channel and it must be reestablished using mechanized equipment. The basin dam face (at the downstream end of the facility) and a 10-foot swath adjacent to the toe of the dam are kept clear of vegetation. Vegetation management is done with hand tools and occasional herbicide to the maximum extent feasible. Areas outside of the pilot channel and dam face are allowed to become colonized with native vegetation between complete desilting events.

Routine maintenance may also include repairs to a basin's grouted rock dam embankments and outlet pipe that occasionally experience erosion and require repair in order to protect the structure from further erosion and possible failure. Minor repairs to a basin during routine maintenance could include addition of concrete or rock to fill in erosion holes, repair or replacement of a damaged outlet pipe, or repair of damaged rocks/concrete from debris impacts on the dam embankment.

Existing approximately 1.5-acre debris basin periodic maintenance activities include clearing the 15-foot wide pilot channel, clear outlet structure, and other specific areas. Debris and sediment removal occurs immediately after the rainy season or during the fall maintenance season if the spring inspection identifies unacceptable volumes of debris and sediments at the basin. Long-term maintenance also takes place after a significant fire in the watershed area. All vegetation and debris are removed in anticipation of expected increased post-fire debris flows. Debris and sediment removal occur when the basin is approximately 25% full to prevent mudflow impacts to the environment and community.

Prior to the 1996 commencement of the District's *Debris Basin Maintenance Program*, all vegetation within each debris basin was removed on an annual basis. Since 1996, the *Program* allows habitat to develop within the basins while ensuring that they function properly when needed. Continuing maintenance activities will involve basin inspection after heavy rains and removal of organic debris that could plug the outlet works. The District's intent is to conduct routine maintenance of the pilot channels, outlet works and dam face on an annual basis, although it will periodically be necessary to conduct long-term maintenance that requires the removal of debris and sediment from the basins.

## Purpose And Need

The purpose of the proposed Project would expand the Basin's size from approximately 1.5 acres to approximately 2.4 acres to increase flood protection for downstream properties (Figure 3). Identical equipment and activity used to conduct maintenance desilting would be used to excavate the expansion area and haul the material away. The approximate amount of basin excavation and export would be 19,000 cubic yards (cy).

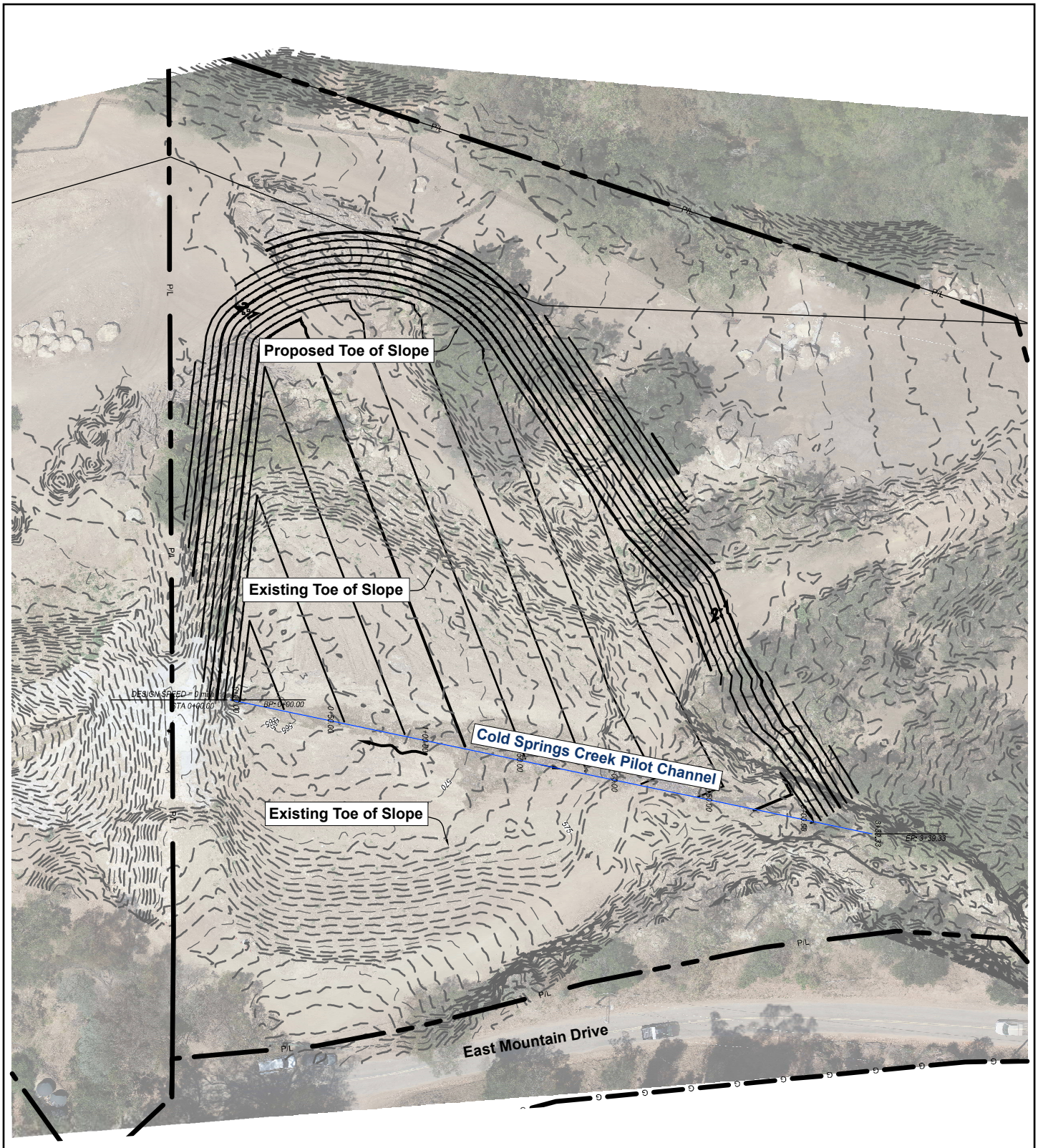
General Project Site Information is presented in Table 1.

| **Table 1**<br>**Project Site Information** | |
|---|---|
| Comprehensive Plan Designation | County of Santa Barbara: Urban Area, Montecito Community Plan Area, Residential (SRR-0.33), 0.33 dwelling units/acre, 3-acre minimum parcel size |
| Zoning District, Ordinance | Santa Barbara County Code Chapter 35-2: Montecito Land Use & Development Code Chapter 35.423, Residential Zones; (3-E-1) One Family Residential, 3-acre minimum parcel size. |
| Site Size | Existing Basin: 1.5 acres (approximate)<br>Proposed Project: 0.9 acres (approximate)<br>Proposed Project Temporary Overall Disturbance Area – 1.6 acres (approximate) |
| Present Use & Development | Santa Barbara County Flood Control District – Detention Basin and undeveloped area |
| Surrounding Uses/Zoning | North: Residential (3-E-1)<br>South: Residential (3-E-1)<br>East: Residential (3-E-1)<br>West: Residential (5-E-1) |
| Access | East Mountain Drive |
| Public Services | Water Supply: Montecito Water District<br>Sewage: Montecito Sanitary District<br>Fire: Montecito Fire Protection District<br>Law Enforcement: County of Santa Barbara Sheriff Department |
| 1995 Montecito Community Plan Land Use Designations<br>2018 Montecito Land Use & Development Code | |

## Project Construction

Activities associated with proposed Basin expansion would be essentially the same as those resulting from historic routine maintenance. Basin expansion would be limited to earth-moving and would not include constructing additional structures or additions to the existing dam embankment. Construction access would use the existing dirt road and ramp extending from East Mountain Drive (across from the 1030 East Mountain Drive residential driveway) that is used for existing debris basin maintenance.

Basin construction would begin in the summer or early fall, occur over 35 to 45 working days, and would be completed prior to the rainy season (November 15). Activity would commence as early as 2020, and would occur Monday through Friday, 7:30 a.m. – 4:30 p.m. No construction would occur on weekends and federal holidays.

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Dashed Lines = Existing Topographic Contours Solid Lines = Proposed Topographic Contours

# FIGURE 3

Cold Springs Debris Basin Expansion Plan
Cold Springs Debris Basin Expansion
Santa Barbara County, CA.

The following provides an overview of the proposed Project construction steps and methodology:

- *Clear water diversion and dewatering*. The contractor would set up a "clear water" diversion or temporary rail bridge such that expansion grading activities would avoid creek flows within the existing Basin.
- *Clearing and grubbing vegetation* within the expansion area.
- *Excavation*. Rock and sediment would be excavated and hauled from the site using the same equipment used for maintenance desilting activities. Grading and excavation would occur within the existing Basin, west of the current low-flow pilot channel (Figure 3). Approximately 1,900 dump truck round trips (10 cy/truck load) would occur along the haul route using East Mountain Drive to Hot Springs Road, to Olive Mill Road and to U.S. Highway 101. A final export destination has not been identified, such that the excavated material may be transported north or south on U.S. 101.
- *Channel grading*: Once excavation and grading of the basin is completed, the pilot channel would be restored to pre-project conditions as part of the routine maintenance program along its current alignment.
- *Water diversion system removal*. Subsequent to all excavations, the temporary diversion system infrastructure would be removed and equipment demobilized.
- *Habitat Restoration*. Approximately 0.4 acres of native riparian vegetation would be planted along the Basin slopes. Additional area southwest of the expanded Basin on District-owned property would also be available for mitigation. Restoration species would include oak (acorns from existing trees onsite would be collected and replanted), sycamore, elderberry, sugarbush, toyon, lemonade berry, blackberry, giant rye, sumac, ceanothus, etc.

The proposed Project would include a standard construction traffic safety management plan that ensures that construction staging areas are well marked with temporary signs on East Mountain Drive to alert drivers to planned construction dates and any expected speed limit reductions. During construction, flaggers and appropriate signs and speed reductions would be used if necessary to implement any necessary lane closures. Construction equipment use of roads would be limited and warning signs alerting drivers to potential for construction vehicles entering and exiting adjacent roadways would be posted.

Construction activity would be monitored by the District biologist and a District-contracted construction management/inspection team.

Vegetation removal would be minimized where technologically feasible, such as locating basin construction access roads away from mature native trees to the maximum extent. Up to 14 mature trees would potentially need to be removed. Their species and estimated diameters include:

- *Coast live oaks* – 8: four between 4- and 15-inch diameter, and four between 20- and 34-inch diameter (one additional dead, 10-inch diameter specimen would also be removed)

- *Sycamore* – 3: between 6- to 8-inch diameter (planted during prior restoration activity)
- *Acacia* – 2: both 20-inch diameter (these are in very poor condition and near death).
- *Eucalyptus* – 1: 15-inch diameter

Other mature native trees including one coast live oak and three sycamores located in line with the existing dam embankment would be avoided. All trees outside of the proposed Basin expansion area would also be avoided.

## Construction Fleet and Personnel

Table 2 shows the estimated construction equipment and dump truck trips, personnel, and days necessary to complete the project (see page 10).

## Permits

A new permit for the expansion of the Basin expansion area would be requested from the California Department of Fish and Wildlife. Projected maintenance of the Basin expansion area would be subsumed under existing maintenance permits.

Proposed excavation within the existing Debris Basin would be covered by existing Army Corps of Engineers (ACOE) maintenance permits. The proposed Basin expansion area is outside of the ACOE jurisdiction and does not require a ACOE permit.

The State Regional Water Quality Control Board (RWQCB) would amend an existing permit that covers maintenance and removal of several debris basin (including Cold Springs) to cover the expansion. When the RWQCB amends the existing permit for the debris basin expansion, they would also amend and modify the permit for the other basins that were slated for removal.

**Table 2**
**Estimated Construction Equipment and Personnel**

| *Equipment* | *Quantity* | *Hours/Day* | *Number of Days* | *Total Hours* |
|---|---|---|---|---|
| Hydraulic Tracked Excavators | 2 | 6 | 35-45 | 420-540 |
| Loaders (Front-end) | 2 | 8 | 35-45 | 560-720 |
| Pickup Trucks | 4 | 2 | 35-45 | 280-360 |
| Water Truck | 1 | 3 | 35-45 | 105-135 |
| Truck Trailer | 2 | 4 | 2 | 8 |
| Pumps | 1 | 8 | 35-45 | 280-360 |
| Chain Saws | 2 | 8 | 5 | 80 |
| Dump Truck(s) 19,000 cubic yards (cy) excavation at 10 cy/trip capacity;<br>1,900 round trips (RT) total, and<br>3 RT /day for each truck | 14 (45 days)<br>18 (35 days) | 8 | 35-45 | 5,040 |
| **Total** | **-** | **44** | **182-232** | 6,773-7,243 |
| Foreman | 1 | 8 | 35-45 | 280-360 |
| Equipment Operators | 3 | 8 | 35-45 | 840-1080 |
| Laborers | 3 | 8 | 35-45 | 1,120-1,440 |
| Water Truck Operator | 1 | 3 | 35-45 | 105-135 |
| **Total** | **-** | **24** | **105-135** | **2,345-3,015** |
| Source: Santa Barbara County Flood Control and Water Conservation District | | | | |

# 3.0 ENVIRONMENTAL SETTING

## 3.1 PHYSICAL SETTING

The following physical setting description draws in part from the *Final Updated Debris Basin Maintenance and Removal Plan* (Santa Barbara County 2017).

Cold Springs Creek originates in the Santa Ynez Mountains approximately 2.5 miles upstream of the Pacific Ocean (Figure 1). The creek drains a 2,562-acre (approximately 4-square mile) watershed capable of producing flows of 3800 cubic feet per second (cfs) during a 100-year return period precipitation event. The creek is typically perennial, though multi-year drought cycles periodically eliminate flowing.

The substrate consists of silty sand intermixed with large cobble and rocks. The bottom of the basin is normally vegetated with large stands of large willow trees and cattails, however the 2018 Debris Flow removed all the vegetation within the basin floor and most of the vegetation along the basin slopes. Upslope on adjacent property there are eucalyptus and oaks.

Mountain Drive is located immediately east of the basin. The nearest residential structures from the proposed Basin expansion area are approximately 200 feet to the west, 265 to the northeast, and 375 feet to the southeast (see Figure 2).

The Cold Spring Debris Basin design footprint is approximately 1.5 acres in size. The dam structure consists of a 16-foot-high earthen fill spillway capped with grouted rock, a rock apron, grouted rock embankments, cutoff walls, and a 48-inch reinforced concrete low flow pipe.

The January 9, 2018 Montecito Debris Flow devastated the area, eroded the dam embankment, completely filled the existing basin, and stripped the surrounding area of most of the vegetation. The dam embankment rock, grout and outlet were repaired. Soil and rock debris within the basin were subsequently removed, similar to previous historical maintenance activity. Photos of the existing Debris Basin are displayed below.

Photo 1 illustrates repairs made to the dam embankment, including replacement of rock, grout, and a new outlet pipe. Minimal revegetation of the basin is noted in the photo foreground and middle ground. The bottom of the basin is normally vegetated with large stands of large willow trees and cattails; however, vegetation removal after the Thomas Fire, the January 2018 debris flow, and associated clean-out eliminated vegetation in the basin such that it is currently populated with sparse coyote bush and a few willows. Coast live oak, sycamore, willow, coastal sage scrub and chaparral species are located within the proposed basin expansion area. These surrounding trees on the west side of the proposed basin expansion area and maintenance access ramp are illustrated in Photo 2.

Views of the existing debris basin are experienced from East Mountain Drive looking southwest (Photo 3) and of the proposed Basin expansion area (Photo 4).

***Slope/Topography.*** The substrate consists of silty sand intermixed with large cobble and rocks. The bottom of the basin is normally vegetated with large stands of large willow trees and cattails. Prior to the 2018 Debris Flow, the side slopes were vegetated with sycamore, willow, coastal sage scrub and chaparral species. Upslope on adjacent property there are eucalyptus and oaks. East Mountain Drive is located immediately east of the basin.

***Fauna and Flora.*** Cold Springs Creek, including the proposed Project site area, is designated an Environmentally Sensitive Habitat area (ESH) in the Montecito Community Plan due to its characterization as a riparian woodland corridor (Santa Barbara County 1993).

The flora and fauna of the project area was extensively damaged in the Thomas Fire of late 2017 and subsequent debris flow on January 9, 2018. The area is considered degraded ESH.

**Photo 1. Existing Debris Basin Dam Embankment and Expansion Area**

**Photo 2. Debris Basin Expansion Area from East Mountain Drive, Looking Northwest**

**Photo 3. Existing Debris Basin from East Mountain Drive, Looking Southwest**

**Photo 4. Proposed Expansion Area from East Mountain Drive, Looking Southwest**

Habitat conditions prior to the Thomas Fire and debris flow are summarized in a field survey of the Cold Springs Debris Basin by the District Biologist on October 10, 2016. Results were compared with previously conducted wildlife surveys in 2003 and observations from several years of maintenance inspections through 2016.

Prior to the Thomas Fire and debris flow, the basin provided willow riparian scrub habitat along the center channel and the adjacent floor of the basin. Dominant plant species included arroyo willow, sandbar willow, and mule fat. A few larger cottonwood and sycamore trees were present at the edges of the basin. The area would normally provide suitable habitat for Baja California treefrog and steelhead trout when water is present. The habitat would normally be suitable for a variety of riparian birds with a mix of cover types.

The results of the 2016 wildlife survey and previous observations are considered to reflect the biological resources reasonably expected to occur within the existing Basin as subject to periodic permitted maintenance and vegetation removal.

The District Biologist performed an updated biological field assessment of the project area on November 22, 2019. The debris basin floor, including the wetted creek channel, is almost entirely bare, exposed sediment. The substrate is composed of sand, gravel, cobble and larger rock outcrops. There is very little vegetation recolonization in the basin due to emergency recovery operations and further sediment mobilization that has occurred in subsequent storms on the burned watershed.

Currently, the basin has less than 1% vegetative cover. Vegetation that is present is composed of low ruderal species, occasional willow sprouts, tree tobacco, nightshade, and willow herb. There is no contiguous cover or riparian canopy in the basin or along the creek corridor.

The creek corridor throughout the project area was inspected for aquatic organisms. Water flow was low (1 to 3 cfs) which is typical of this area in the summer and fall. Water depth ranged from less than 1” to 4”, in a low-gradient channel characterized by mixed grade rock, gravel, and sand. There are no pools or well-defined stream habitats, due to very low water and the frequency of recent disturbances. Vegetation was absent along most of the wetted channel, with only sporadic low sprouts of willow and willow-herb less than 15” in height. Creek substrate is almost entirely bare sediment. No aquatic vertebrates were encountered. The water level is too low to support quality habitat for fish or amphibians

The adjacent hillside to the west of the basin was also damaged in the 1/9/18 debris flow, but some standing trees and vegetation remain. This area has occasional coast live oaks, sycamore trees, laurel sumac, willow thickets and resprouts, telegraph weed, California sagebrush, and non-native species such as tree tobacco, castor bean, and ruderal herbaceous species throughout. Fallen trees, brush, litter, and debris are common, due to dead plant material from the severe drought and residual material from the 1/9/18 debris flow.

Prior to the 1/9/18 debris flow, the eastern slopes of the basin were thickly vegetated with sycamore, willow and alder and an understory of species such as toyon, sugar bush, lemonade

berry, rye grass, and ceanothus. All this vegetation was destroyed by the debris flow and subsequent basin desilting. The hillside and slope adjacent to the basin is partially disturbed, representing a transitional area between the basin itself and the dense oak canopy and willow riparian community further west beyond the burn area. In its present condition, this hillside adjacent to the basin is suitable and attractive to some migratory birds and opportunistic wildlife. The habitat is in fair to poor condition based on the pattern of recent disturbances.

***Archaeological and Historical Sites.*** An intensive archaeological ground surface (Phase 1) survey was conducted in support of the proposed project by a County-qualified archaeologist (see Section 4.5). No previously recorded cultural resources within the Project site were identified in the background research, and no previously unrecorded resources were identified during the intensive surface survey.

***Soils.*** The substrate consists of silty sand intermixed with large cobble and rocks (Santa Barbara County 2017).

***Surrounding Land Uses.*** The existing Debris Basin and expansion area are located in the low density residential area of Montecito, with parcels 3-acres and larger. East Mountain Drive borders the east side of the existing Debris Basin.

***Existing Structures.*** The existing Debris Basin is currently earthen and unlined, extending approximately 475 linear feet. The dam structure consists of a 16-foot-high earthen fill spillway capped with grouted rock, a rock apron, grouted rock embankments, cutoff walls, and a 48-inch reinforced concrete low flow pipe.

## 3.2 OTHER PENDING AND APPROVED PROJECTS

Section 15355 of the State CEQA Guidelines states that "cumulative impacts" refer to two or more individual effects that when considered together are considerable or which compound or increase other environmental impacts. “The individual effects may be changes resulting from a single project or a number of separate projects," and "the cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

Table 3 identifies related proposed and approved projects or those under construction within the Montecito Community Plan area.

**Table 3**
**Montecito Community Plan Area Cumulative Projects List**

| | Project Name | Status | Description |
|---|---|---|---|
| ***Public Works Department, Flood Control District Projects*** | | | |
| 1. | Cold Springs Debris Basin Improvement | Future Pending (Summer 2021) | Modification of the existing debris basin dam embankment to allow sediment delivery and fish passage |
| 2 | Randall Road Debris Basin | Future Pending (Summer 2021) | Constructing a new debris basin and associated flood-control facilities along the San Ysidro Creek Channel, north and east of the Randall Road / East Valley Road intersection, in Montecito, CA. Up to eight residential parcels would be converted to this flood-control use. Randall Road would be used for construction access, and thereafter for maintenance and emergency response (Santa Barbara County 2019). |
| 3 | San Ysidro Debris Basin Improvement | Future Pending (Summer 2022) | Modification of the existing debris basin dam embankment to allow sediment delivery and fish passage. |
| 4 | Romero Debris Basin Improvement | Future Pending (Summer 2021) | Modification of the existing debris basin dam embankment to allow sediment delivery and fish passage. |
| 5 | Santa Monica Debris Basin Improvements | Future Pending (Summer 2021) | Repair of drainage towers, replacement of bridge over emergency outlet channel, construction of all-weather crane pad for basin clean-outs, and repair of plunge pool bypass pipe. |
| 6 | Debris Basin Maintenance | Future Pending (Summer 2021) | Possible maintenance of Montecito Creek, San Ysidro Creek, and Romero Creek debris basins within the Montecito Community Plan area (between August – November) |
| ***Other Projects*** | | | |
| 7 | Westmont College Master Plan | Under Construction | Demolition of 22,360 s.f. of buildings and construction of 314,500 s.f. of new structures. |
| 8 | Garner Lot Split | Approved | Splitting one parcel into two, creating one additional residential lot. |
| 9 | Crane School Updated Master Plan | Under Construction | Demolition of 5,645 s.f. and addition of 39,985 s.f. of campus facilities. |
| 10 | Montecito YMCA Master Plan | Future Pending | Redevelopment of existing facilities and new gymnasium. |

| Table 3<br>Montecito Community Plan Area Cumulative Projects List | | | |
|---|---|---|---|
| 11 | Miramar Hotel Revision | Constructed | Rebuilding of 237,865 s.f. of visitor serving commercial facility. |
| Source: County of Santa Barbara Public Works Department.<br>Accessed at http://cosb.countyofsb.org/pwd/default.aspx?id=3676<br>County of Santa Barbara Planning & Development<br>Accessed at https://www.countyofsb.org/uploadedFiles/plndev/Content/Projects/CrystalReportViewer1.pdf | | | |

Table 3 illustrates that proposed Cold Spring Basin Expansion and Improvements would not occur simultaneously, or even sequentially (Improvements following Expansion).

Maintenance of debris basins within the Montecito Community Plan is dependent on the extent of storm flow materials that occur each winter. Sediments and material removal from basins scheduling is determined after each rainy season and would occur generally during the months of August through November.

## 3.3 ENVIRONMENTAL BASELINE

The environmental baseline from which the project's impacts are assessed consists of the physical environmental conditions in the vicinity of the project, as described above. Additional baseline information is included as appropriate in the issue area discussions within Sections 4.1 to 4.17 below.

# 4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

**Potentially Significant Impact:** A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

**Less Than Significant Impact with Mitigation:** Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to a Less Than Significant Impact.

**Less Than Significant Impact:** An impact is considered adverse but does not trigger a significance threshold.

**No Impact:** There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

**Reviewed Under Previous Document:** The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below. The discussion should include reference to the previous documents, a citation of the page(s) where the information is found, and identification of mitigation measures incorporated from the previous documents.

# 4.1 AESTHETICS/VISUAL RESOURCES

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view? | | | X | | |
| **b.** Change to the visual character of an area? | | | X | | |
| **c.** Glare or night lighting which may affect adjoining areas? | | | | X | |
| **d.** Visually incompatible structures? | | | | X | |

**Existing Setting:**

The proposed Debris expansion area is adjacent to the existing approximately 1.5-acre Cold Springs Debris Basin. The Basin is located within the Santa Ynez Mountain foothills and is surrounded by residential parcels; three residences are located between 200 and 375 feet of the proposed Basin expansion area. East Mountain Drive borders the Basin to the east; it provides access to the Basin, residences and the other arterial roadways including Hot Springs Road. East Mountain Drive is not a designated or eligible scenic road. The Basin expansion site is not viewed from any other roadway or public park. It is visible from portions of the Cold Springs Trail at a distance of approximately 1,900 feet to the north, where the trail extends along a ridgeline at an elevation of 1,600 feet above sea level, approximately 1,000 feet above the proposed Basin expansion area.

**County Environmental Thresholds.** The County's Visual Aesthetics Impact Guidelines classify coastal and mountainous areas, the urban fringe, and travel corridors as "especially important" visual resources. A project may have the potential to create a significantly adverse aesthetic impact if (among other potential effects) it would impact important visual resources, obstruct public views, remove significant amounts of vegetation, substantially alter the natural character of the landscape, or involve extensive grading visible from public areas. The guidelines address public, not private views.

**Impact Discussion**:

**a).** ***Less than Significant.*** Project construction and staging areas would not be visible from a public scenic vista, or a designated or eligible scenic roadway. Coast live oak trees on the western shoulder of East Mountain Drive provide visual screening of the Project area from the roadway. The proposed Basin expansion would involve revegetation of the site's area via restoration of the basin slopes with native riparian species in the vicinity of East Mountain Road, which would further

improve screening of the site (see Section 4.4, *Biological Resources*). The Project, including construction and staging, would not impact any designated or eligible scenic vistas. The site would not be visible from West Mountain Drive, approximately 1.0 mile from the site. The visual experience of the Project site from East Mountain Drive is ephemeral due to the road's 35 mile per hour speed limit and tree screening along the majority of the Project site. An exception is three gaps in roadside foliage each ranging from approximately 50 to 125 feet in length. East Mountain Road travelers would experience Basin expansion area views for less than 5 seconds while driving by, consistent with existing views of the basin. The proposed 0.9-acre Basin expansion area would be visible from Cold Springs Trail, but at a distance (1,900 feet) and elevation (1,000 feet) where it would not represent a substantial change in the regional visual character. Basin expansion activity would also be consistent with periodic existing Basin maintenance activities, such that the short-term earthwork would not be precedent-setting. In the long-term, the Basin expansion area would also be revegetated with native species along with the existing approximately 1.5-acre Basin providing a beneficial visual experience, given that the basin would remain completely vegetated for many years between maintenance clean-outs. Reestablishment of riparian habitat vegetation occurs within 2 years of maintenance, such that the basin's visual resources are generally characterized by the restored vegetation, except for periodic short-terms after clearing Therefore, the potential impacts to scenic vistas from Project construction and operation would be **less than significant**.

**b). *Less than Significant.*** The proposed Basin expansion area would only be publicly experienced from East Mountain Drive. The duration of this public viewing experience during construction would be ephemeral and less than significant. Earthwork activity would be similar to existing periodic Basin maintenance. In the long term, the Basin expansion area would be restored with native riparian species that would provide for a greater expanse of riparian habitat than presently experienced (see Section 4.4, *Biological Resources*). Long-term views of the Basin expansion area would be compatible with the existing Debris Basin. Therefore, the potential short- and long-term impacts to scenic vistas from proposed Basin expansion would be **less than significant**.

**c). *No Impact.*** Project construction and operation would not result in any sources of daytime nor nighttime light and glare impacts. Therefore, **no impact** associated from light and glare would occur.

**d). *No Impact***. No structures are proposed within the proposed Basin expansion area. Basin expansion areas would be perceived as an extension of the existing topographic depression westward. Therefore, **no impacts** associated with potential incompatible structures would occur.

**Cumulative Impacts:** Basin expansion activity would not result in a substantial change in the aesthetic character of the area, as it would represent a minor (approximately 0.9-acre) extension of the existing topographic depression westward. Of the related cumulative projects identified in Section 3.2, the proposed Randall Road Debris Basin and proposed improvements to the Cold Springs, San Ysidro, Romero, and Santa Monica debris basins, and periodic maintenance of the San Ysidro, Romero, Santa Monica debris basins occurring over the next 3 years would result in

similar localized, short-term modifications to visual resources in the Montecito Community Plan area. Short-term construction would be localized in different and distinct drainages within this region of influence. Additionally, each of the debris basins would be be revegetated over time. Therefore, the proposed Project combined with other related projects in the Montecito Community Plan area would result in several short-term cumulative impacts. However, because of their short duration and location throughout the Montecito Planning Area rather than within one watershed, impacts on aesthetics and visual resources would not be cumulatively considerable.

## 4.2 AGRICULTURAL RESOURCES

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs? | | | | X | |
| **b.** An effect upon any unique or other farmland of State or Local Importance? | | | | X | |

**Existing Setting:** The Project site is within a residentially designated neighborhood along the Cold Springs Creek corridor, adjacent to the existing debris basin. No agriculturally designated areas exist within the Project site or vicinity.

**County Environmental Thresholds:** The County's *Environmental Thresholds and Guidelines Manual* (Revised July 2015b), Section 4 – "Agricultural Resource Guidelines," provides a methodology for evaluating agricultural resources. However, since there would be no potential for impacts to agricultural resources at the project site, these guidelines do not apply.

**Impact Discussion:**

**a, b). *No Impact*.** The Project site has no agricultural lands or farmland of State or Local Importance, and has never been used for agricultural purposes. Therefore, the Project would have **no impact** on agricultural resources.

**Cumulative Impacts:** The project would have no direct or indirect impacts to agricultural operations or lands. Related projects in Section 3.2 also would not have a cumulatively considerable impact on agricultural resources. Therefore, the proposed Project combined with other projects in the Montecito Community Plan area would not result in cumulatively considerable impacts on agricultural resources.

**Mitigation and Residual Impact: No impacts** are identified. Therefore, mitigation is not necessary and residual impacts would not occur.

## 4.3a AIR QUALITY

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)? | | X | | | |
| **b.** Excessive Long-term Operational Emissions? | | | | X | |
| **c.** The creation of objectionable smoke, ash or odors? | | | | X | |
| **d.** Extensive dust generation? | | X | | | |

**Existing Setting:** The project site is located in the South Central Coast Air Basin (SCCAB) that encompasses San Luis Obispo, Santa Barbara, and Ventura counties. The Santa Barbara County Air Pollution Control District (SBCAPCD) monitors and regulates the local air quality in Santa Barbara County.

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include reactive organic compounds (ROCs; also referred to as volatile organic compounds (VOCs), oxides of nitrogen (NOx), carbon monoxide (CO), sulfur oxides (SOx), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (PM10), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size (PM2.5). ROCs and NOx are important because they are precursors to ozone (O3).

Air pollution control is administered on three governmental levels. The U.S. Environmental Protection Agency (EPA) has jurisdiction under the Clean Air Act, the California Air Resources Board (CARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act, and the SBCAPCD shares responsibility with the CARB for ensuring that all State and Federal ambient air quality standards are attained within the Santa Barbara County portion of the SCCAB.

In analyzing cumulative air quality impacts from the proposed project, the assessment must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the County is designated as nonattainment for the National Ambient Air Quality Standards (NAAQS)

or the California Ambient Air Quality Standards (CAAQS). An area is designated in attainment when it is in compliance with the NAAQS and/or CAAQS, which are set by the U.S. Environmental Protection Agency (EPA) or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified." The County of Santa Barbara is currently in attainment of NAAQS and is in attainment for all CAAQS with the exception of the state 8-hour O3 standard and the state standards for PM10 (CARB 2018; EPA 2015). The County has been designated a "non-attainment" area for State particulate matter ($PM_{10}$) standards and a "non-attainment-transitional" area for the State 8-hour ozone standard, which indicates that pollution concentrations violate the State standard but are nearing attainment (CARB 2018).

**Potentially Applicable SBCAPCD Rules and Regulations**: The SBCAPCD Rules and Regulations establish emission limitations and control requirements for various sources, based upon their source type and magnitude of emissions. The SBCAPCD rules applicable to the proposed project may include the following:

- Rule 302 (Visible Emissions). Rule 302 prohibits emissions of visible air contaminants from any potential source of air contaminants. The rule prohibits air contaminants, other than water vapor, that are a certain level of darkness or opacity from being discharged for a combined period of more than three minutes in any one hour.
- Rule 303 (Nuisance). This rule could apply to fugitive dust emitted during proposed construction activities or odors during operation. This rule states that a person shall not discharge air contaminants from any source that can cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or that can endanger the comfort, repose, health, or safety of any such persons or their business or property.
- Rule 311 (Sulfur Content of Fuels). The purpose of this rule is to limit the sulfur content in gaseous fuels, diesel and other liquid fuels, and solid fuels for the purpose of both reducing the formation of SOx and particulates during combustion.
- Rule 345 (Control of Fugitive Dust from Construction and Demolition Activities). Rule 345 establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites. The rule includes measures for minimizing fugitive dust from on-site activities and from trucks moving on- and off-site.

**County Environmental Thresholds:** Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (as amended in July 2015) addresses the subject of air quality. The thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- emit (from all project sources, mobile and stationary), less than the daily trigger (55 pounds per day of NOx or ROC, 80 pounds per day for PM10) for offsets set in the APCD New Source Review Rule, for any pollutant; and
- emit less than 25 pounds per day of NOx or ROC from motor vehicle trips only; and
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone); and
- not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- be consistent with the adopted federal and state Air Quality Plans.

The County has not established thresholds for temporary impacts associated with construction activities; however, the County's Grading Ordinance requires standard dust control conditions for all projects involving grading activities.

The SBCAPCD does not currently have quantitative thresholds of significance in place for short-term construction emissions; however, the SBCAPCD uses 25 tons per year for any pollutant[1] as a guideline for determining the significance of construction impacts. In addition, standard dust control measures must be implemented for any discretionary project involving earth-moving activities. Some projects have the potential for construction-related dust to cause a nuisance. Because Santa Barbara County is currently in nonattainment for the state PM10 standard, dust mitigation measures are required for all discretionary construction activities (regardless of the significance of the fugitive dust impacts) based on policies within the 1979 Air Quality Attainment Plan (SBCAPCD 2015).

Although quantitative thresholds of significance are not currently in place for short-term emissions, CEQA requires that short-term impacts such as exhaust emissions from construction equipment and fugitive dust generation during grading be discussed in the environmental document. In the interest of public disclosure, the SBCAPCD recommends that construction-related NOx, ROC, PM10 and PM2.5 emissions from diesel and gasoline powered equipment, paving, and other activities be quantified. Construction emissions for the project were estimated using the California Emissions Estimator Model (CalEEMod) (Attachment A).

[1] The 25 tons per year guideline is based on the SBCAPCD rule for stationary source construction emissions offsets (Rule 202 D.16), which considers any pollutant (i.e., all pollutants for which an AAQS has been established by the EPA or CARB and the precursors to such pollutants), except CO. The SBCAPCD staff recommends that for CEQA assessments for typical land use projects that all criteria air pollutants estimated, which typically include ROC, NOx, CO, SOx, PM10, and PM2.5, be compared to the guideline of 25 tons per year. The approach utilized in this air quality assessment is consistent with the direction provided by the SBCAPCD staff for the proposed project.

**Impact Discussion:**

**a, d). *Less than Significant with Mitigation*.**

**Short Term Construction Emissions***:* Project construction would require approximately 19,000 cy of earthwork undertaken over 35 to 45 working days. Short-term construction activities would occur during site preparation and grading. The proposed Project would generate short-term criteria pollutants to the local airshed during soil disturbances, and associated dust emissions and combustion pollutants from on-site construction equipment.

The CalEEMod Version 2016.3.2 program calculated the worst-case scenario short-term construction emissions of 14.491 pounds per day of $PM_{10}$ (Table 4; Appendix A). The annual emissions of $PM_{10}$ were estimated to be approximately 0.277 tons per year, which is in compliance with the SBCAPCD threshold of 25 tons per year. Earth-moving operations at the Project site would therefore not have the potential to result in significant project-specific emissions of fugitive dust and $PM_{10}$ with implementation of standard dust control measures that are required for all new development projects in the County.

Emissions of ozone precursors ($NO_X$ and ROC) during Project construction would result primarily from heavy earthmoving equipment use onsite. Using default values, the CalEEMod program calculated the worst-case scenario short-term construction emissions during the proposed mid-summer to mid-November (prior to the rainy season) construction period of 110.373 pounds per day of $NO_X$ and 4.777 pounds per day of ROC (Table 4; Attachment X). Estimated annual emissions indicate that the estimated emitted tons per year for each criteria pollutant would be in compliance with the SBCAPCD threshold of 25 tons per year (Table 5, Appendix A). Due to the limited period that grading activities would occur on the project site of 35 to 45 approximate working days, construction-related emissions of $NO_X$ and ROC would not be significant on a project-specific or cumulative basis.

**Table 4**
**Estimated Maximum Daily Construction Emissions (pounds per day)**

| | ROC | $NO_x$ | CO | $SO_2$ | $PM_{10}$ | $PM_{2.5}$ | $CO_2E$ (MT/year) |
|---|---|---|---|---|---|---|---|
| TOTAL (2020) | 4.777 | 110.374 | 46.763 | .314 | 14.491 | 6.551 | 609.363 |

CalEEMod Version 2016.3.2, Assumed all construction equipment working 35-45 days
Air quality emissions expressed in pounds/day, GHG Emissions ($CO_2E$) expressed in total Metric Tons per year.

**Table 5**
**Estimated Annual Construction Emissions (tons per year)**

| | ROC | $NO_x$ | CO | $SO_2$ | $PM_{10}$ | $PM_{2.5}$ | $CO_2E$[1] |
|---|---|---|---|---|---|---|---|
| TOTAL (2020) | 0.083 | 2.128 | 0.805 | 0.0006 | 0.277 | 0.123 | 609.363 |
| *SBCAPCD Threshold* | *25* | *25* | *25* | *25* | *25* | *25* | *N/A* |
| Threshold Exceeded? | No | No | No | No | No | No | N/A |

CalEEMod Version 2016.3.2, Assumed all construction equipment working 35-45 days
Air quality emissions expressed in pounds/day, GHG Emissions ($CO_2E$) expressed in total Metric Tons per year.
[1] SBCAPCD thresholds apply to ROC, NOx, CO, SOx, PM10, and PM2.5See Section 4.3b, *Greenhouse Gases* for further discussion on GHG emissions ($CO_2E$). ,

Due to the non-attainment status of the local air basin for ozone, the project would be required to implement measures recommended by the SBCAPCD to reduce construction-related emissions of ozone precursors to the extent feasible as detailed in Mitigation Measure MM AQ-1. Compliance with the equipment and vehicle exhaust reduction measure is routinely required for all new development in the County. The County does not have thresholds established for short-term construction emissions. However, the application of equipment exhaust reduction by the County and SBCAPCD would ensure potential air quality impacts from short-term construction emissions would be **less than significant with mitigation.**

**Fugitive Dust Emissions:** Airborne dust particles can be inhaled and lodge deep in the lungs. Short-term respiratory problems can include pain, shortness of breath and difficulty breathing. Long-term problems can include decreased lung function, aggravated asthma, bronchitis, and other respiratory illnesses. Particle pollution can also impact the heart and cardiovascular system. Certain demographics are especially vulnerable to adverse health effects due to particulate matter inhalation. Sensitive populations include children, seniors, exercising adults, and those who

already have respiratory or heart conditions (SBCAPCD 2016). Soil at the proposed project site has the potential to create an impact should it be disturbed during construction of the project and become airborne as dust. As stated previously, the SBCAPCD has not established construction $PM_{10}$ emissions thresholds. However, because the County is currently in nonattainment for the state $PM_{10}$ standard, dust mitigation measures are required for all discretionary construction activities, regardless of the significance of the fugitive dust impacts, based on policies within the 1979 Air Quality Attainment Plan. These measures are required for all projects involving earthmoving activities regardless of the project size or duration. However, since fugitive dust would be generated during expansion activities and potentially create adjacent health impacts, the District would implement Mitigation Measures MM-AQ-2 and MM-AQ-3 that include dust control measures from the County's *A Planner's Guide to Conditions of Approval and Mitigation Measures* and the SBCAPCD *Fugitive Dust Control Measures*. The dust control measures would include surface watering, use of soil binders, installation of grates at project entrances to catch mud and dirt from equipment and vehicles, rules for hauling, street sweeping, and limiting equipment speeds on unpaved areas during construction to prevent the generation of dust and resulting air quality impacts. Proper implementation of these measures would fully mitigate fugitive dust emissions. Therefore, the potential for fugitive dust to impact air quality with implementation of Mitigation Measures MM-AQ-2 and MM-AQ-3 would be **less than significant with mitigation.**

**b). *No Impact.*** *Long Term Operation Emissions*: The Project site would not construct habitable space that would necessitate the daily use of energy, machinery, or automobiles. Routine maintenance of the debris basin would be required on an as-needed basis; however, ongoing and existing basin maintenance occurs and would be subject to the District's permitted Debris Basin Maintenance Program, including existing Program air quality minimization measures. Therefore, **no impact** due to the long-term operational emissions from the proposed project would occur**.**

**c). *No Impact.*** Proposed Basin expansion activities involve debris capture and flood conveyance and drainage, and would not generate smoke, ash, or odors. As a result, **no impact** on air quality would occur.

**Mitigation and Residual Impact:** The following mitigation measures would reduce the project's air quality impacts to a less than significant level:

**MM-AQ-1: Equipment and Vehicle Exhaust.** Particulate emissions from diesel exhaust are classified as carcinogenic by the State of California. The following is a list of regulatory requirements and control strategies that should be implemented to the maximum extent feasible. Measures shall be shown on grading and building plans, and shall be adhered to throughout grading, hauling, and construction activities.

The following measures are required by state law:

All portable diesel-powered construction equipment shall be registered with the State's portable equipment registration program or an APCD permit be obtained.

a) Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.
b) All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

The following measures are recommended:

a) Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
b) Diesel powered equipment should be replaced by electric equipment whenever feasible. If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts, and diesel particulate filters as certified and/or verified by EPA or California.
c) Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
d) All construction equipment shall be maintained in tune per the manufacturer's specifications.
e) The engine size of construction equipment shall be the minimum practical size.
f) The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
g) Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

**Plan Requirements and Timing:** These requirements shall be noted on all grading plans.

**Monitoring:** District staff shall ensure measures are on plans. Inspectors shall spot check and shall ensure compliance onsite. APCD inspectors shall respond to nuisance complaints.

**MM-AQ-2: Fugitive Dust Control.** Consistent with SBCAPCD requirements and County Standards, the following dust control measures shall be implemented by the contractor/builder to reduce fugitive dust PM10 emissions generated during earthmoving construction activities as applicable:

a) Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site.
b) During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.
c) During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site.
d) Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph at a minimum.
e) Whenever wind exceeds 15 mph, increased watering frequency should be required and the site watered at least once each day including weekends and/or holidays.
f) Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
g) Minimize amount of disturbed area and reduce onsite vehicle speeds to 15 mph or less.
h) Order increased watering as necessary to prevent transport of dust offsite.
i) If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin. Soil binders should be reapplied as needed.
j) Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
k) After clearing, grading, earth moving, or excavation is completed, treat the disturbed area by watering, or revegetation, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
l) If the site is graded and left undeveloped for over four weeks, the Owner/Applicant shall immediately: (i) Seed and water to re-vegetate graded areas; and/or (ii) Spread soil binders; and/or; (iii) Employ any other method(s) deemed appropriate by P&D or APCD.

**Plan Requirements and Timing:** These dust control requirements shall be noted on all grading and building plans.

**Pre-Construction Requirements**: The contractor or builder shall provide staff and APCD with the name and contact information for an assigned onsite dust control monitor(s) who has the responsibility to:

a. Assure all dust control requirements are complied with including those covering weekends and holidays.
b. Order increased watering as necessary to prevent transport of dust offsite.
c. Attend the pre-construction meeting.

**Timing**: The dust monitor shall be designated prior to the initiation of grading. The dust control components apply from the beginning of any grading or construction throughout all development activities until final occupancy clearance is issued.

**Monitoring:** District staff shall ensure measures are on plans. Inspectors shall spot check and shall ensure compliance onsite. APCD inspectors shall respond to nuisance complaints.

**MM-AQ-3: Control of Fugitive Dust from Construction and Demolition Activities (SBCAPCD Rule 345).** The County and project contractor shall comply with the following applicable SBCAPCD Rule 345 requirements of and standards for control of fugitive dust at all times. Rule 345 standards for demolition are not included as the project does not include demolition of structures.

1. Visible Fugitive Dust Beyond the Property Line. No person shall engage in any construction or demolition activity or earth moving activities subject to this rule in a manner that causes discharge into the atmosphere beyond the property line visible dust emissions of 20% opacity or greater for a period or periods aggregating more than 3 minutes in any 60-minute period.
2. Truck Hauling. No person, including facility or site owner or operator of source, 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 utilized:
    a. Use properly secured tarps or cargo covering that covers the entire surface area of the load or use a container-type enclosure.
    b. 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.
    c. Water or otherwise treat the bulk material to minimize loss of material to wind or spillage.
    d. Other effective dust prevention control measures approved in writing by the Control Officer.
3. Track-Out/Carry-Out. Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall be controlled as outlined below:
    a. Visible roadway dust shall be minimized by the use of any of the following trackout/carry-out and erosion control measures that apply to the project or operations: trackout grates of gravel beds at each egress point, wheel-washing at each egress point during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and
    b. Visible roadway dust shall be removed at the conclusion of each work day when bulk material removal ceases, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only a PM10-Efficient Street Sweeper shall be used. The use of blowers for removal of track-out/carry-out is prohibited.

**Plan Requirements and Timing:** All dust control requirements shall be included on noted on all grading plans prior to construction.

**Pre-Construction Requirements:** The contractor shall provide the Flood Control District monitoring staff and SBCAPCD with the name, telephone number, and contact information for an assigned onsite dust control monitor(s) prior to construction who has the responsibility to:

a. Assure all dust control requirements are complied with including those covering weekends and holidays.

b. Order increased watering as necessary to prevent transport of dust offsite.

c. Attend the pre-construction meeting.

**Timing:** The District monitor shall be designated prior to construction and duties shall include holiday and weekend periods when work may not be in progress. The dust control components apply from the beginning of any construction or grading throughout all development activities.

**Monitoring:** The County Flood Control District shall ensure dust control measures are implemented and included in plans. The District assigned engineering inspector shall ensure compliance onsite. SBCPACD inspectors shall respond to nuisance complaints.

**Cumulative Impacts**: The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the significance criteria for air quality. Therefore, the project's contribution to regionally significant air pollutant emissions is not cumulatively considerable, and its cumulative impact would be **less than cumulatively considerable.**

## 4.3b AIR QUALITY- GREENHOUSE GAS EMISSIONS

| Greenhouse Gas Emissions | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | X | | |
| **b.** Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | X | | |

**Existing Setting:** Greenhouse gases (GHGs) are gases that absorb infrared radiation in the atmosphere. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Global climate change concerns are focused on whether human activities are

leading to an enhancement of the greenhouse effect. GHGs include carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride ($SF_6$), and nitrogen trifluoride ($NF_3$). If the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere will gradually increase. Globally, climate change has the potential to impact numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. Climate change is already affecting California: average temperatures have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later. There is strong evidence to support that human activities have accelerated the generation of greenhouse gases beyond natural levels. The overabundance of GHGs in the atmosphere has led to a warming of the earth and has the potential to severely impact the earth's climate system.

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP), which varies among GHGs. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of $CO_2$. Thus, GHG emissions are typically measured in terms of pounds or tons of $CO_2$ equivalent ($CO_2E$)[2].

Climate change results from GHG emissions "*…generated globally over many decades by a vast number of different sources*" rather than from GHG emissions generated by any one project (County of Santa Barbara Planning and Development 2015). As defined in CEQA Guidelines Section 15355 and discussed in Section 15130, "…a cumulative impact consists of an impact which is created as a result of the combination of the [proposed] project…evaluated…together with other projects causing related impacts." Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs (SBCAPCD 2015). This approach is consistent with the Final Statement of Reasons for Regulatory Action for amendments to the CEQA Guidelines, which confirms that an environmental impact report or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable.

[2] The $CO_2E$ for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of $CO_2E$ = (metric tons of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for CH4 is 21, which means that emissions of 1 metric ton of CH4 are equivalent to emissions of 21 metric tons of $CO_2$, and the GWP for N2O is 310, based on the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report. Although the IPCC has released subsequent Assessment Reports with updated GWPs, CARB reporting and other statewide documents utilize the GWP in the IPCC Second Assessment Report. As such, it is appropriate to use the hardwired GWP values in CalEEMod from the IPCC Second Assessment Report.

**County Environmental Thresholds:**

Santa Barbara County's Energy and Climate Action Plan (ECAP), adopted in 2015, is a GHG emission reduction plan. The County has been implementing the plan's emission reduction measures since 2016. However, the County is not projected to meet the 2020 GHG emission reduction goal contained within the plan, and the plan is going to be updated beginning in fiscal year 2019-2020. Therefore, at this time, a significance threshold is more appropriate for project-level GHG emission analysis, rather than tiering off the ECAP's Environmental Impact Report (EIR).

CEQA Guidelines Section 15064.4(a) states "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project." CEQA Guidelines Section 15064.4(b) further states,

> A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
>
> (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
>
> (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project...

The County of Santa Barbara does not have an adopted GHG emission significance threshold for sources other than industrial stationary sources. Therefore, significance thresholds from other California jurisdictions or agencies can be appropriately applied to land use projects within Santa Barbara County, as long as substantial evidence is provided to describe why the selected threshold is appropriate (CEQA Guidelines, § 15064.7(d)). In 2012, San Luis Obispo County Air Pollution Control District (APCD) established an annual significance threshold of 1,150 metric tons of carbon dioxide equivalent ($MTCO_2e/yr$) for both residential and commercial projects. This significance threshold is approximately equivalent to the operational GHG emissions associated with a 70- unit residential subdivision in an urban setting (49- unit rural development) or a 70,000 sq. ft. office building (San Luis Obispo County APCD 2012). Santa Barbara County selected the San Luis Obispo County APCD threshold of 1,150 $MTCO_2e/yr$ as the most appropriate threshold to determine significance of cumulative impacts from GHG emissions for this proposed project. The rationale for applying the San Luis Obispo County APCD GHG emissions significance threshold is discussed below.

**Threshold Applicability**

- The threshold applies to GHG emissions that are not industrial stationary sources, but that are subject to discretionary approvals by the County, where the County is the CEQA lead agency.
- The threshold was developed to be consistent with Assembly Bill 32 (the California Global Warming Solutions Act of 2006), which established the State of California's 2020 GHG emissions reduction goal.

- The selected threshold considers GHG emissions comprehensively by measuring in annual metric tons of carbon dioxide equivalent.
- The threshold assessed historical and potential future land use development trends in San Luis Obispo County to establish the significance threshold. San Luis Obispo and Santa Barbara Counties have similar historical and potential future land use development trends.
- The threshold applies to GHG emissions from residential and commercial land use projects.
- The threshold assumes that construction emissions will be amortized over the life of a project and added to the operational emissions.

**Impact Discussion:**

**a, b). *Less than Significant.*** Project-generated GHG emissions associated with temporary construction activity were quantified using CalEEMod (see Attachment A). Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling trucks, and worker vehicles. The CalEEMod Annual Report prepared for the Project identifies the annual $CO_2E$ total at 609.363 MT $CO_2E$/year for the construction phase of Debris Basin expansion and improvements. The amortized annual emissions rate, which reflects estimated Project-generated construction emissions annualized over 25 years, would therefore be approximately 24.4 MT $CO_2E$ per year. Subsequent periodic Basin expansion area maintenance GHG emissions would be addressed under the District's exist Program Maintenance Plan (Santa Barbara County 2017). The Project's estimated GHG emissions would be temporary in duration, and would be less than the County of San Luis Obispo APCD threshold. GHG impacts would be **less than significant.**

While climate change impacts cannot result from a particular project's GHG emissions, the Project's incremental contribution of GHG emissions combined with all other sources of GHGs would potentially have a significant impact on global climate change. For this reason, a project's cumulative contribution to GHG emissions is analyzed below under "Cumulative Impacts." As such, project-specific impacts would be **less than significant.**

**Cumulative Impacts:** Comparison of the proposed Project (0.9-acre expansion of an existing approximately 1.5-acre debris basin, channel grading, and habitat restoration) to the County of San Luis Obispo APCD threshold of significance (1,150 MT $CO_2E$/yr) demonstrates that the Project's temporary and incremental contribution to GHG emissions would have a **less than cumulatively considerable** effect on GHG emissions.

**Mitigation and Residual Impact:** As potential project-specific impacts and cumulative contributions would less than significant and less than considerable, no additional mitigation is necessary. Therefore, no mitigation would be required, and GHG emission residual impacts would be **less than significant**.

## 4.4 BIOLOGICAL RESOURCES

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| Flora | | | | | |
| **a.** A loss or disturbance to a unique, rare or threatened plant community? | | | X | | |
| **b.** A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants? | | | X | | |
| **c.** A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)? | | X | | | |
| **d.** An impact on non-native vegetation whether naturalized or horticultural if of habitat value? | | | X | | |
| **e.** The loss of healthy native specimen trees? | | X | | | |
| **f.** Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat? | | | | X | |
| Fauna | | | | | |
| **g.** A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals? | | | X | | |
| **h.** A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)? | | | X | | |
| **i.** A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)? | | X | | | |
| **j.** Introduction of barriers to movement of any resident or migratory fish or wildlife species? | | | X | | |
| **k.** Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife? | | | X | | |

**Existing Setting:** The proposed Basin expansion area is within the Cold Springs Creek floodway and a riparian woodland corridor environmentally sensitive habitat (ESH) as designated in the Montecito Community Plan (Santa Barbara County 1993). The proposed Debris expansion area has been subject to periodic brushing of riparian vegetation similar to the adjacent existing debris basin, including in 2018. With the exception of a few small sprouts, the basin is currently devoid of vegetation. Subsequent to periodic maintenance, vegetation in the existing desilted debris basin is recolonized with willow riparian scrub habitat adjacent to the pilot channel and basin floor, with dominant plant species including but not limited to arroyo willow, sandbar willow, and mule fat (Santa Barbara County 2017).

Habitat in the project area was extensively damaged in the Thomas Fire of late 2017 and subsequent debris flow on January 9, 2018. The debris basin itself if comprised of mostly bare rock and substrate with less than 1% vegetative cover. The adjacent hillside where the basin expansion is proposed is comprised of a mixed community of coast live oaks, sycamore trees, laurel sumac, willow thickets and resprouts, telegraph weed, California sagebrush, and non-native species such as tree tobacco, castor bean, and ruderal herbaceous species throughout. Fallen trees, brush, litter, and debris are common, due to dead plant material from the severe drought and residual material from the 1/9/18 debris flow.

The biological value of the proposed Basin expansion area is of limited quality, as portions of the approximately 0.9 acres were used as an equipment access point and for stockpiling sediments during the 2018 debris flow event. The January 2018 mudflows and subsequent basin clearing uprooted many plant species, such that existing vegetation diversity is currently substantially lower than listed in the 2016 survey.

Based on biological assessments performed before the 2018 debris flow disaster, it is expected that the project area would eventually be recolonized with a similar willow riparian scrub habitat that was noted before the Thomas Fire.

Plant species that would potentially inhabit the Project site vicinity during periods of vegetation recolonization are identified in Table 6, below.

**Table 6**
**Cold Springs Creek Debris Basin**
**Vascular Plant List**

| Scientific Name | Common Name | Origin* |
|---|---|---|
| APIACEAE | | |
| *Conium maculatum* | Poison hemlock | I |
| APOCYNACEAE | | |
| *Vinca major* | Periwinkle | I |
| ARALIACEAE | | |
| *Ageratina adenophora* | Ironweed | I |
| ASTERACEAE | | |
| *Artemesia californica* | California sagebrush | N |
| *Artemesia douglasiana* | Mugwort | N |
| *Baccharis pilularis* | Coyotebrush | N |
| *Gnaphalium bicolor* | Bicolored everlasting | N |

| Scientific Name | Common Name | Origin* |
|---|---|---|
| *Isocoma menziesii* | Coast golden bush | N |
| *Lactuca serriola* | Prickly lettuce | I |
| *Picris echioides* | Ox tongue | I |
| *Venegasia carpesioides* | Canyon sunflower | N |
| BETULACEAE | | |
| *Alnus rhombifolia* | White alder | N |
| BRASSICACEAE | | |
| *Brassica nigra* | Black mustard | I |
| *Raphanus sativus* | Wild raddish | I |
| CHENOPODIACEAE | | |
| *Chenopodium ambrosioides* | Mexican tea | I |
| EUPHORBIACEAE | | |
| *Ricinus communis* | Castor bean | I |
| FABACEAE | | |
| *Melilotus alba* | White sweetclover | I |
| FAGACEAE | | |
| *Quercus agrifolia* | Coast live oak | N |
| MALVACEAE | | |
| *Malva nicaeensis* | Mallow | I |
| *Malva parvifolia* | Cheeseweed | I |
| MYRTACEAE | | |
| *Eucalyptus* sp. | Eucalyptus | I |
| PLATAGINACEAE | | |
| *Plantago major* | Common plantain | I |
| *Plantago lanceolata* | Plantain | I |
| PLANTANACEAE | | |
| *Platanus racemosa* | California sycamore | N |
| POACEAE | | |
| *Avena fatua* | Wild oat | I |
| *Bromus mollis* | Soft chess | I |
| *Lolium multiflorum* | Italian ryegrass | I |
| *Lolium miliacea* | Rice grass | I |
| *Polypogon monspeliensis* | Rabbitsfoot grass | I |
| POLYGONACEAE | | |
| *Polygonum lapathifolium* | Willow smartweed | I |
| *Rumex crispus* | Curly dock | I |
| ROSACEAE | | |
| *Heteromeles arbutifolia* | Toyon | N |
| *Malosma laurina* | Laurel sumac | N |
| *Rubus ursinus* | California blackberry | N |
| RHAMNACEAE | | |
| *Ceanothus spinosus* | Greenback ceanothus | N |
| *Ceanothus cuneatus* | Buckbrush | N |
| SALICACEAE | | |
| *Salix lasiolepis* | Arroyo willow | N |
| SOLANACEAE | | |
| *Solanum douglasii* | Douglas nightshade | N |
| TYPHACEAE | | |
| *Typha latifolia* | Broad-leaved cattail | N |
| *N = Native; I = Introduced | | |

Source: Santa Barbara County 2017

**County Environmental Thresholds:** The County's Environmental Thresholds and Guidelines Manual (Revised July 2008), Section 6 – "Biological Resources," includes guidelines for the assessment of biological resource impacts. Disturbance to habitats or species may be significant if they substantially impact significant resources in the following ways:

- Substantially reduce or eliminate species diversity or abundance
- Substantially reduce or eliminate quantity or quality of nesting areas
- Substantially limit reproductive capacity through losses of individuals or habitat
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources
- Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes)
- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends

Habitat-specific guidelines protect and preserve habitats such as wetlands, riparian areas, native grasslands, oak woodlands, and native trees. The following thresholds are applicable to the proposed project:

*Other Rare Habitat Types*: The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

**Impact Discussion:**

**a,b,d). *Less than Significant.*** The habitat located within the proposed Debris basin expansion area is currently substantially disturbed, consisting of barren and/or ruderal lands, non-native grasslands, coyote brush, coast live oak and sycamores, and three introduced trees (two acacia in poor health, and one eucalyptus). As a result, no sensitive species are currently known or anticipated to inhabit the site. The proposed Basin expansion would temporarily remove the degraded upland habitat, but no loss or disturbance to a unique, rare or threatened plant community would occur (a.), no reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants would occur (b.), and no impact on non-native vegetation of habitat value (the two acacia trees that are in very poor condition) would occur (c.). Therefore, impacts on biological resources would be **less than significant**.

**c). *Less than Significant with Mitigation.*** In the short-term, Basin expansion would reduce the extent, diversity, and quality of native vegetation by removing eight coast live oaks and three sycamore trees. The degraded riparian habitat ESH does not constitute a rare or threatened plant

community. Impacts on biological resources would be **less than significant with mitigation** by implementing standard Debris Basin Maintenance measures MM-BIO-1 and MM-BIO-2 (Santa Barbara County 2017).

Previous debris basin maintenance across California has resulted in many debris basins developing dense riparian forests. “In addition to providing high quality habitat, the native vegetation in these basins can provide an excellent source for the District’s biotechnical bank stabilization and revegetation projects as well as source material for Key Wood Debris (KWD) and Large Wood Debris (LWD) habitat enhancement projects” (Santa Barbara County 2017). Approximately 0.4 acres of native riparian vegetation would be planted along the Basin expansion slopes. Additional area southwest of the expanded Basin on District-owned property would also be available for restoration that would include oak (acorns from existing trees onsite would be collected and replanted), sycamore, and elderberry. Therefore, impacts to habitat and vegetation communities onsite would be **less than significant with mitigation.** As is typical with natural riparian habitat in a creek watershed, the vegetation commonly is disturbed during flooding and subsequently re-establishes within up to 2 years. Long-term biological impacts would be beneficial by increasing the spatial extent of high quality plant community within the Debris basin area from approximately 1.5 to approximately 2.4 acres that persists for many years between cleanouts during maintenance, except for periodic disturbances to riparian habitat within creeks like Cold Springs that commonly occur resulting from periodic debris flows.

**Mitigation and Residual Impact:**

**MM-BIO-1: Construction Monitoring During Maintenance Activities.** The following mitigation measures would reduce the Project’s potential construction related impacts to a less than significant level:

1. The District Biologist shall monitor maintenance activities daily to ensure that the appropriate methods and limits are used. Results of the monitoring shall be documented in the annual post-maintenance report. These activities include brushing, herbicide application, channel shaping, desilting, bank stabilization by placing fill or grading banks, bank protection construction or repair, grade stabilizer construction or repair, pilot channel construction, and access ramp construction.

**Plan Requirements and Timing:** This condition shall be included in construction plans and specifications.

**Monitoring:** The District biologist shall check plans prior to the construction as well as oversee daily construction activities.

**MM-BIO-2: Restore Temporarily Disturbed Areas.** The District shall restore channel banks containing riparian or wetland vegetation that are temporarily disturbed by maintenance or construction activities associated with the following: channel shaping, placement of bank protection, ramp construction, and repair or construction of bank protection and grade stabilizers. Restoration objectives, methods, plant species, maintenance, and monitoring shall

follow the guidelines in the updated restoration plan described in the Flood Control District Maintenance Program EIR. The restoration of channel bed habitats shall only occur if it would not conflict with the maintenance needs in the affected reach.

**Plan Requirements and Timing:** This condition shall be included in construction plans and specifications.

**Monitoring**: The District appointed biologist shall check plans prior to construction and oversee restoration activities.

**e). *Less than Significant with Mitigation.*** Vegetation removal resulting from Basin expansion would be avoided and minimized where technologically feasible, such as locating basin construction access roads away to the maximum extent from mature native trees. Eight coast live oaks and three sycamore healthy native specimen trees would be unavoidable and be removed. Impacts on biological resources would be **less than significant with mitigation** by implementing measure MM-BIO-3.

**Mitigation and Residual Impact:**

**MM-BIO-3: Native Tree Replacement.** The following mitigation measure would reduce the Project's native tree removal impact during construction to a less than significant level:

1. The District shall prepare a native Tree Replacement Plan by an approved arborist/biologist designed to reduce impacts to the 8 coast live oaks and 3 sycamore native trees onsite that would be removed. The Tree Replacement Plan's replacement trees shall be local species; the oaks and sycamore shall be replaced at a 3:1 ratio with 1-gallon specimens (with guaranteed success of the three trees), for each specimen to be removed or significantly disturbed. Replanting shall be installed within 1 year following construction completion. The replanting areas and specimens must be shown on site plans. The Tree Replacement Plan shall include:
    - Irrigation providing specimen watering on a weekly basis for the first year after installation, on a biweekly basis the second year, and on a monthly basis during the third year, if needed.
    - The trees shall be weaned off of irrigation over a period of two to three years; and
    - No permanent irrigation within a dripline of a native tree.
    - If replacement trees cannot all be accommodated onsite, the District shall submit a plan for regulatory agency approval for replacement trees to be planted offsite.
    - Tree plantings shall be monitored on an annual basis to ensure California Department of Fish and Wildlife permitting standards requiring a 3-foot high tall planting at 3 years, and 6-foot high tall planning at 5 years. Tree heights shall be monitored on a yearly basis until trees meet the height requirements.

**Plan Requirements and Timing:** This condition shall be printed on the Restoration Landscape Plan.

**Monitoring:** The District monitoring staff shall approve the Restoration Landscape Plan prior to construction.

Incorporation of MM-BIO-3 would result in **less than significant impacts** related to the loss of healthy native specimen trees.

**f).** ***No Impact.*** Proposed Basin expansion construction activity would not incorporate the use of herbicides or pesticides. The Project would not introduce new animal life or non-native plants into the area capable of harming the site's habitat. Human habitation would not occur, as the debris basin access would be limited to construction and maintenance employees approved by the District. Therefore, **no impact** on biological resources is anticipated related to the introduction of herbicides, pesticides, animal life, human habitation, and non-native plants.

***g,h,k). Less than Significant.*** The 2019 site assessment conducted by a District biologist concluded the basin had no aquatic species present onsite; however, the creek corridor may provide suitable habitat for the Baja California tree frog and steelhead trout when water is present. The habitat may also be suitable for a variety of riparian birds. No unique, rare, threatened, or endangered animal species would be anticipated onsite during construction, as the Basin pilot channel contains very little flow during the summer and fall months, and Project construction would occur outside of the rainy season. Basin expansion activity would be monitored by the District biologist and a District-contracted construction management/inspection team (see also MM BIO-1) for sensitive species to ensure that unanticipated potential impacts to onsite species would be identified and addressed. The type and extent of disturbance to the basin during the expansion project would be identical to routine maintenance activities. Impacts on biological resources would be **less than significant**.

***i).*** **Less than Significant with Mitigation.** A raptor red-tailed hawk was identified in the adjacent habitat during the 2016 site assessment conducted by a District biologist. Therefore, the potential exists for disturbance of active raptor nests and other bird nests in trees and shrubs within and adjacent to the Project site should construction occur during the bird breeding season (February 1- August 31). Active raptor nest sites are protected by the Federal Migratory Bird Treaty Act and by Sections 3503, 3503.5, and 3513 of the California Department of Fish and Wildlife Code. In addition, the Montecito Community Plan Development Standard BIO-M-18.2 requires protection of active and historical raptor nest sites when feasible. If nests were to exist when Debris basin construction were undertaken, this action would result in a short-term potentially significant impact on biological resources. Impacts on biological resources would be **less than significant with mitigation** by implementing measure MM-BIO-4.

**Mitigation and Residual Impact:**

**MM-BIO-4: Pre-Construction Bird Surveys.** Vegetation removal including clearing and grubbing and tree trimming shall avoid the bird nesting season (February 1$^{st}$ – August 31$^{st}$) as

feasible to ensure protection of breeding birds potentially on site and adjacent to the Project site during the site preparation and construction. If avoidance of the bird nesting season is infeasible, pre-construction breeding bird surveys shall be performed by a County-qualified biologist. Nesting bird pre-construction surveys shall occur within the area to be disturbed and extend outward 300 ft. or to the property boundary, consistent with existing Flood Control District basin maintenance permits. If any occupied bird nests or cavity roosts are found, the biologist shall determine an appropriate buffer zone that considers the bird species, nest location, nest height, existing pre-construction level of disturbance in the vicinity of the nest, and proposed construction activities. A buffer ranging in size from 100 ft. for nesting passerine species to 300 ft. for nesting raptors shall be determined and demarcated by the biologist with bright-orange construction fencing, flagging, construction lathe, or other means to mark the boundary, unless a smaller buffer is considered adequate based on the factors listed above.

**Plan Requirements and Timing:** Bird Surveys shall be undertaken no later than 1 to 2 weeks prior to commencement of construction. The results of the bird surveys shall be reviewed and approved prior to the commencement of construction. The buffer shall remain in place if required until any nesting young have fledged.

**Monitoring:** District staff shall conduct periodic site inspections to verify compliance with any restrictions on construction activity posed by either this mitigation measure and/or the biological survey prepared prior to commencement of construction.

**Cumulative Impacts:** Basin expansion activity would not result in a substantial change to biological resources on the site, as it would improve habitat area in the heavily degraded proposed project expansion area. Of the related cumulative projects identified in Section 3.2, only the proposed Randall Road Debris Basin and maintenance of existing San Ysidro, Romero, Santa Monica debris basins would result in similar localized modifications to biological resources in the Santa Ynez Mountain foothills. Short-term construction would be localized, and the basin would restore 0.4 acres of site habitat and improve habitat quality in the 0.9 basin expansion area overtime. Therefore, the proposed Project combined with other projects in the Montecito Community Plan area would **not result in cumulatively considerable impacts** on biological resources.

**Mitigation and Residual Impact:**

The Project includes appropriate biological surveying, native tree replacement, and construction monitoring, so the potential for habitat and species impacts would be mitigated by implementation of Mitigation Measure MM BIO-1 though MM-BIO-4**.** Residual impacts on biological resources would be **less than significant**.

## 4.5 CULTURAL RESOURCES

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Cause a substantial adverse change in the significance of any object, building, structure, area, place, record, or manuscript that qualifies as a historical resource as defined in CEQA Section 15064.5? | | | | X | |
| **b.** Cause a substantial adverse change in the significance of a prehistoric or historic archaeological resource pursuant to CEQA Section 15064.5? | | | X | | |
| **c.** Disturb any human remains, including those located outside of formal cemeteries? | | | X | | |
| **d.** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:<br><br>1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or<br><br>2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | | X | | |

**Existing Setting:** The Barbareño Chumash resided in the Montecito area of Santa Barbara County and throughout the South Coast from Carpinteria west to Point Conception. The coastal areas along the Santa Barbara Channel represent the highest density of prehistoric occupation

along the West Coast. Larger tribal villages are recorded closer to the coastline, particularly at the confluence with creeks and/or estuaries. Smaller temporary campsites and special activity areas (such as plant gathering/processing and hunting areas) were located in higher elevations within the Santa Ynez Mountain foothills, often in proximity to fresh water sources such as Cold Springs Creek.

A records search at the Central Coast Information Center of the University of California, Santa Barbara (CCIC) was completed by Wood archaeologists (November 2019) to identify the presence of any recorded sites within the Project site and a 0.5-mile radius (Attachment B- these data are confidential and are accessible to qualified personnel only). Eleven reports have been completed within this area, though none in the Basin expansion area. Five sites are recorded within 0.5 miles of the Project site, but none within the Basin expansion area. These resources include rock art (both paintings and etchings) on bedrock boulders located on upland landforms, and a small, temporary campsite including shellfish fragments and four chipped stone waste flakes on a terrace above Montecito. A search of the Native American Heritage Commission Sacred Land Inventory were negative for the presence of tribal cultural resources (Andrew Green NAHC Staff Services Analyst, November 19, 2019).

An intensive Phase 1 archaeological ground surface survey of the proposed Basin expansion areas was completed by Wood archaeologists on November 11, 2019. Ground surfaces within the Project site were intensely surveyed using 3-meter (10-foot) transects. The topography within the Project site ranges from fairly level to moderate (less than 25 percent slopes) and has been substantially modified during the 2018 debris flow and subsequent mechanical cleanup activities within the Project site (see Appendix A, Photos 2 and 3). A majority of the ground surfaces within the Project site were partially covered by annual grasses and riparian scrub, resulting in very good to complete (70 to 100 percent) ground surface visibility. Sandstone cobbles and boulders were observed throughout the entire Project site and were inspected for cultural modification such as polishing, painted petroglyphs, and cupules.

No previously unrecorded prehistoric or historic-period resources were identified during the current intensive Phase 1 survey of the Project site. The intensive Phase 1 survey of the Project site provided a very reliable evaluation of the absence of prehistoric and historic-period archaeological resources on the ground surface. Given that the area is within an active alluvial corridor of Cold Springs Creek, the potential for intact prehistoric temporary camps or activity areas to exist onsite is very low. Occupation and burial sites within the creek channel is very unlikely, as prehistoric land uses such as the temporary camp recorded on Montecito Creek in the Project site vicinity were located on upland terraces outside of areas subject to repeated flooding and associated erosion.

The only structure within the vicinity of the proposed Basin expansion area is the existing Basin grouted rock dam embankment and outlet pipe, originally constructed in 1964. The structures are periodically maintained and repaired as necessary under the Flood Control District's Program EIR (County of Santa Barbara 2001) and Basin Program Update (County of Santa Barbara 2017).

**County Environmental Thresholds**: Chapter 8 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (2008, revised February 27, 2018) contains guidelines for the identification, significance evaluation, and mitigation of impacts to cultural resources, including archaeological, historic, and tribal cultural resources. In accordance with the requirements of CEQA, these guidelines specify that if a resource cannot be avoided, it must be evaluated for importance under specific CEQA criteria. CEQA Section 15064.5(a)(3)A-D contains the criteria for evaluating the importance of archaeological and historic resources. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the significance criteria for listing in the California Register of Historical Resources: (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (B) Is associated with the lives of persons important in our past; (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (D) Has yielded, or may be likely to yield, information important in prehistory or history. The resource also must possess integrity of at least some of the following: location, design, setting, materials, workmanship, feeling, and association. For archaeological resources, the criterion usually applied is (D).

CEQA calls cultural resources that meet these criteria "historical resources". Specifically, a "historical resource" is a cultural resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources, or included in or eligible for inclusion in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1. As such, any cultural resource that is evaluated as significant under CEQA criteria, whether it is an archaeological resource of historic or prehistoric age, a historic built environment resource, or a tribal cultural resource, is termed a "historical resource".

CEQA Guidelines Section 15064.5(b) states that "a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." As defined in CEQA Guidelines Section 15064.5(b), substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project: (1) demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; (2) demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources; or (3) demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

For the built environment, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995), is generally considered as mitigated to a less than a significant impact level on the historical resource.

**Impact Discussion:**

**a). *No Impact.*** No potentially significant architectural historic structures features exist within the proposed Basin expansion site. Proposed expansion activity would not affect the existing Basin grouted rock dam embankments and outlet pipe. Therefore, **no impacts** to historic period cultural resources would occur.

**b-c). *Less than Significant.*** No cultural or archaeological resources were identified within the Basin expansion area in the background records search and during the intensive surface archaeological survey. Surface visibility during the survey was very good (generally over 70 percent) such that the reliability of the results is considered very good. Given that the area is within an active alluvial corridor of Cold Springs Creek, the potential for intact prehistoric temporary camps or activity areas to exist onsite is very low. Prehistoric occupation and burial sites within the creek channel is very unlikely, as prehistoric land uses such as the temporary camp recorded on Montecito Creek in the Project site vicinity were located on upland terraces outside of areas subject to repeated flooding and associated erosion. In order to comply with cultural resource policies, the proposed Basin expansion would be conditioned with a standard archaeological discovery clause which requires that any previously unidentified cultural resources discovered during site development are treated in accordance with the County's Cultural Resources Guidelines [Chapter 8 of the County's Environmental Thresholds and Guidelines Manual (rev.2/2018)]. Impacts on cultural resources would be **less than significant**.

**d). *Less than Significant.*** No potentially significant tribal resources including prehistoric sites or resources used by contemporary tribal members (such as vegetation for basketry, etc.) exist within the proposed Basin expansion site. Prehistoric occupation and burial sites within the creek channel is very unlikely, as prehistoric land uses such as the temporary camp recorded on Montecito Creek in the Project site vicinity were located on upland terraces outside of areas subject to repeated flooding and associated erosion. Therefore, impacts to tribal cultural resources would be **less than significant**. In order to comply with cultural resource policies, the proposed Basin expansion would be conditioned with a standard archaeological discovery clause which requires that any previously unidentified cultural resources discovered during site development are treated in accordance with the County's Cultural Resources Guidelines [Chapter 8 of the County's Environmental Thresholds and Guidelines Manual (rev.2/2018)].

**Cumulative Impacts:** Proposed construction of the Randall Road Debris Basin and improvements to the existing San Ysidro, Romero, and Santa Monica Debris Basins would occur within similar active, alluvial contexts to the proposed Project, outside of likely locations for prehistoric occupation. The potential for disturbances to unknown cultural resources within these

projects is also highly unlikely. The potential for cultural resource impacts on all other related projects, including continued maintenance of previously disturbed, existing debris basins within the Montecito Community Plan, would not result in the potential for additional impacts on cultural resources. was assessed and determined to be less than significant. Since no cultural resources were identified within the Project site and encountering unknown resources is unlikely, the proposed Project would not contribute to a cumulatively considerable impact on cultural resources. Cumulative impacts associated with all related projects within the Montecito Community Plan area would be less than significant.

**Mitigation and Residual Impact:**

As impacts on cultural resources would be less than significant, no mitigation is required and residual impacts would be **less than significant.**

## 4.6 ENERGY

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Substantial increase in demand, especially during peak periods, upon existing sources of energy? | | | X | | |
| **b.** Requirement for the development or extension of new sources of energy? | | | | X | |

**Existing Setting:** Private electrical and natural gas utility companies provide service to customers in the unincorporated areas of Santa Barbara County. Inefficient use of energy has resulted in actions to increase the energy efficiency of appliances and buildings. The local efforts that support energy efficiency include the adoption of the Energy and Climate Action Plan (County of Santa Barbara Long Range Planning Division, 2015a) and the creation of the Energy and Sustainability Initiatives Division (2015a).

**County Environmental Thresholds:** The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b) does not identify significance thresholds for electrical and/or natural gas service impacts. CEQA Guidelines Appendix F requires a discussion of energy conservation and potential energy impacts of proposed projects, with a particular emphasis on avoiding or reducing the inefficient, wasteful, and unnecessary consumption of energy.

**Impact Discussion:**

**a).** ***Less than Significant***. The proposed Basin expansion construction fleet would be fueled by gas and diesel (see Table 2 for the estimated construction equipment and personnel and Table 5, Estimated Onsite and Offsite Construction Emissions). Using the EPA GHG Equivalences Calculator, the project's estimated fuel consumption would be approximately 68,232 gallons of oil

and diesel (EPA 2019). Project construction would extend approximately 35 to 45 days and would not include any permanent components that would increase demand for existing sources of energy. Following construction, utilization, and maintenance of the Channel would not require utility service or cause the need for development of new sources of energy or the extension of energy sources. Therefore, short-term impacts on energy would be **less than significant**.

Mitigation Measure AQ-1 would limit construction equipment and diesel vehicles engine idling time, use of electric equipment in place of diesel-powered equipment when feasible, and the use of catalytic converters that would reduce consumption of gas and diesel. Additionally, the County's Energy and Climate Action Plan includes measures requiring reduced energy use in County projects, including Measure BE 10, Construction Equipment Operations, implementing best management practices for construction equipment. These recommended measures would reduce **less than significant** impacts associated with the demand of existing energy sources**.**

**b). *No Impact.*** Basin expansion would not require any long-term increase in energy demand. Future Basin expansion area maintenance would not require utility service, development of new sources of energy, or the extension of energy sources. Therefore, **no impact** on energy would occur.

**Cumulative Impacts**: The Project would not include any permanent components that would increase energy demand. Potential impacts on energy would be limited to temporary construction activities using heavy construction equipment that would be fueled by gas and diesel energy resources. Since no long-term impact on energy would occur, no Project contribution to cumulative energy resource impacts associated with the short-term Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities within the Montecito Community Plan area would occur.

**Mitigation and Residual Impact:**

As there would no potential impacts on energy, mitigation is not required; no residual impacts would occur.

## 4.7 FIRE PROTECTION

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Introduction of development into an existing high fire hazard area? | | | | X | |
| **b.** Project-caused high fire hazard? | | | | X | |
| **c.** Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for firefighting? | | | | X | |
| **d.** Introduction of development that will hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas? | | | | X | |
| **e.** Development of structures beyond safe Fire Dept. response time? | | | | X | |

**Existing Setting:** The County of Santa Barbara experiences annual cycles of elevated fire danger. Due to low annual precipitation, highly flammable vegetation, and high velocity "sundowner" and "Santa Ana" winds, the County has routinely experienced major wildfires that can threaten residents' safety and damage property.

The Project area is located in a State and local High Fire Hazard Area (CalFire 2008, Santa Barbara County 1993).

All standard temporary construction traffic control measures during proposed Basin expansion activity would be established consistent with Montecito Fire Protection District standards. The Project site is readily accessible by Montecito Fire Protection District (MFPD) Station No. 2, staff located at 2300 Sycamore Canyon Road (MFPD 2018).

**County Environmental Thresholds**: The County Fire Department Standards do not apply to the proposed Project, as the Basin expansion would not include any structures over 5,000 square feet and would not include development of any new residential or access roads.

**Impact Discussion:**

**a-e).** ***No Impact.*** The proposed Project is located within a High Fire Hazard Area, but it would not introduce potential fire hazards. The Basin expansion would not introduce new development or structures into an existing fire hazard area, nor would it require or hamper fire protection services. The Project is located within an adequate response time from MFPD Station No. 2, and would not hinder existing fire department response times. Construction activity would extend between 35 and 45 days, and would include standard traffic control to ensure that temporary truck trips would

not interfere with potential fire response equipment (see Figure 2). Therefore, **no impact** on fire protection would result.

**Cumulative Impacts:** As the proposed Project would not have any long-term impacts on fire protection, its cumulative impact on fire protection including the Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities within the Montecito Community Plan area would be **less than cumulatively considerable**.

**Mitigation and Residual Impact:** As there would no potential impacts on fire protection, mitigation is not required; **no residual impacts** would occur.

## 4.8 GEOLOGIC PROCESSES

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards? | | | | X | |
| **b.** Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading? | | X | | | |
| **c.** Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise? | | | | X | |
| **d.** The destruction, covering, or modification of any unique geologic, paleontological, or physical features? | | | | X | |
| **e.** Any increase in wind or water erosion of soils, either on or off the site? | | X | | | |
| **f.** Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake? | | | X | | |

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **g.** The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent? | | | | X | |
| **h.** Extraction of mineral or ore? | | | | X | |
| **i.** Excessive grading on slopes of over 20%? | | | X | | |
| **j.** Sand or gravel removal or loss of topsoil? | | X | | | |
| **k.** Vibrations, from short-term construction or long-term operation, which may affect adjoining areas? | | | X | | |
| **l.** Excessive spoils, tailings or over-burden? | | | | X | |

**Existing Setting:** The proposed Basin expansion area is within the Cold Springs Creek floodplain. As stated previously, the soils are comprised of silty sand intermixed with large cobble and rocks that have been transported from upstream during intense precipitation events.

**County Thresholds of Significance:** Pursuant to the County's Adopted Thresholds and Guidelines Manual, impacts related to geological resources may have the potential to be significant if the proposed project involves any of the following characteristics:

1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by P&D or PWD. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. "Special Problems" areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.
2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.
3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
4. The project is located on slopes exceeding 20% grade.

**Impact Discussion:**

**a). *No Impact***. The Santa Barbara County Comprehensive Plan, Seismic Safety and Safety Element characterizes the Project site as having low problem ratings for liquefaction, compressible-collapsible soils, slope stability/landslides, high groundwater, and moderate problem ratings for seismic-tectonic hazards, expansive soils and soil creep. It is within a low to moderate geologic problems index area (Santa Barbara County 2015).

The Project site is not underlain by any known fault, but is within the vicinity of the Montecito Fault. Compliance with standard construction regulations would reduce potential ground shaking impacts caused by movement along a distant fault to a less than significant level. The proposed Basin expansion would be removing soils but not include construction of any new structures. Therefore, soil characteristics identified in the Seismic Safety and Safety Element would not affect the integrity of the completed Basin expansion. Therefore, no impacts related to geological hazards would occur.

**c-d). *No Impact.*** The proposed project is not located in proximity to coastal bluffs and would not be impacted by bluff retreat or sea level rise. In addition, the project would also not cause the destruction, covering, or modification of any unique geologic, paleontological, or physical features. Therefore, **no impact** would occur.

**b,e,j). *Less than Significant with Mitigation*.** Grading for Basin expansion would remove portions of vegetative cover and disturb the ground and sub-ground surface, thereby increasing the potential for short-term erosion and sedimentation impacts. Application of standard County grading and erosion control mitigation measure MM-GEO-1 would ensure that the potential for the project to cause substantial erosion, sloughing, and sediment impacts would be reduced to **less than significant with mitigation.**

**f). *Less than Significant Impact.*** During most storm flows, no changes to Cold Springs Creek siltation, deposition or erosion would occur, as is the existing case. During very large flow events or debris flows, sediment and debris would be more likely to deposit in the proposed Basin expansion area. Material (or portions of it) that would have been carried downstream over the spillway of a full basin would be trapped with the expanded capacity. Therefore, changes in deposition or erosion or changes in siltation that would potentially modify the Cold Springs Creek channel would be **less than significant.**

**g)*. No Impact.*** The Project would not involve structural construction. The flood control enhancements would not require placement or use of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent. Therefore, **no impact** geological resources would occur.

**h). *No Impact.*** Basin expansion would not involve mining for minerals or ores. Therefore, **no impact** geological resources would occur.

**i). *Less than Significant.*** Grading within the Basin expansion area would expand the basin bottom and side slopes. No new structures would be constructed or inhabited above or on high slopes, and no residential, industrial, or commercial facilities would be constructed. All grading

would be conducted according to plans designed by a licensed geotechnical engineer. Therefore, impacts on geological resources would be **less than significant.**

**k).** ***Less than Significant.*** Any vibrations from Basin expansion activity that would affect adjoining areas would be short term, occur during daylight hours, and be similar to periodic maintenance of the existing approximately 1.5-acre debris basin. Project construction would extend between 35 to 45 working days. The nearest residences are between 200 and 375 feet away. Any vibration impacts from construction would be temporary. Long-term operation of the project would not cause any vibrations that would affect adjoining areas. Therefore, impacts resulting from geological resource vibrations would be **less than significant.**

**l).** ***No Impact.*** The proposed Project would not result in excessive spoils, tailings or over-burden during construction or post-construction operation. Therefore, **no impact** on geological resources would occur.

**Cumulative Impacts:**

As the proposed Project would not have any long-term impacts on geological resources, its cumulative impact on fire protection combined with other related projects in the Montecito Community Plan area including the Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities would be less than cumulatively considerable.

**Mitigation and Residual Impact:**

The following mitigation measures would reduce the project's geologic impacts to a less than significant level:

**MM-GEO-1: Erosion and Sediment Control Plan.** Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until re-graded acres have been stabilized by structures, long-term erosion control measures or permanent landscaping. The District shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments onsite. The SWPPP shall be submitted to the State Water Resources Control Board for approval**.**

**Plan Requirements and Timing:** The SWPPP shall be submitted for review and approved by the State Water Resources Control Board. The plan shall be designed to address erosion, sediment and pollution control during all phases of development of the site until all disturbed areas are permanently stabilized.

The SWPPP requirements shall be implemented prior to commencement of grading throughout the year. The ESCP/SWMP requirements shall be implemented fall and spring of each year as

recommended by licensed geologists or engineers, except pollution control measures shall be implemented year round.

**Monitoring:** The District-designated inspector shall perform site inspections throughout the construction phase.

With the incorporation of these measures, residual impacts on geological resources would be **less than significant**.

## 4.9 HAZARDOUS MATERIALS/RISK OF UPSET

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)? | | | | X | |
| **b.** The use, storage or distribution of hazardous or toxic materials? | | | | X | |
| **c.** A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions? | | | | X | |
| **d.** Possible interference with an emergency response plan or an emergency evacuation plan? | | | | X | |
| **e.** The creation of a potential public health hazard? | | | | X | |
| **f.** Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)? | | | | X | |
| **g.** Exposure to hazards from oil or gas pipelines or oil well facilities? | | | | X | |
| **h.** The contamination of a public water supply? | | | | X | |

**Existing Setting:** The proposed Basin expansion area is not used for the storage of an hazardous waste or materials. The adjacent existing Debris basin is periodically maintained using heavy equipment that are run on diesel and gasoline engines.

**County Environmental Thresholds:** The County's Environmental Thresholds and Guidelines Manual (revised July 2015b), Section 15 – "Public Safety Thresholds," addresses involuntary public exposure from projects involving significant quantities of hazardous materials. The threshold addresses the likelihood and severity of potential accidents to determine whether the safety risks of a project exceed significant levels.

**Impact Discussion:**

**a). *No Impact.*** No chemicals including oil, gas, biocides, bacteria, pesticides, or radiation have been on the proposed Basin expansion area. Therefore, there is no potential of an hazardous materials accident or upset conditions. Therefore, **no impact** related to hazardous materials would occur.

**b-h). *No impact.*** Basin expansion would require temporary heavy equipment use but no storage of diesel fuel, oils, pesticides or herbicides. Therefore, **no impact** related to hazardous materials would occur.

**Cumulative Impacts:** As the proposed project would not have any impacts related to hazardous materials, the proposed project combined with other related projects in the Montecito Community Plan area including the Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities would have less than cumulatively considerable impacts related to hazardous materials.

**Mitigation and Residual Impact:** As there are no potential impacts, mitigation is not required and **no residual impacts** would occur.

## 4.10 LAND USE

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Structures and/or land use incompatible with existing land use? | | | | X | |
| **b.** 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, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X | |
| **c.** The induction of substantial growth or concentration of population? | | | | X | |

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **d.** The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project? | | | | X | |
| e. Loss of existing affordable dwellings through demolition, conversion or removal? | | | | X | |
| **f.** Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X | |
| **g.** Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X | |
| **h.** The loss of a substantial amount of open space? | | | | X | |
| **i.** An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.) | | | | X | |
| **j.** Conflicts with adopted airport safety zones? | | | | X | |

**Existing Setting:** The proposed Basin expansion area is located adjacent to the existing debris basin within the Cold Springs Creek drainage. Residential land uses surround the Project site.

**County Environmental Thresholds:** The County's Environmental Thresholds and Guidelines Manual (revised July 2015b) contains no specific thresholds for land use. Generally, a significant impact may occur if a proposed project would be potentially inconsistent with policies and standards adopted by an agency for the purposes of environmental protection or would result in substantial growth inducing effects.

**Impact Discussion:**

**a-j). *No Impact*.** The proposed Basin expansion would not cause a significant physical change that would conflict with adopted environmental policies or regulations. The proposed Project does not require demolition of structures. It would not result in population growth, loss of affordable housing, loss of open space, or displacement of people. The proposed Project would not extend a sewer trunk line and would not conflict with any airport safety zones. Expansion of the Debris basin would be compatible with the adjacent flood control structure. Therefore, **no impact** to land use would occur.

**Cumulative Impacts:** As the proposed Basin expansion would not have any land use impacts, it along with other related projects in the Montecito Community Plan area including the Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities would not result in any cumulatively considerable land use impacts. All other proposed projects listed in Section 3.2 are consistent with related land use designations and have been evaluated for their land use compatibilities.

**Mitigation and Residual Impact:** As no potential impacts on land use would occur, mitigation is not required and **no residual impacts** would occur.

## 4.11 NOISE

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)? | | | X | | |
| **b.** Short-term exposure of people to noise levels exceeding County thresholds? | | X | | | |
| **c.** Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)? | | X | | | |

**Existing Setting:** Ambient (existing) noise levels within the Project site and vicinity are less than 60 decibels (dBA) (CNEL) as characterized by the Community Noise Equivalent Level) (Santa Barbara County 1993). This noise level extends throughout the Montecito Community Plan area north of East Valley Road, where traffic levels are relatively low associated with low density residential development (3 acre and larger parcels). Traffic levels are generally elevated to

between 60 and 64 dBA CNEL along Hot Springs Road in the commercial district of Montecito, south of East Mountain Drive, and then drop at the roadway's southward confluence with Olive Mill Road to below 60 dBA CNEL. As Olive Mill Road approaches U.S. 101 at North Jameson Lane, noise levels increase to 60 to 64 dBA CNEL. The Santa Barbara County Noise Element acceptable residential exterior noise level is 65 dBA CNEL. Therefore, residential land uses within the vicinity of the Project site and proposed construction truck route to U.S. 101 are exposed to acceptable ambient noise levels.

Three single family residences representing the closest sensitive receptors exist from 200 to 375 feet from the Project site (see Figure 2). The Project site is located over 15 miles from the Santa Barbara Airport, the nearest airport to the site.

The Basin expansion area is adjacent to the existing Debris Basin that is periodically maintained by the Flood Control District, including the removal of debris, boulders, and soils. These periodic Basin maintenance activities are identical to those associated with the proposed Basin expansion.

The proposed Project construction schedule would comply with the Montecito Community Plan's construction operation hours of 7:00 am to 4:30 pm Monday through Friday, with no activities on weekends nor Holidays (County of Santa Barbara 1997).

**County Environmental Thresholds:** Noise is defined as unwanted or objectionable sound that is measured on a logarithmic scale and commonly expressed in decibels (dB). For example, a soft whisper measures at 30 dB(A) and a lawn mower measures at 100 dB(A) at five feet. The letter "A" refers to noise levels that are "A-weighted," the measurement of noise experienced by a receptor at any point in time (day or night). In noise-sensitive settings, the sounds generated at night are often more intrusive than sounds generated during the day. This is the case because outdoor background noise levels and indoor household activities are lower at night, making individual noise events stand out more sharply. The Community Noise Equivalent Level (CNEL) referenced in County thresholds is a noise index that weights noise levels occurring between 7:00 p.m. and 12:00 midnight by adding 5 dB, and adding 10 dB for noise occurring between midnight and 7:00 a.m..

The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 13 – "Noise Thresholds," specifies that a proposed project that would generate noise levels in excess of 65 dB(A) CNEL for exterior exposure and 45 dB(A) CNEL for interior exposure may have a significant impact on surrounding noise sensitive land uses. The thresholds identify noise-sensitive land uses to include residential dwellings and recreational areas (parks, trails, etc.). The Manual indicates that project construction, involving heavy equipment typically generating noise levels up to 90 dBA CNEL, may be experienced 1,600 feet from the activity source.

**Impact Discussion:**

**a). *Less than Significant.*** The proposed 0.9-acre Debris Basin expansion site would expand the existing Cold Springs Debris Basin by approximately 38 percent. The expanded Debris Basin would not contain any noise-generating infrastructure. Periodic Debris Basin maintenance would

occur, expanded the duration of the permitted maintenance vehicles or equipment noise by the 38 percent area characterized above. Noise generated activity would be, however, similar the existing site's current noise levels. The expanded periodic maintenance activity would not contribute significantly to long-term exposure of people to noise levels exceeding the County's thresholds. Therefore, long-term noise impacts would be **less than significant.**

**b-c).** ***Less than Significant with Mitigation.*** Short-term heavy equipment activity would occur at various times at the Project site over the projected 35-to 45-day construction period with the equipment and vehicles identified in Table 7 below. Some, like chain saws, would be operated for only a few days. Noise generated by Project construction activities were estimated using reference levels from the Federal Transit Authority's (FTA) guidance manual (FTA 2006) and standard noise propagation algorithms. Table 7 summarizes anticipated construction equipment noise levels. Given that noise decreases (attenuates) 6 dB with doubling the distance from the source, the three closest residential structures between 200 and 375 feet of the proposed Debris expansion area would be exposed to worst-case (depending upon the equipment being used) short-term, daytime exterior noise levels between 73 and 78 dBA CNEL, exceeding the

**Table 7**
**Proposed Construction Equipment Noise Levels**

| Equipment | Noise level at 50 feet [dBA] |
|---|---|
| Dozer | 81 |
| Dump Truck | 80 |
| Chain Saw | 90 |
| Front End Loader | 76 |
| Grader | 81 |
| Pump | 74 |
| Scraper | 81 |

Source: FTA 2006; USDA 2010
Notes: Noise Levels are adapted from maximum noise level and acoustical use factors.

65dBA CNEL significance threshold. This would be a short-term impact on noise. Implementation of **Mitigation Measure MM NOS-1** during construction of the Project would ensure short-term noise impacts are reduced to **less than significant with mitigation.**

**Cumulative Impacts**: Proposed Debris expansion construction activity would occur for 35 to 45 working days. Other proposed short-term Flood Control Debris Basin projects including the Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities would extend over

a similar time frame, but all would be located over one mile away from the Project site (or in the case of Cold Springs Basin improvements, would occur in different years). Given their distance from each other, temporary noise impacts of any two related projects occurring simultaneously would not be experienced by an adjacent sensitive receptor. Therefore, the proposed Project combined with other related projects in the Montecito Community Plan Area would not result in any cumulatively considerable noise impacts on sensitive receptors. Implementation of Mitigation Measure MM-NOS-1 would reduce potential project-specific short-term noise impacts to a less than cumulatively considerable level.

**Mitigation and Residual Impacts:**

The following measures would be required to reduce short-term, significant construction noise.

**MM-NOS-1: Construction Noise Limitations.** All construction contractors and subcontractors shall limit construction activity, including equipment maintenance and site preparation to the hours between 7:00 AM and 4:30 PM Monday through Friday. No construction shall occur on weekends or State holidays. Any subsequent amendment to the Comprehensive Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based shall supersede the hours stated herein.

**Plan Requirements and Timing:** The County or contractor shall provide and post a sign stating these restrictions at all construction site entries. All construction plans shall provide written statements of designated construction hours.

**Monitoring:** The District-designated inspector shall ensure compliance prior to grading and construction activities.

With incorporation of MM-NOS-1, residual impacts on noise would be **less than significant**.

## 4.12 PUBLIC FACILITIES

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** A need for new or altered police protection and/or health care services? | | | | X | |
| **b.** Student generation exceeding school capacity? | | | | X | |
| **c.** Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)? | | | X | | |

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **d.** A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)? | | | | X | |
| **e.** The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | X | | |

**Existing Setting:** Major public services include emergency services, law enforcement, fire protection, schools, library, solid waste management, water, wastewater, and specialized facilities such as landfills and jails. Fire Protection is addressed in section 4.7, "Fire Protection." Recreation and transportation-related impacts are addressed in sections 4.15, "Recreation," and 4.17, "Transportation/Circulation," respectively. The proposed Basin expansion area is adjacent to the existing Debris basin.

**County Environmental Thresholds:** According to the CEQA Guidelines, Appendix G, a project may create a significant environmental impact associated with public services if it creates a need for new construction or physical alteration of governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 18 – "Solid Waste Thresholds," includes thresholds for schools and solid waste as follows:

*Schools:* A significant level of school impacts is generally considered to occur when a project would generate sufficient students to require an additional classroom.

*Solid Waste:* A project is considered to result in significant impacts to landfill capacity if it would generate 196 tons per year of solid waste. This volume represents 5% of the expected average annual increase in waste generation, and is therefore considered a significant portion of the remaining landfill capacity. In addition, construction and demolition waste from remodels and rebuilds is considered significant if it exceeds 350 tons. A project which generates 40 tons per year of solid waste is considered to have an adverse effect on solid waste generation, and mitigation via a Solid Waste Management Plan is recommended.

**Impact Discussion:**

**a, b, d). *No Impact.*** The proposed Project would expand the adjacent debris basin by 0.9 acres. The proposed Project would not construct provide housing for additional residents, for students within the area, and would not generate any new permanent employment. Therefore, **no impact** on police, health, or education services or capacity would occur. **No impact** on long-term, operational wastewater treatment would occur.

**c.) *Less Than Significant*** Soils would be reused in other construction projects as fill. The construction waste generated from the Project would be minimal and would not exceed the County threshold of 350 tons. Therefore, the proposed Project would have **less than significant impact** on public facilities.

**e). *Less Than Significant.*** The proposed Basin expansion would increase the flood control capacity of the Cold Springs Debris Basin and minimize future downstream impacts resulting from intense precipitation events. No additional water quality control facilities would be necessary to serve the project. Potential impacts associated with Cold Springs Creek drainage would be improved over existing conditions. Therefore, impacts on public services would be **less than significant**.

**Cumulative Impacts**: The proposed Project combined with other projects including the Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities would not result in any cumulatively considerable public facilities impacts. Other related projects would be conditioned to address their individual contributions to regional, cumulative public service impacts.

**Mitigation and Residual Impact:** As no potential impacts on land use would occur, no mitigation is required and **no residual impacts** would occur.

## 4.13 RECREATION

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Conflict with established recreational uses of the area? | | | | X | |
| **b.** Conflict with biking, equestrian and hiking trails? | | | | X | |
| **c.** Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)? | | | | X | |

**Existing Setting:** The Project site is within a recreationally designated parcel. No recreational trails extend within or adjacent to the proposed Basin expansion area.

**County Environmental Thresholds:** The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b) does not identify any thresholds for park and recreation impacts. Therefore, the three factors listed above (a, b, and c) are used to analyze a project's potential impacts on recreation.

**Impact Discussion**:

**a-c). *No Impact.*** The proposed Basin expansion would not result in any impacts on the quality or quantity of existing recreational opportunities. Short-term heavy equipment vehicles would be limited to existing roadways and would not encroach within any trails or park areas. **No impact** on recreation would result.

**Cumulative Impacts**: As the proposed project would not have any recreation impacts, the proposed project combined with other related projects including the Randall Road Basin construction, Cold Springs, San Ysidro, Romero, and Santa Monica debris basin improvement projects, and periodic future basin maintenance activities would not result in any cumulatively considerable recreation impacts. Potential recreational impacts resulting from other related projects within the Montecito Community Planning area have been mitigated to less than significant, such that cumulative impacts would be **less than considerable**.

**Mitigation and Residual Impact**: As no potential impacts on recreation would occur, mitigation is not necessary and **no residual impacts** would occur.

## 4.14 TRANSPORTATION/CIRCULATION

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system? | | | X | | |
| **b.** A need for private or public road maintenance, or need for new road(s)? | | | X | | |
| **c.** Effects on existing parking facilities, or demand for new parking? | | | X | | |
| **d.** Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods? | | | X | | |
| **e.** Alteration to waterborne, rail or air traffic? | | | X | | |
| **f.** Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)? | | X | | | |
| **g.** Inadequate sight distance? | | | X | | |

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| ingress/egress? | | | X | | |
| general road capacity? | | | X | | |
| emergency access? | | | X | | |
| **h.** Impacts to Congestion Management Plan system? | | | X | | |

**Existing Setting:** The public roadways surrounding the project site include East Mountain Drive that transitions southward to Hot Springs Road. The proposed construction activity haul route would include East Mountain Drive, Hot Springs Road, Olive Mill Road, and U.S. Highway 101. East Mountain Drive, Hot Springs Road, and Olive Mill Road are all two-lane collectors. Hot Springs Road conveys travelers through the Coast Village Road shopping area. The roadways are operating at an acceptable level of service (MFPD 2016).

**County Environmental Thresholds**: The County's Environmental Thresholds and Guidelines Manual (Revised July 2018), Section 19 – "Thresholds of Significance for Traffic Impacts and Contents of a Traffic Study," indicates that a significant traffic impact would occur when:

- An addition of project traffic to an intersection increases the volume to capacity ratio by a specific value;
- Project access to a major road would require a driveway that would create an unsafe situation or a new traffic signal or major revisions to an existing traffic signal;
- A project adds traffic to a roadway that has design features or receives use which would be incompatible;
- Project traffic would utilize a substantial portion of an intersection capacity where the intersection is currently operating at an acceptable level of service but with cumulative traffic would degrade to unacceptable level of service.

**Impact Discussion:**

**a-e, g-h).** ***Less than Significant.*** The proposed Basin expansion would be short-term, extending between 35 and 45 days. The construction activity would be similar to existing Cold Springs Debris Basin maintenance activity in terms of the types of equipment and intensity of transportation trips. Depending upon the duration of excavation (between 35 and 45 days), between approximately 84 and 108 truck trips would occur daily over the 9-hour construction period. This would result in between 9 and 12 trucks trips per hour. The short-term increase in trips on these local roadways would result in a less than significant impact on roadway capacity. Impacts on Transportation would be less than significant.

Proposed Basin excavation activity would not permanently increase vehicular traffic to or from the site, pedestrian, bicycle, or transit access, or any other type of transportation facility. The

proposed Project would not alter affect air traffic operations. No railway or navigable waterways are located on or adjacent to the project site.

**f). *Less than Significant with Mitigation*.** Depending upon the duration of excavation (between 35 and 45 days), between approximately 84 and 108 truck trips would occur daily over the 9-hour construction period. This would result in between 9 and 12 trucks trips per hour. The short-term addition of truck traffic would potential increase safety hazards along East Mountain Drive and the haul route southward to U.S. 101 due to the size and slower speed of dump trucks transporting excavated soils. This would result in a short-term significant impact on transportation related to traffic safety that would be feasibly mitigated to less than significant with incorporation of MM TRANS-1.

**Mitigation and Residual Impacts:**

The following measure would be required to reduce short-term, significant transportation hazards during construction

**MM TRANS-1. Construction Traffic Safety Management Plan**. A Construction Traffic Safety Management Plan shall be prepared and implemented that provides the following:

a. Construction staging areas shall be marked with temporary signs on East Mountain Drive to alert drivers to planned construction dates and any expected speed limit reductions.
b. Flag persons and appropriate signs and speed reductions shall be used during construction, if necessary to implement any necessary lane closures.
c. Construction equipment use of roads shall be limited and warning signs alerting drivers to potential for construction vehicles entering and exiting adjacent roadways shall be posted.

**Plan Requirements and Timing:** Plan component shall be included as notes on construction plans and specifications. The County or contractor shall provide and post temporary signs stating these restrictions at all construction site entries. All construction plans shall provide written statements identifying these conditions.

**Monitoring:** The District-designated inspector shall ensure compliance during grading and construction activities.

Implementation of MM TRANS-1 would effectively minimize any potential adverse impacts on transportation and circulation resulting during truck trip ingress and egress on East Mountain Drive. Therefore, the Project would result in **less than significant** transportation and circulation impacts and residual impacts on noise would be **less than significant**.

**Cumulative Impacts:** The proposed project combined with other similar projects including the Randall Road flood control debris basin construction, and San Ysidro, Romero, and Santa Monica debris basin maintenance projects would be subject to standard District Debris Basin Maintenance Program mitigation measures (Santa Barbara County 2017) that effectively ensure short-term construction and long-term operational impacts would be reduced to less than significant levels. The proposed Project's implementation of the standard construction traffic

safety management plan would ensure that its short-term contribution to these cumulative impacts would be reduced to **less than cumulatively considerable** and that cumulative impacts would be **less than significant**.

## 4.15 WATER RESOURCES/FLOODING

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **a.** Changes in currents, or the course or direction of water movements, in either marine or fresh waters? | | | X | | |
| **b.** Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff? | | | X | | |
| **c.** Change in the amount of surface water in any water body? | | | | X | |
| **d.** Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc.) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution? | | | | X | |
| **e.** Alterations to the course or flow of flood water or need for private or public flood control projects? | | | X | | |
| **f.** Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion? | | | | X | |
| **g.** Alteration of the direction or rate of flow of groundwater? | | | | X | |
| **h.** Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference? | | | | X | |

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **i.** Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin? | | | | X | |
| **j.** The substantial degradation of groundwater quality including saltwater intrusion? | | | | X | |
| **k.** Substantial reduction in the amount of water otherwise available for public water supplies? | | | | X | |
| **l.** Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water? | | X | | | |

**Existing Setting:** The existing Debris basin has no associated water demand. Periodic maintenance pursuant to the permitted Flood Control Debris Maintenance Program (Santa Barbara County 2017) addresses short-term desilting and debris removal as required.

**County Environmental Thresholds:** The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 17 – "Surface and Storm Water Quality Significance Guidelines," identifies project-specific impacts that would be considered significant. In part, a project's effect on water quality and hydrology are considered significant if the project:

- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native
- vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands; or
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit.

Water Resources Thresholds:

- A project is determined to have a significant effect on water resources if it would exceed established threshold values which have been set for each over drafted groundwater basin. These values were determined based on an estimation of a basin's remaining life of available water storage. If the project's net new consumptive water use [total consumptive demand adjusted for recharge less discontinued historic use] exceeds the

threshold adopted for the basin, the project's impacts on water resources are considered significant.

- A project is also deemed to have a significant effect on water resources if a net increase in pumping from a well would substantially affect production or quality from a nearby well.

**Impact Discussion:**

**a, b, e). *Less than Significant.*** Proposed Basin expansion would provide for additional area for alluvial sediment, rock, and debris to collect during peak precipitation events. The direction of Cold Spring Creek water movements would not be altered, though the flow of flood water would be spread over a 60 percent larger area (increased from approximately 1.5 to approximately 2.4 acres) within the basin area. The action would complement the effectiveness of the existing debris basin flood control infrastructure. This change in the direction of flood water movements, and drainage patterns would be **less than significant**.

**c, f-k). *No impact.*** Proposed Basin expansion would not introduce or discharge any new amount of surface water in Cold Springs Creek, nor impact the creek's quality (c, d). Basin expansion would minimize the exposure of people or property to water related hazards such as debris flows downstream (f). Basin expansion would not require any demand on groundwater supplies (g-j) or public water supplies (k). **No impacts** on these water resources would result.

**l). *Less than Significant with Mitigation***. Short-term Basin expansion grading activities would not occur in the rainy season. Therefore, the potential for temporary runoff and erosion downstream would be minimal. Oil, grease, and other related petrochemicals associated with heavy equipment use would potentially be introduced into Basin soils during expansion construction. Such potential impacts would be highly localized, as most accidental spills are limited in quantity (e.g., less than 50 gallons) and would occur in the dry season when flows are absent (Santa Barbara County 2017). Long-term maintenance of the expanded Basin would involve application of herbicides to control emerging vegetation within the channel bed, but these chemicals would not be applied to open water, over-spraying would be minimized by trained field crews, and most spraying would occur in the fall when flows are absent in the drainage (Santa Barbara County 2017). These potential impacts on water quality would be similar to those that occur during existing basin maintenance. They would be significant but minimized by incorporating standard Flood Control debris basin measures (Santa Barbara County 2017).

**Cumulative Impacts**: As noted previously, proposed Basin expansion construction would result in similar levels of activity and intensity as that occur during existing debris basin maintenance. The proposed Project combined with other similar projects including the Randall Road flood control debris basin construction, and San Ysidro, Romero, and Santa Monica debris basin construction and maintenance projects would be subject to standard District Debris Basin Maintenance Program mitigation measures (Santa Barbara County 2017) that effectively ensure short-term construction and long-term operational impacts would be reduced to less than significant levels. Implementation of these measures, including measures WR-1 and WR-2 identified below, would ensure that the proposed Project's short-term contribution to these

cumulative impacts would be reduced to **less than cumulatively considerable** and that cumulative impacts would be **less than significant**.

**Mitigation and Residual Impact**: In addition to measure MM-GEO-1 requiring preparation of erosion and/or sediment control plans, the following standard Flood Control Debris Basin Maintenance Program measures (County of Santa Barbara 2017) would be implemented.

**MM WR-1. Reduce Sedimentation.** The District shall minimize the amount of surface disturbance and vegetation removal to the extent feasible during all Basin expansion activities to reduce the area of disturbed soils that could be eroded during winter runoff. No stockpiles or dewatering operations shall be established in the channel bed or basin bottom. All fill shall be compacted to reduce erosion. All disturbed banks and terraces above the low flow channel shall be seeded with appropriate riparian grasses and herbs and/or planted with willows mule fat, or other woody plant species to stabilize these areas and reduce erosion. The selection of species to be used and the density of seeding or planting shall balance the need for maintaining channel capacity while meeting these objectives

**Plan Requirements and Timing:** This condition shall be included in construction plans and specifications.

**Monitoring:** The District-designated inspector shall ensure compliance prior to grading and construction activities.

**MM WR-2. Prevent Accidental Spills and Leaks.** Equipment fueling or maintenance shall not occur within the debris basin. Spill containment and clean-up procedures for vehicle fuels and oils shall be developed by the District. All field personnel shall be trained and all field vehicles shall be equipped with appropriate materials.

**Plan Requirements and Timing:** This condition shall be included in construction plans and specifications.

**Monitoring:** The District-designated inspector shall ensure compliance during grading and construction activities.

**Mitigation and Residual Impact:** Implementation of measure **MM-GEO-1, -WR-1,** and **-WR-2** above would reduce residual project related impacts to water quality to less than significant.

# 5.0 INFORMATION SOURCES

## 5.1 County Departments Consulted

Police, Fire, Public Works, Flood Control, Parks, Environmental Health, Special Districts, Regional Programs, Other : _____

## 5.2 Comprehensive Plan (check those sources used):

| | | | |
|---|---|---|---|
| X | Seismic Safety/Safety Element | X | Conservation Element |
| X | Open Space Element | X | Noise Element |
| | Coastal Plan and Maps | X | Circulation Element |
| | ERME | X | Montecito Community Plan |

## 5.3 Other Sources (check those sources used):

| | | | |
|---|---|---|---|
| X | Field work | | Ag Preserve maps |
| | Calculations | X | Flood Control maps |
| X | Project plans | X | Other technical references |
| | Traffic studies | | (reports, survey, etc.) |
| X | Records | X | Planning files, maps, reports |
| | Grading plans | X | Zoning maps |
| | Elevation, architectural renderings | X | Soils maps/reports |
| X | Published geological map/reports | X | Plant maps |
| X | Topographical maps | X | Archaeological maps and reports |
| | | | Other |

# 6.0 MANDATORY FINDINGS OF SIGNIFICANCE

| Will the proposal result in: | Poten. Signif. | Less than Signif. with Mitigation | Less Than Signif. | No Impact | Reviewed Under Previous Document |
|---|---|---|---|---|---|
| **1.** Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory? | | | X | | |
| **2.** Does the project have the potential to achieve short-term goals to the disadvantage of long-term environmental goals? | | | | X | |
| **3.** 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 | | |
| **4.** Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | X | | | |
| **5.** Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ? | | | X | | |

**1)** Mitigation measures applied to this project would ensure that the Project would not substantially degrade the quality of the environment. The proposed project would not contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory. Therefore, impacts to the quality of the environment would be **less than significant.**

**2)** The proposed project would not result in any short-term environmental goals to the disadvantage of long-term environmental coals. The Debris basin expansion would achieve both beneficial short-term and long-term environmental goals by providing greater opportunities to

capture siltation and debris resulting from substantial precipitation events. Construction of the Project would have **no impact** as it would implement both short-term and long term environmental goals.

**3)** Mitigation measures applied to the proposed Project would ensure that no cumulatively considerable impacts would result. Basin expansion would occur on District-owned land adjacent to the existing basin facility and would not require encroachment onto private lands. Therefore, impacts would be **less than significant.**

**4)** Proposed Project mitigated measures would reduce/minimize all potential substantial environmental adverse effects on human beings. No habitable structures would be introduced, and potential long-term effects on human populations downstream resulting from debris flows would be minimized. Therefore, impacts would be **less than significant with mitigation.**

**5)** There is no disagreement regarding the significance of an effect that would warrant investigation in an EIR. Technical studies conducted for the proposed project have been included in the attachments of this MND. Therefore, impacts would be **less than significant.**

## 7.0 PROJECT SPECIFIC (short- and long-term) AND CUMULATIVE IMPACT SUMMARY

The proposed project would result in project-specific impacts that are potentially significant but mitigatable in the following issue areas: air quality, biological resources, cultural resources, geology, noise, transportation (safety hazards), and water quality. The proposed Project would expand the existing Cold Springs Debris Basin that would improve retention of intense storm siltation and debris flows downstream. Proposed Project mitigation measures would reduce all potential cumulative impacts to less than significant.

## 8.0 PROJECT ALTERNATIVES

Pursuant to the 2016 CEQA Statute and Guidelines, project alternatives are only required for projects which would result in significant and immitigable impacts to the environment. Any potentially significant impacts resulting from the proposed Debris expansion would be mitigated to less than significant impacts. Therefore, no project alternatives were considered.

## 9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

**County Inland Land Use Development Code (LUDC)**: Chapter 35 of the LUCD, the Montecito Land Use & Development Code, Section 35.423.030 defines purposes of residential zones within the Montecito Community Plan area. The Project site is with the R-/E-1 One Family Residential zone. A “Flood Control Project of 20,000 s.f. or more total area” is a permitted use in the R-1/E-1 zone district as defined in Table 2-7 of LUDC Section 35.423.030. Therefore, the proposed Basin expansion is consistent with the LUDC.

The proposed Project's consistency with relevant General Plan policies is provided below. The policy in italics is followed by the consistency analysis.

**Montecito Community Plan:**

**Policy LU-M-2.1:** *New structures shall be designed, sited, graded, and landscaped in a manner which minimizes their visibility from public roads*. **Consistent.** The proposed Project would be located next to the existing Cold Springs Debris Basin and would be minimally visible from East Mountain Drive.

**Policy LUED-M-1.1:** *All educational, institutional, and other public & quasi-public uses shall be developed and operated in a manner compatible with the community's residential character.* **Consistent.** The proposed Project would be located next to the existing Cold Springs Debris Basin within the Cold Springs Creek channel area. It would be over 200 feet from the nearest existing residential structures and would not introduce any incompatible uses.

**Policy CIRC-M-1.4:** *The County shall strive to permit reasonable development of parcels within the community of Montecito based upon the policies and land use designations adopted in this Community Plan, while maintaining safe roadways and intersections that operate at acceptable levels*. **Consistent.** Proposed Basin expansion would be completed within 35 to 45 days. Construction activity would have no long-term impact on adjacent roadway and intersection operational levels. Implementing the District-proposed traffic safety management plan would ensure that construction staging areas are well marked with temporary signs on East Mountain Drive to alert drivers to planned construction dates and any expected speed limit reductions.

**Policy PRT-M-1.6:** *New development shall not adversely impact existing recreational facilities and uses.* **Consistent.** The proposed Basin expansion area is not within any existing recreational facility or trail.

**Policy AQ-M-1.3:** *Air pollution emissions I from new development and associated construction activities shall be minimized to the maximum extent feasible. These activities shall be consistent with the Air Quality Attainment Plan and Air Pollution Control District guidelines*. **Consistent.** Short-term (35-35 days) Basin expansion construction activity would incorporate all relevant APCD emission reduction measures including MM-AQ-1: Equipment and Vehicle Exhaust, MM-AQ-2: Fugitive Dust Control, and MM-AQ-3: Control of Fugitive Dust from Construction and Demolition Activities (SBCAPCD Rule 345).

**Policy BIO-M-1.3:** *Environmentally Sensitive Habitat (ESH) areas within the Montecito Planning Area shall be protected, and where appropriate, enhanced*.

**Policy BIO-M-1.6:** *Riparian vegetation shall be protected as part of a stream or creek buffer. Where riparian vegetation has previously been removed, (except for channel cleaning necessary for free-flowing conditions as determined by the County Flood Control District) the buffer shall allow the reestablishment of riparian vegetation to its prior extent to the greatest degree possible. Restoration of degraded riparian areas to their former state shall be encouraged*.

**Development Standard BIO-M-1.6.2**: *On-site restoration of any project-disturbed buffer or riparian vegetation within creeks in the Montecito Planning Area shall be mandatory. A riparian revegetation plan, approved by the County, shall be developed by a County approved biologist*

*(or other experienced individual acceptable to the County) and implemented at the applicant's expense. The revegetation plan shall use native species that would normally occur at the site prior to disturbance. The plan shall contain planting methods and locations, site preparation, weed control, and monitoring criteria and schedules*.

**Policy BIO-M-1.7:** *No structures shall be located within a riparian corridor except: public trails that would not adversely affect existing habitat; dams necessary for water supply projects; flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety, other development where the primary function is for the improvement of fish and wildlife habitat and where this policy would preclude reasonable development of a parcel. Culverts, fences, pipelines, and bridges (when support structures are located outside the critical habitat) may be permitted when no alternative route/location is feasible. All development shall incorporate the best mitigation measures feasible to minimize the impact to the greatest extent*.

**Policy BIO-M-1.10:** *All development, including dredging, filling and grading within stream corridors, shall be limited to activities necessary for the construction of uses specified in Policy B-1.7. When such activities would require removal of riparian plant species, revegetation with local native plants shall be required on both banks and extending outward 25 feet from each top of bank, except where it would preclude reasonable development of a parcel.*

**Development Standard BIO-M-1.14.3:** *In those cases where adverse impacts to biological resources cannot be avoided after impacts have been minimized to the greatest extent feasible, on-site restoration may be required. Restoration may also be required for parcels on which development is proposed and on which disturbance has previously occurred if the currently proposed development would exacerbate the existing impact. The following policies shall be used as guidelines for the restoration effort but shall not preclude reasonable development of a parcel.*

- *The revegetation effort shall include the appropriate diversity and density of plants native to the locality.*
- *Restoration plans shall incorporate maintenance measures to insure that the remedial action is carried out for the duration of the impact.*
- *When restoration is proposed, on-site rather than off-site restoration shall be the preferred alternative.*
- *Wetland areas and surrounding habitats that have been damaged by pollution and artificial stream channelization shall be restored to their natural condition whenever practical*.

**Development Standard BIO-M-1.14.4:** *Where sensitive or valuable biological resources exist within or border a project site, a County-approved biologist or other experienced individual acceptable to the County may be required to monitor construction within/bordering the resource area as determined necessary by RMD.*

**Development Standard BIO-M-1.14.5:** *As determined necessary by DER, prior to issuance of occupancy clearance a biologist shall provide written confirmation to RMD/DER stating that the applicant has complied with all construction-related biological resource mitigation measures.*

**Consistent.** Proposed Basin expansion would include replacement of removed native specimen trees (3 sycamores and 8 coast live oaks and) on a 3:1 and provide 0.4 acres of native riparian habitat restoration in presently degraded areas on District-owned property adjacent to the site. The District Biologist would monitor Basin construction activities and prepare a report documenting compliance with all required protection measures.

**Policy BIO-M-1.15:** *To the maximum extent feasible, specimen trees shall be preserved. Specimen trees are defined for the purposes of this policy as mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species. Native or non-'native trees that have unusual scenic or aesthetic quality, have important historic value, or are unique due to species type or location shall be preserved to the maximum extent feasible.* **Consistent.** The District has minimized removal of specimen trees in the vicinity of the Basin expansion area by optimizing areas for construction and access away from driplines. No native or non-native trees that would be removed have unusual scenic or aesthetic quality, important historic value, or are unique due to their species type or location.

**Development Standard BIO-M-1.8.2.** *All trees serving as known raptor nesting or key raptor roosting sites· shall be protected from damage or removal to the maximum extent feasible.* **Consistent.** The eight coast live oak trees and three sycamores that would be removed are not known raptor nesting or key raptor roosting sites. A red tailed hawk was identified during 2016 biological surveys in adjacent habitat. Incorporation of measure MM-BIO-4 Preconstruction Bird Surveys would ensure the identification of any raptor roosting prior to construction and avoid impacts to this activity.

**Policy BIO-M-l.20:** *Pollution of streams, sloughs, drainage channels, underground water basins, estuaries, the ocean and areas adjacent to such waters shall be minimized.* **Consistent.** Incorporation of measure MM-WR-1 Reduce Sedimentation, and MM WR-2 Prevent Accidental Spills and Leaks would minimize the potential for disturbed soil erosion and releases from construction equipment fueling or maintenance to pollute downstream Cold Springs Creek waters.

**Policy FD-M-4.1:** *Flood control activities shall protect lives and property while being conducted according to the least environmentally damaging methods*. **Consistent.** The proposed Project would expand the existing Cold Springs Debris Basin and further minimize the potential for downstream damage and debris flow risks to downstream areas.

**Policy FD-M-4.4:** *When flood control maintenance is required, a maintenance access road shall be limited to one side only and to the minimum width feasible. An emergency access road may be permitted on the opposite side when the riparian habitat is maintained to the greatest degree feasible*. **Consistent.** Proposed Basin expansion construction would utilize the existing access road on the west side of the Project area that is used periodically for existing maintenance activities.

**Development Standard CR-M-2.1.1:** *Prior to the issuance of a Land Use Development Permit, RMD shall determine whether the project site is located either in a known archaeological site or in an area with potential archaeological resources. This shall be determined by consulting the Resource Management Department staff archaeologist for archaeological surveys of the area which would provide such information*. *In the event that the site is located in an area which is likely to contain archaeological resources and there has not yet been a Phase I survey of the*

*property, the applicant shall fund preparation of a Phase I survey to be prepared by an RMD-qualified archaeologist*. **Consistent.** A Phase 1 archaeological resources investigation including background research and intensive ground surface survey was completed by a County-qualified archaeologist. No significant cultural resources were identified.

**Policy N-M-1.1:** *Noise-sensitive uses (i.e., residential and lodging facilities, educational facilities, public meeting places and others specified in the Noise Element) shall be protected from significant noise impacts*. **Consistent**. Incorporation of measure MM-NOS-1 Construction Noise Limitations would require equipment maintenance and site preparation limited to between 7:00 AM and 4:30 PM Monday through Friday, no weekends or State holidays. This would minimize impacts on the three exterior residential living areas in the vicinity.

**Policy VIS-M-1.2:** *Grading required for access roads and site development shall be limited in scope so as to protect the viewshed*. **Consistent**. Proposed Basin expansion grading would be minimized adjacent to the existing debris basin. Public views of the construction activity would be extremely limited from East Mountain Drive through trees on the road shoulder, and from limited sections of Cold Spring Trail, 1,900 feet north and 1,000 feet higher in elevation where it would not represent a substantial change in the regional visual character.

## 10.0 RECOMMENDATION BY P&D STAFF

On the basis of the Initial Study, the staff of Planning and Development:

_____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

__X__ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.

_____ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.

_____ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas:

_____ With Public Hearing __X__ Without Public Hearing

PROJECT EVALUATOR: _____ DATE:_____

## 11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

__X__ I agree with staff conclusions. Preparation of the appropriate document may proceed.

_____ I DO NOT agree with staff conclusions. The following actions will be taken:

_____ I require consultation and further information prior to making my determination.

SIGNATURE: _____ NEGATIVE DECLARATION 12/11/19

SIGNATURE: _____

FINAL NEGATIVE DECLARATION DATE: 1/23/20

# 12.0 ATTACHMENTS

A. Air Quality and GHG Project Modeling Results Summary Tables – CalEEMod (November 2019).

B. **CONFIDENTIAL**. Cultural Resources Central Coast Information Center Records Search Results. Cultural Resources Background. Central Coast Information Center Records Search, Native American Heritage Commission Sacred Lands Inventory Search, Negative Archaeological Survey Report, Cold Springs Basin Expansion Project. Wood Environment and Infrastructure, December 2019. Available to qualified individuals at Santa Barbara County Flood Control District and Water Agency offices.

C. Notice of Availability of the Draft Mitigated Negative Declaration for the Cold Spring Debris Basin Expansion Project 19 NGD-00000-00015.

D. Draft MND Public Comment Letters and Responses.

# 13.0 REFERENCES CITED

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2017 Final Updated Debris Basin Maintenance and Removal Plan. June.

2019 Notice of Preparation of Environmental Impact Report, Randall Road Debris Basin Project. February 14.

Santa Barbara County

1993 Montecito Community Plan Phase II Update Final Environmental Impact Report. 92-EIR-03. Prepared by Envicom Corporation. June.

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2015a Energy and Climate Action Plan. Accessed online at: http://longrange.sbcountyplanning.org/programs/climateactionstrategy/docs/BOS051915/Attachment%20B_ECAP.pdf

2018 Environmental Thresholds and Guidelines Manual. Planning and Development Department. Revised, July.

U.S. Department of Agriculture, Forest Service (USDA-FS)

2010 Preventing Noise-Induced Hearing Loss: Safety Measures for Field Employees. U.S. Forest Service Technology & Development Program Safety and Health Tech Tips. June.

U.S. Environmental Protection Agency (EPA)

2019 Greenhouse Gas Equivalencies Calculator. U.S. Environmental Protection Agency. Accessed online at https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

# ATTACHMENTS

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# ATTACHMENT A

# Air Quality and Greenhouse Gas Emissions Modelling Calculation Data

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# Cold Springs Debris Basin Improvements Project

**Santa Barbara-South of Santa Ynez Range County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| User Defined Recreational | 2.40 | User Defined Unit | 2.40 | 0.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Rural | **Wind Speed (m/s)** | 2.7 | **Precipitation Freq (Days)** | 37 |
| **Climate Zone** | 8 | | | **Operational Year** | 2020 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Cold Springs Debris Basin Improvements Project - Santa Barbara-South of Santa Ynez Range County, Annual

Project Characteristics -

Land Use - Total lot area is 2.4 acres.

Construction Phase - Only site preparation and grading will be included in the Project.

Off-road Equipment - Excavators, Tractors/Loaders/Backhoes, a water truck (other construction equipment), and a pump will be used for the grading phase.

Off-road Equipment - One tractor/loader/backhoe will be used for site preparation for grading.

Trips and VMT - 3,800 truck trips at 80 miles per trip during the grading phase. Worker trips per day is conservatively estimated with 9 total laborers during each phase.

Grading - The total area of disturbance is 1.6 acres.

Construction Off-road Equipment Mitigation -

Off-road Equipment - Only Tractor/Loader/Backhoe will be used for site preparation for water diversion.

Off-road Equipment - No paving phase.

Off-road Equipment - No architectural coating phase.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 10.00 | 0.00 |
| tblConstructionPhase | NumDays | 6.00 | 40.00 |
| tblConstructionPhase | NumDays | 10.00 | 0.00 |
| tblConstructionPhase | NumDays | 3.00 | 0.00 |
| tblConstructionPhase | NumDays | 3.00 | 5.00 |
| tblGrading | AcresOfGrading | 20.00 | 1.60 |
| tblGrading | AcresOfGrading | 4.50 | 0.00 |
| tblGrading | MaterialExported | 0.00 | 19,000.00 |
| tblLandUse | LotAcreage | 0.00 | 2.40 |
| tblOffRoadEquipment | HorsePower | 158.00 | 187.00 |
| tblOffRoadEquipment | HorsePower | 84.00 | 247.00 |
| tblOffRoadEquipment | HorsePower | 158.00 | 367.00 |

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | HorsePower | 84.00 | 247.00 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.41 |
| tblOffRoadEquipment | LoadFactor | 0.74 | 0.40 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.74 | 0.40 |
| tblOffRoadEquipment | OffRoadEquipmentType | Graders | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | Rubber Tired Dozers | Pumps |
| tblOffRoadEquipment | OffRoadEquipmentType | | Other Construction Equipment |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 6.00 |
| tblProjectCharacteristics | UrbanizationLevel | Urban | Rural |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 80.00 |
| tblTripsAndVMT | HaulingTripNumber | 0.00 | 3,800.00 |
| tblTripsAndVMT | WorkerTripNumber | 8.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 18.00 |
| tblTripsAndVMT | WorkerTripNumber | 25.00 | 18.00 |
| tblTripsAndVMT | WorkerTripNumber | 15.00 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 0.0826 | 2.1283 | 0.8054 | 6.1000e-003 | 0.2547 | 0.0218 | 0.2766 | 0.1027 | 0.0206 | 0.1232 | 0.0000 | 607.8452 | 607.8452 | 0.0607 | 0.0000 | 609.3630 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **0.0826** | **2.1283** | **0.8054** | **6.1000e-003** | **0.2547** | **0.0218** | **0.2766** | **0.1027** | **0.0206** | **0.1232** | **0.0000** | **607.8452** | **607.8452** | **0.0607** | **0.0000** | **609.3630** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 0.0826 | 2.0894 | 0.8054 | 6.1000e-003 | 0.1873 | 0.0218 | 0.2091 | 0.0661 | 0.0206 | 0.0867 | 0.0000 | 607.8451 | 607.8451 | 0.0607 | 0.0000 | 609.3629 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **0.0826** | **2.0894** | **0.8054** | **6.1000e-003** | **0.1873** | **0.0218** | **0.2091** | **0.0661** | **0.0206** | **0.0867** | **0.0000** | **607.8451** | **607.8451** | **0.0607** | **0.0000** | **609.3629** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **1.83** | **0.00** | **0.00** | **26.49** | **0.00** | **24.40** | **35.63** | **0.00** | **29.68** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

Cold Springs Debris Basin Improvements Project - Santa Barbara-South of Santa Ynez Range County, Annual

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 8-1-2020 | 10-31-2020 | 2.1862 | 2.1487 |
| 2 | 11-1-2020 | 1-31-2021 | 0.0809 | 0.0795 |
| | | Highest | 2.1862 | 2.1487 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0000 | 0.0000 | 2.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **2.0000e-005** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **4.0000e-005** | **4.0000e-005** | **0.0000** | **0.0000** | **5.0000e-005** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0000 | 0.0000 | 2.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **2.0000e-005** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **4.0000e-005** | **4.0000e-005** | **0.0000** | **0.0000** | **5.0000e-005** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Cold Springs Debris Basin Improvements Project - Santa Barbara-South of Santa Ynez Range County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 8/29/2020 | 8/28/2020 | 5 | 0 | |
| 2 | Site Preparation for Grading | Site Preparation | 9/1/2020 | 9/7/2020 | 5 | 5 | Preparation for grading. |
| 3 | Grading | Grading | 9/8/2020 | 11/2/2020 | 5 | 40 | |
| 4 | Site Preparation - Misc. | Site Preparation | 9/11/2020 | 9/15/2020 | 5 | 3 | Preparation for water diversion, vegetation clearing. |
| 5 | Paving | Paving | 7/16/2021 | 7/15/2021 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 7/30/2021 | 7/29/2021 | 5 | 0 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1.6**

**Acres of Paving: 0**

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

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Scrapers | 1 | 8.00 | 367 | 0.48 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Site Preparation for Grading | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Site Preparation for Grading | Excavators | 0 | 6.00 | 367 | 0.48 |
| Site Preparation for Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Site Preparation for Grading | Pumps | 0 | 8.00 | 247 | 0.40 |
| Site Preparation for Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Site Preparation for Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 187 | 0.41 |

| | | | | | |
|---|---|---|---|---|---|
| Grading | Pumps | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |
| Site Preparation - Misc. | Cranes | 0 | 8.00 | 231 | 0.29 |
| Site Preparation - Misc. | Forklifts | 0 | 7.00 | 89 | 0.20 |
| Site Preparation - Misc. | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Site Preparation - Misc. | Graders | 0 | 8.00 | 187 | 0.41 |
| Site Preparation - Misc. | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Site Preparation - Misc. | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Site Preparation - Misc. | Welders | 0 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 0 | 8.00 | 9 | 0.56 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Other Construction Equipment | 1 | 3.00 | 172 | 0.42 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation for Grading | 2 | 18.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 7 | 18.00 | 0.00 | 3,800.00 | 8.30 | 6.40 | 80.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation - Misc | 10 | 18.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Site Preparation - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.2 Site Preparation - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.2 Site Preparation - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.3 Site Preparation for Grading - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.0500e-003 | 0.0105 | 0.0114 | 2.0000e-005 | | 6.7000e-004 | 6.7000e-004 | | 6.1000e-004 | 6.1000e-004 | 0.0000 | 1.3643 | 1.3643 | 4.4000e-004 | 0.0000 | 1.3753 |
| **Total** | **1.0500e-003** | **0.0105** | **0.0114** | **2.0000e-005** | **0.0000** | **6.7000e-004** | **6.7000e-004** | **0.0000** | **6.1000e-004** | **6.1000e-004** | **0.0000** | **1.3643** | **1.3643** | **4.4000e-004** | **0.0000** | **1.3753** |

## 3.3 Site Preparation for Grading - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.4000e-004 | 1.2000e-004 | 1.0700e-003 | 0.0000 | 2.8000e-004 | 0.0000 | 2.8000e-004 | 7.0000e-005 | 0.0000 | 8.0000e-005 | 0.0000 | 0.2270 | 0.2270 | 1.0000e-005 | 0.0000 | 0.2272 |
| **Total** | **1.4000e-004** | **1.2000e-004** | **1.0700e-003** | **0.0000** | **2.8000e-004** | **0.0000** | **2.8000e-004** | **7.0000e-005** | **0.0000** | **8.0000e-005** | **0.0000** | **0.2270** | **0.2270** | **1.0000e-005** | **0.0000** | **0.2272** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.0500e-003 | 0.0105 | 0.0114 | 2.0000e-005 | | 6.7000e-004 | 6.7000e-004 | | 6.1000e-004 | 6.1000e-004 | 0.0000 | 1.3643 | 1.3643 | 4.4000e-004 | 0.0000 | 1.3753 |
| **Total** | **1.0500e-003** | **0.0105** | **0.0114** | **2.0000e-005** | **0.0000** | **6.7000e-004** | **6.7000e-004** | **0.0000** | **6.1000e-004** | **6.1000e-004** | **0.0000** | **1.3643** | **1.3643** | **4.4000e-004** | **0.0000** | **1.3753** |

## 3.3 Site Preparation for Grading - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.4000e-004 | 1.2000e-004 | 1.0700e-003 | 0.0000 | 2.8000e-004 | 0.0000 | 2.8000e-004 | 7.0000e-005 | 0.0000 | 8.0000e-005 | 0.0000 | 0.2270 | 0.2270 | 1.0000e-005 | 0.0000 | 0.2272 |
| **Total** | **1.4000e-004** | **1.2000e-004** | **1.0700e-003** | **0.0000** | **2.8000e-004** | **0.0000** | **2.8000e-004** | **7.0000e-005** | **0.0000** | **8.0000e-005** | **0.0000** | **0.2270** | **0.2270** | **1.0000e-005** | **0.0000** | **0.2272** |

## 3.4 Grading - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1227 | 0.0000 | 0.1227 | 0.0665 | 0.0000 | 0.0665 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0280 | 0.2937 | 0.2071 | 6.3000e-004 | | 0.0121 | 0.0121 | | 0.0113 | 0.0113 | 0.0000 | 54.7015 | 54.7015 | 0.0125 | 0.0000 | 55.0135 |
| **Total** | **0.0280** | **0.2937** | **0.2071** | **6.3000e-004** | **0.1227** | **0.0121** | **0.1348** | **0.0665** | **0.0113** | **0.0778** | **0.0000** | **54.7015** | **54.7015** | **0.0125** | **0.0000** | **55.0135** |

## 3.4 Grading - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0520 | 1.8206 | 0.5741 | 5.4300e-003 | 0.1294 | 8.8700e-003 | 0.1382 | 0.0355 | 8.4900e-003 | 0.0439 | 0.0000 | 549.2933 | 549.2933 | 0.0476 | 0.0000 | 550.4837 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1600e-003 | 9.8000e-004 | 8.5400e-003 | 2.0000e-005 | 2.2200e-003 | 1.0000e-005 | 2.2400e-003 | 5.9000e-004 | 1.0000e-005 | 6.0000e-004 | 0.0000 | 1.8160 | 1.8160 | 6.0000e-005 | 0.0000 | 1.8175 |
| **Total** | **0.0532** | **1.8216** | **0.5826** | **5.4500e-003** | **0.1316** | **8.8800e-003** | **0.1405** | **0.0360** | **8.5000e-003** | **0.0445** | **0.0000** | **551.1093** | **551.1093** | **0.0477** | **0.0000** | **552.3012** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0552 | 0.0000 | 0.0552 | 0.0299 | 0.0000 | 0.0299 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0280 | 0.2548 | 0.2071 | 6.3000e-004 | | 0.0121 | 0.0121 | | 0.0113 | 0.0113 | 0.0000 | 54.7014 | 54.7014 | 0.0125 | 0.0000 | 55.0135 |
| **Total** | **0.0280** | **0.2548** | **0.2071** | **6.3000e-004** | **0.0552** | **0.0121** | **0.0673** | **0.0299** | **0.0113** | **0.0413** | **0.0000** | **54.7014** | **54.7014** | **0.0125** | **0.0000** | **55.0135** |

## 3.4 Grading - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0520 | 1.8206 | 0.5741 | 5.4300e-003 | 0.1294 | 8.8700e-003 | 0.1382 | 0.0355 | 8.4900e-003 | 0.0439 | 0.0000 | 549.2933 | 549.2933 | 0.0476 | 0.0000 | 550.4837 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.1600e-003 | 9.8000e-004 | 8.5400e-003 | 2.0000e-005 | 2.2200e-003 | 1.0000e-005 | 2.2400e-003 | 5.9000e-004 | 1.0000e-005 | 6.0000e-004 | 0.0000 | 1.8160 | 1.8160 | 6.0000e-005 | 0.0000 | 1.8175 |
| **Total** | **0.0532** | **1.8216** | **0.5826** | **5.4500e-003** | **0.1316** | **8.8800e-003** | **0.1405** | **0.0360** | **8.5000e-003** | **0.0445** | **0.0000** | **551.1093** | **551.1093** | **0.0477** | **0.0000** | **552.3012** |

## 3.5 Site Preparation - Misc. - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.4000e-004 | 2.3700e-003 | 2.5600e-003 | 0.0000 | | 1.5000e-004 | 1.5000e-004 | | 1.4000e-004 | 1.4000e-004 | 0.0000 | 0.3070 | 0.3070 | 1.0000e-004 | 0.0000 | 0.3094 |
| **Total** | **2.4000e-004** | **2.3700e-003** | **2.5600e-003** | **0.0000** | **0.0000** | **1.5000e-004** | **1.5000e-004** | **0.0000** | **1.4000e-004** | **1.4000e-004** | **0.0000** | **0.3070** | **0.3070** | **1.0000e-004** | **0.0000** | **0.3094** |

## 3.5 Site Preparation - Misc. - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.0000e-005 | 7.0000e-005 | 6.4000e-004 | 0.0000 | 1.7000e-004 | 0.0000 | 1.7000e-004 | 4.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1362 | 0.1362 | 0.0000 | 0.0000 | 0.1363 |
| **Total** | **9.0000e-005** | **7.0000e-005** | **6.4000e-004** | **0.0000** | **1.7000e-004** | **0.0000** | **1.7000e-004** | **4.0000e-005** | **0.0000** | **5.0000e-005** | **0.0000** | **0.1362** | **0.1362** | **0.0000** | **0.0000** | **0.1363** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.4000e-004 | 2.3700e-003 | 2.5600e-003 | 0.0000 | | 1.5000e-004 | 1.5000e-004 | | 1.4000e-004 | 1.4000e-004 | 0.0000 | 0.3070 | 0.3070 | 1.0000e-004 | 0.0000 | 0.3094 |
| **Total** | **2.4000e-004** | **2.3700e-003** | **2.5600e-003** | **0.0000** | **0.0000** | **1.5000e-004** | **1.5000e-004** | **0.0000** | **1.4000e-004** | **1.4000e-004** | **0.0000** | **0.3070** | **0.3070** | **1.0000e-004** | **0.0000** | **0.3094** |

## 3.5 Site Preparation - Misc. - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.0000e-005 | 7.0000e-005 | 6.4000e-004 | 0.0000 | 1.7000e-004 | 0.0000 | 1.7000e-004 | 4.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1362 | 0.1362 | 0.0000 | 0.0000 | 0.1363 |
| **Total** | **9.0000e-005** | **7.0000e-005** | **6.4000e-004** | **0.0000** | **1.7000e-004** | **0.0000** | **1.7000e-004** | **4.0000e-005** | **0.0000** | **5.0000e-005** | **0.0000** | **0.1362** | **0.1362** | **0.0000** | **0.0000** | **0.1363** |

## 3.6 Paving - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Paving | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.6 Paving - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Paving | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.6 Paving - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.7 Architectural Coating - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.7 Architectural Coating - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### 3.7 Architectural Coating - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

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

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| User Defined Recreational | 6.60 | 5.50 | 6.40 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| User Defined Recreational | 0.553205 | 0.030828 | 0.204091 | 0.129951 | 0.023898 | 0.006086 | 0.017139 | 0.018453 | 0.002761 | 0.002481 | 0.007244 | 0.002707 | 0.001156 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

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

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

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

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

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

### 5.3 Energy by Land Use - Electricity

**Mitigated**

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

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0000 | 0.0000 | 2.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |
| Unmitigated | 0.0000 | 0.0000 | 2.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.0000 | 0.0000 | 2.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |
| **Total** | **0.0000** | **0.0000** | **2.0000e-005** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **4.0000e-005** | **4.0000e-005** | **0.0000** | **0.0000** | **5.0000e-005** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.0000 | 0.0000 | 2.0000e-005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 4.0000e-005 | 4.0000e-005 | 0.0000 | 0.0000 | 5.0000e-005 |
| **Total** | **0.0000** | **0.0000** | **2.0000e-005** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **4.0000e-005** | **4.0000e-005** | **0.0000** | **0.0000** | **5.0000e-005** |

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

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

## 7.2 Water by Land Use

**Unmitigated**

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

### 7.2 Water by Land Use

**Mitigated**

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

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

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

## 8.2 Waste by Land Use

**Unmitigated**

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

**Mitigated**

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

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

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

### Boilers

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

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Cold Springs Debris Basin Improvements Project

**Santa Barbara-South of Santa Ynez Range County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| User Defined Recreational | 2.40 | User Defined Unit | 2.40 | 0.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Rural | **Wind Speed (m/s)** | 2.7 | **Precipitation Freq (Days)** | 37 |
| **Climate Zone** | 8 | | | **Operational Year** | 2020 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Cold Springs Debris Basin Improvements Project - Santa Barbara-South of Santa Ynez Range County, Summer

Project Characteristics -

Land Use - Total lot area is 2.4 acres.

Construction Phase - Only site preparation and grading will be included in the Project.

Off-road Equipment - Excavators, Tractors/Loaders/Backhoes, a water truck (other construction equipment), and a pump will be used for the grading phase.

Off-road Equipment - One tractor/loader/backhoe will be used for site preparation for grading.

Trips and VMT - 3,800 truck trips at 80 miles per trip during the grading phase. Worker trips per day is conservatively estimated with 9 total laborers during each phase.

Grading - The total area of disturbance is 1.6 acres.

Construction Off-road Equipment Mitigation -

Off-road Equipment - Only Tractor/Loader/Backhoe will be used for site preparation for water diversion.

Off-road Equipment - No paving phase.

Off-road Equipment - No architectural coating phase.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 10.00 | 0.00 |
| tblConstructionPhase | NumDays | 6.00 | 40.00 |
| tblConstructionPhase | NumDays | 10.00 | 0.00 |
| tblConstructionPhase | NumDays | 3.00 | 0.00 |
| tblConstructionPhase | NumDays | 3.00 | 5.00 |
| tblGrading | AcresOfGrading | 20.00 | 1.60 |
| tblGrading | AcresOfGrading | 4.50 | 0.00 |
| tblGrading | MaterialExported | 0.00 | 19,000.00 |
| tblLandUse | LotAcreage | 0.00 | 2.40 |
| tblOffRoadEquipment | HorsePower | 158.00 | 187.00 |
| tblOffRoadEquipment | HorsePower | 84.00 | 247.00 |
| tblOffRoadEquipment | HorsePower | 158.00 | 367.00 |

Cold Springs Debris Basin Improvements Project - Santa Barbara-South of Santa Ynez Range County, Summer

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | HorsePower | 84.00 | 247.00 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.41 |
| tblOffRoadEquipment | LoadFactor | 0.74 | 0.40 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.74 | 0.40 |
| tblOffRoadEquipment | OffRoadEquipmentType | Graders | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | Rubber Tired Dozers | Pumps |
| tblOffRoadEquipment | OffRoadEquipmentType | | Other Construction Equipment |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 6.00 |
| tblProjectCharacteristics | UrbanizationLevel | Urban | Rural |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 80.00 |
| tblTripsAndVMT | HaulingTripNumber | 0.00 | 3,800.00 |
| tblTripsAndVMT | WorkerTripNumber | 8.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 18.00 |
| tblTripsAndVMT | WorkerTripNumber | 25.00 | 18.00 |
| tblTripsAndVMT | WorkerTripNumber | 15.00 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 4.7365 | 108.6934 | 46.5949 | 0.3149 | 13.0714 | 1.1498 | 14.4882 | 5.2198 | 1.0825 | 6.5479 | 0.0000 | 34,470.1564 | 34,470.1564 | 3.5845 | 0.0000 | 34,559.7700 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **4.7365** | **108.6934** | **46.5949** | **0.3149** | **13.0714** | **1.1498** | **14.4882** | **5.2198** | **1.0825** | **6.5479** | **0.0000** | **34,470.1564** | **34,470.1564** | **3.5845** | **0.0000** | **34,559.7700** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 4.7365 | 106.7503 | 46.5949 | 0.3149 | 9.6974 | 1.1498 | 11.1141 | 3.3908 | 1.0825 | 4.7189 | 0.0000 | 34,470.1564 | 34,470.1564 | 3.5845 | 0.0000 | 34,559.7700 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **4.7365** | **106.7503** | **46.5949** | **0.3149** | **9.6974** | **1.1498** | **11.1141** | **3.3908** | **1.0825** | **4.7189** | **0.0000** | **34,470.1564** | **34,470.1564** | **3.5845** | **0.0000** | **34,559.7700** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **1.79** | **0.00** | **0.00** | **25.81** | **0.00** | **23.29** | **35.04** | **0.00** | **27.93** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | **0.0000** | **5.6000e-004** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | **0.0000** | **5.6000e-004** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 8/29/2020 | 8/28/2020 | 5 | 0 | |
| 2 | Site Preparation for Grading | Site Preparation | 9/1/2020 | 9/7/2020 | 5 | 5 | Preparation for grading. |
| 3 | Grading | Grading | 9/8/2020 | 11/2/2020 | 5 | 40 | |
| 4 | Site Preparation - Misc. | Site Preparation | 9/11/2020 | 9/15/2020 | 5 | 3 | Preparation for water diversion, vegetation clearing. |
| 5 | Paving | Paving | 7/16/2021 | 7/15/2021 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 7/30/2021 | 7/29/2021 | 5 | 0 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1.6**

**Acres of Paving: 0**

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

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Scrapers | 1 | 8.00 | 367 | 0.48 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Site Preparation for Grading | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |

| | | | | | |
|---|---|---|---|---|---|
| Site Preparation for Grading | Excavators | 0 | 6.00 | 367 | 0.48 |
| Site Preparation for Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Site Preparation for Grading | Pumps | 0 | 8.00 | 247 | 0.40 |
| Site Preparation for Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Site Preparation for Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 187 | 0.41 |
| Grading | Pumps | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |
| Site Preparation - Misc. | Cranes | 0 | 8.00 | 231 | 0.29 |
| Site Preparation - Misc. | Forklifts | 0 | 7.00 | 89 | 0.20 |
| Site Preparation - Misc. | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Site Preparation - Misc. | Graders | 0 | 8.00 | 187 | 0.41 |
| Site Preparation - Misc. | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Site Preparation - Misc. | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Site Preparation - Misc. | Welders | 0 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 0 | 8.00 | 9 | 0.56 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Other Construction Equipment | 1 | 3.00 | 172 | 0.42 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation for Grading | 2 | 18.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 7 | 18.00 | 0.00 | 3,800.00 | 8.30 | 6.40 | 80.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation - Misc | 10 | 18.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Site Preparation - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.2 Site Preparation - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.2 Site Preparation - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.3 Site Preparation for Grading - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4190 | 4.2103 | 4.5594 | 6.2100e-003 | | 0.2662 | 0.2662 | | 0.2449 | 0.2449 | | 601.5370 | 601.5370 | 0.1946 | | 606.4008 |
| **Total** | **0.4190** | **4.2103** | **4.5594** | **6.2100e-003** | **0.0000** | **0.2662** | **0.2662** | **0.0000** | **0.2449** | **0.2449** | | **601.5370** | **601.5370** | **0.1946** | | **606.4008** |

## 3.3 Site Preparation for Grading - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0436 | 0.4218 | 1.0300e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 102.3172 | 102.3172 | 3.4200e-003 | | 102.4028 |
| **Total** | **0.0563** | **0.0436** | **0.4218** | **1.0300e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **102.3172** | **102.3172** | **3.4200e-003** | | **102.4028** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4190 | 4.2103 | 4.5594 | 6.2100e-003 | | 0.2662 | 0.2662 | | 0.2449 | 0.2449 | 0.0000 | 601.5370 | 601.5370 | 0.1946 | | 606.4008 |
| **Total** | **0.4190** | **4.2103** | **4.5594** | **6.2100e-003** | **0.0000** | **0.2662** | **0.2662** | **0.0000** | **0.2449** | **0.2449** | **0.0000** | **601.5370** | **601.5370** | **0.1946** | | **606.4008** |

## 3.3 Site Preparation for Grading - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0436 | 0.4218 | 1.0300e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 102.3172 | 102.3172 | 3.4200e-003 | | 102.4028 |
| **Total** | **0.0563** | **0.0436** | **0.4218** | **1.0300e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **102.3172** | **102.3172** | **3.4200e-003** | | **102.4028** |

## 3.4 Grading - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.1346 | 0.0000 | 6.1346 | 3.3254 | 0.0000 | 3.3254 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.3989 | 14.6823 | 10.3570 | 0.0314 | | 0.6060 | 0.6060 | | 0.5659 | 0.5659 | | 3,014.9030 | 3,014.9030 | 0.6879 | | 3,032.1008 |
| **Total** | **1.3989** | **14.6823** | **10.3570** | **0.0314** | **6.1346** | **0.6060** | **6.7406** | **3.3254** | **0.5659** | **3.8913** | | **3,014.9030** | **3,014.9030** | **0.6879** | | **3,032.1008** |

## 3.4 Grading - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 2.5926 | 88.0911 | 28.7034 | 0.2719 | 6.5958 | 0.4426 | 7.0383 | 1.8039 | 0.4234 | 2.2273 | | 30,321.1884 | 30,321.1884 | 2.6189 | | 30,386.6597 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0436 | 0.4218 | 1.0300e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 102.3172 | 102.3172 | 3.4200e-003 | | 102.4028 |
| **Total** | **2.6489** | **88.1347** | **29.1252** | **0.2730** | **6.7094** | **0.4433** | **7.1527** | **1.8341** | **0.4241** | **2.2581** | | **30,423.5056** | **30,423.5056** | **2.6223** | | **30,489.0625** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.7606 | 0.0000 | 2.7606 | 1.4964 | 0.0000 | 1.4964 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.3989 | 12.7392 | 10.3570 | 0.0314 | | 0.6060 | 0.6060 | | 0.5659 | 0.5659 | 0.0000 | 3,014.9029 | 3,014.9029 | 0.6879 | | 3,032.1008 |
| **Total** | **1.3989** | **12.7392** | **10.3570** | **0.0314** | **2.7606** | **0.6060** | **3.3666** | **1.4964** | **0.5659** | **2.0623** | **0.0000** | **3,014.9029** | **3,014.9029** | **0.6879** | | **3,032.1008** |

## 3.4 Grading - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 2.5926 | 88.0911 | 28.7034 | 0.2719 | 6.5958 | 0.4426 | 7.0383 | 1.8039 | 0.4234 | 2.2273 | | 30,321.1884 | 30,321.1884 | 2.6189 | | 30,386.6597 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0436 | 0.4218 | 1.0300e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 102.3172 | 102.3172 | 3.4200e-003 | | 102.4028 |
| **Total** | **2.6489** | **88.1347** | **29.1252** | **0.2730** | **6.7094** | **0.4433** | **7.1527** | **1.8341** | **0.4241** | **2.2581** | | **30,423.5056** | **30,423.5056** | **2.6223** | | **30,489.0625** |

## 3.5 Site Preparation - Misc. - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1571 | 1.5789 | 1.7098 | 2.3300e-003 | | 0.0998 | 0.0998 | | 0.0919 | 0.0919 | | 225.5764 | 225.5764 | 0.0730 | | 227.4003 |
| **Total** | **0.1571** | **1.5789** | **1.7098** | **2.3300e-003** | **0.0000** | **0.0998** | **0.0998** | **0.0000** | **0.0919** | **0.0919** | | **225.5764** | **225.5764** | **0.0730** | | **227.4003** |

## 3.5 Site Preparation - Misc. - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0436 | 0.4218 | 1.0300e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 102.3172 | 102.3172 | 3.4200e-003 | | 102.4028 |
| **Total** | **0.0563** | **0.0436** | **0.4218** | **1.0300e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **102.3172** | **102.3172** | **3.4200e-003** | | **102.4028** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1571 | 1.5789 | 1.7098 | 2.3300e-003 | | 0.0998 | 0.0998 | | 0.0919 | 0.0919 | 0.0000 | 225.5764 | 225.5764 | 0.0730 | | 227.4003 |
| **Total** | **0.1571** | **1.5789** | **1.7098** | **2.3300e-003** | **0.0000** | **0.0998** | **0.0998** | **0.0000** | **0.0919** | **0.0919** | **0.0000** | **225.5764** | **225.5764** | **0.0730** | | **227.4003** |

## 3.5 Site Preparation - Misc. - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0563 | 0.0436 | 0.4218 | 1.0300e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 102.3172 | 102.3172 | 3.4200e-003 | | 102.4028 |
| **Total** | **0.0563** | **0.0436** | **0.4218** | **1.0300e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **102.3172** | **102.3172** | **3.4200e-003** | | **102.4028** |

## 3.6 Paving - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Paving | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.6 Paving - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Paving | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.6 Paving - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.7 Architectural Coating - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.7 Architectural Coating - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### 3.7 Architectural Coating - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

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

### 4.2 Trip Summary Information

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

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| User Defined Recreational | 6.60 | 5.50 | 6.40 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| User Defined Recreational | 0.553205 | 0.030828 | 0.204091 | 0.129951 | 0.023898 | 0.006086 | 0.017139 | 0.018453 | 0.002761 | 0.002481 | 0.007244 | 0.002707 | 0.001156 |

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

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

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

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

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| Unmitigated | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | | **5.6000e-004** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | | **5.6000e-004** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Cold Springs Debris Basin Improvements Project

**Santa Barbara-South of Santa Ynez Range County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| User Defined Recreational | 2.40 | User Defined Unit | 2.40 | 0.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Rural | **Wind Speed (m/s)** | 2.7 | **Precipitation Freq (Days)** | 37 |
| **Climate Zone** | 8 | | | **Operational Year** | 2020 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Cold Springs Debris Basin Improvements Project - Santa Barbara-South of Santa Ynez Range County, Winter

Project Characteristics -

Land Use - Total lot area is 2.4 acres.

Construction Phase - Only site preparation and grading will be included in the Project.

Off-road Equipment - Excavators, Tractors/Loaders/Backhoes, a water truck (other construction equipment), and a pump will be used for the grading phase.

Off-road Equipment - One tractor/loader/backhoe will be used for site preparation for grading.

Trips and VMT - 3,800 truck trips at 80 miles per trip during the grading phase. Worker trips per day is conservatively estimated with 9 total laborers during each phase.

Grading - The total area of disturbance is 1.6 acres.

Construction Off-road Equipment Mitigation -

Off-road Equipment - Only Tractor/Loader/Backhoe will be used for site preparation for water diversion.

Off-road Equipment - No paving phase.

Off-road Equipment - No architectural coating phase.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 10.00 | 0.00 |
| tblConstructionPhase | NumDays | 6.00 | 40.00 |
| tblConstructionPhase | NumDays | 10.00 | 0.00 |
| tblConstructionPhase | NumDays | 3.00 | 0.00 |
| tblConstructionPhase | NumDays | 3.00 | 5.00 |
| tblGrading | AcresOfGrading | 20.00 | 1.60 |
| tblGrading | AcresOfGrading | 4.50 | 0.00 |
| tblGrading | MaterialExported | 0.00 | 19,000.00 |
| tblLandUse | LotAcreage | 0.00 | 2.40 |
| tblOffRoadEquipment | HorsePower | 158.00 | 187.00 |
| tblOffRoadEquipment | HorsePower | 84.00 | 247.00 |
| tblOffRoadEquipment | HorsePower | 158.00 | 367.00 |

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | HorsePower | 84.00 | 247.00 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.41 |
| tblOffRoadEquipment | LoadFactor | 0.74 | 0.40 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.74 | 0.40 |
| tblOffRoadEquipment | OffRoadEquipmentType | Graders | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | Rubber Tired Dozers | Pumps |
| tblOffRoadEquipment | OffRoadEquipmentType | | Other Construction Equipment |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Site Preparation - Misc. |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 6.00 |
| tblProjectCharacteristics | UrbanizationLevel | Urban | Rural |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 80.00 |
| tblTripsAndVMT | HaulingTripNumber | 0.00 | 3,800.00 |
| tblTripsAndVMT | WorkerTripNumber | 8.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 18.00 |
| tblTripsAndVMT | WorkerTripNumber | 25.00 | 18.00 |
| tblTripsAndVMT | WorkerTripNumber | 15.00 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 4.7769 | 110.3738 | 46.7628 | 0.3139 | 13.0714 | 1.1527 | 14.4910 | 5.2198 | 1.0852 | 6.5506 | 0.0000 | 34,352.1594 | 34,352.1594 | 3.5978 | 0.0000 | 34,442.1039 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **4.7769** | **110.3738** | **46.7628** | **0.3139** | **13.0714** | **1.1527** | **14.4910** | **5.2198** | **1.0852** | **6.5506** | **0.0000** | **34,352.1594** | **34,352.1594** | **3.5978** | **0.0000** | **34,442.1039** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 4.7769 | 108.4307 | 46.7628 | 0.3139 | 9.6974 | 1.1527 | 11.1170 | 3.3908 | 1.0852 | 4.7216 | 0.0000 | 34,352.1594 | 34,352.1594 | 3.5978 | 0.0000 | 34,442.1039 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Maximum** | **4.7769** | **108.4307** | **46.7628** | **0.3139** | **9.6974** | **1.1527** | **11.1170** | **3.3908** | **1.0852** | **4.7216** | **0.0000** | **34,352.1594** | **34,352.1594** | **3.5978** | **0.0000** | **34,442.1039** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **1.76** | **0.00** | **0.00** | **25.81** | **0.00** | **23.28** | **35.04** | **0.00** | **27.92** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | **0.0000** | **5.6000e-004** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | **0.0000** | **5.6000e-004** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 8/29/2020 | 8/28/2020 | 5 | 0 | |
| 2 | Site Preparation for Grading | Site Preparation | 9/1/2020 | 9/7/2020 | 5 | 5 | Preparation for grading. |
| 3 | Grading | Grading | 9/8/2020 | 11/2/2020 | 5 | 40 | |
| 4 | Site Preparation - Misc. | Site Preparation | 9/11/2020 | 9/15/2020 | 5 | 3 | Preparation for water diversion, vegetation clearing. |
| 5 | Paving | Paving | 7/16/2021 | 7/15/2021 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 7/30/2021 | 7/29/2021 | 5 | 0 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1.6**

**Acres of Paving: 0**

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

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Scrapers | 1 | 8.00 | 367 | 0.48 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Site Preparation for Grading | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |

| | | | | | |
|---|---|---|---|---|---|
| Site Preparation for Grading | Excavators | 0 | 6.00 | 367 | 0.48 |
| Site Preparation for Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Site Preparation for Grading | Pumps | 0 | 8.00 | 247 | 0.40 |
| Site Preparation for Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Site Preparation for Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 187 | 0.41 |
| Grading | Pumps | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |
| Site Preparation - Misc. | Cranes | 0 | 8.00 | 231 | 0.29 |
| Site Preparation - Misc. | Forklifts | 0 | 7.00 | 89 | 0.20 |
| Site Preparation - Misc. | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Site Preparation - Misc. | Graders | 0 | 8.00 | 187 | 0.41 |
| Site Preparation - Misc. | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Site Preparation - Misc. | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Site Preparation - Misc. | Welders | 0 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 0 | 8.00 | 9 | 0.56 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Other Construction Equipment | 1 | 3.00 | 172 | 0.42 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation for Grading | 2 | 18.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 7 | 18.00 | 0.00 | 3,800.00 | 8.30 | 6.40 | 80.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation - Misc | 10 | 18.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 8.30 | 6.40 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Site Preparation - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.2 Site Preparation - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.2 Site Preparation - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.3 Site Preparation for Grading - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4190 | 4.2103 | 4.5594 | 6.2100e-003 | | 0.2662 | 0.2662 | | 0.2449 | 0.2449 | | 601.5370 | 601.5370 | 0.1946 | | 606.4008 |
| **Total** | **0.4190** | **4.2103** | **4.5594** | **6.2100e-003** | **0.0000** | **0.2662** | **0.2662** | **0.0000** | **0.2449** | **0.2449** | | **601.5370** | **601.5370** | **0.1946** | | **606.4008** |

## 3.3 Site Preparation for Grading - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0635 | 0.0499 | 0.4381 | 1.0000e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 99.9509 | 99.9509 | 3.4400e-003 | | 100.0369 |
| **Total** | **0.0635** | **0.0499** | **0.4381** | **1.0000e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **99.9509** | **99.9509** | **3.4400e-003** | | **100.0369** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4190 | 4.2103 | 4.5594 | 6.2100e-003 | | 0.2662 | 0.2662 | | 0.2449 | 0.2449 | 0.0000 | 601.5370 | 601.5370 | 0.1946 | | 606.4008 |
| **Total** | **0.4190** | **4.2103** | **4.5594** | **6.2100e-003** | **0.0000** | **0.2662** | **0.2662** | **0.0000** | **0.2449** | **0.2449** | **0.0000** | **601.5370** | **601.5370** | **0.1946** | | **606.4008** |

## 3.3 Site Preparation for Grading - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0635 | 0.0499 | 0.4381 | 1.0000e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 99.9509 | 99.9509 | 3.4400e-003 | | 100.0369 |
| **Total** | **0.0635** | **0.0499** | **0.4381** | **1.0000e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **99.9509** | **99.9509** | **3.4400e-003** | | **100.0369** |

## 3.4 Grading - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.1346 | 0.0000 | 6.1346 | 3.3254 | 0.0000 | 3.3254 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.3989 | 14.6823 | 10.3570 | 0.0314 | | 0.6060 | 0.6060 | | 0.5659 | 0.5659 | | 3,014.9030 | 3,014.9030 | 0.6879 | | 3,032.1008 |
| **Total** | **1.3989** | **14.6823** | **10.3570** | **0.0314** | **6.1346** | **0.6060** | **6.7406** | **3.3254** | **0.5659** | **3.8913** | | **3,014.9030** | **3,014.9030** | **0.6879** | | **3,032.1008** |

## 3.4 Grading - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 2.6115 | 89.7527 | 28.8223 | 0.2709 | 6.5958 | 0.4454 | 7.0411 | 1.8039 | 0.4261 | 2.2300 | | 30,210.2903 | 30,210.2903 | 2.6321 | | 30,276.0916 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0635 | 0.0499 | 0.4381 | 1.0000e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 99.9509 | 99.9509 | 3.4400e-003 | | 100.0369 |
| **Total** | **2.6749** | **89.8026** | **29.2604** | **0.2719** | **6.7094** | **0.4461** | **7.1555** | **1.8341** | **0.4268** | **2.2608** | | **30,310.2412** | **30,310.2412** | **2.6355** | | **30,376.1284** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.7606 | 0.0000 | 2.7606 | 1.4964 | 0.0000 | 1.4964 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.3989 | 12.7392 | 10.3570 | 0.0314 | | 0.6060 | 0.6060 | | 0.5659 | 0.5659 | 0.0000 | 3,014.9029 | 3,014.9029 | 0.6879 | | 3,032.1008 |
| **Total** | **1.3989** | **12.7392** | **10.3570** | **0.0314** | **2.7606** | **0.6060** | **3.3666** | **1.4964** | **0.5659** | **2.0623** | **0.0000** | **3,014.9029** | **3,014.9029** | **0.6879** | | **3,032.1008** |

## 3.4 Grading - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 2.6115 | 89.7527 | 28.8223 | 0.2709 | 6.5958 | 0.4454 | 7.0411 | 1.8039 | 0.4261 | 2.2300 | | 30,210.2903 | 30,210.2903 | 2.6321 | | 30,276.0916 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0635 | 0.0499 | 0.4381 | 1.0000e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 99.9509 | 99.9509 | 3.4400e-003 | | 100.0369 |
| **Total** | **2.6749** | **89.8026** | **29.2604** | **0.2719** | **6.7094** | **0.4461** | **7.1555** | **1.8341** | **0.4268** | **2.2608** | | **30,310.2412** | **30,310.2412** | **2.6355** | | **30,376.1284** |

## 3.5 Site Preparation - Misc. - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1571 | 1.5789 | 1.7098 | 2.3300e-003 | | 0.0998 | 0.0998 | | 0.0919 | 0.0919 | | 225.5764 | 225.5764 | 0.0730 | | 227.4003 |
| **Total** | **0.1571** | **1.5789** | **1.7098** | **2.3300e-003** | **0.0000** | **0.0998** | **0.0998** | **0.0000** | **0.0919** | **0.0919** | | **225.5764** | **225.5764** | **0.0730** | | **227.4003** |

## 3.5 Site Preparation - Misc. - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0635 | 0.0499 | 0.4381 | 1.0000e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 99.9509 | 99.9509 | 3.4400e-003 | | 100.0369 |
| **Total** | **0.0635** | **0.0499** | **0.4381** | **1.0000e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **99.9509** | **99.9509** | **3.4400e-003** | | **100.0369** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1571 | 1.5789 | 1.7098 | 2.3300e-003 | | 0.0998 | 0.0998 | | 0.0919 | 0.0919 | 0.0000 | 225.5764 | 225.5764 | 0.0730 | | 227.4003 |
| **Total** | **0.1571** | **1.5789** | **1.7098** | **2.3300e-003** | **0.0000** | **0.0998** | **0.0998** | **0.0000** | **0.0919** | **0.0919** | **0.0000** | **225.5764** | **225.5764** | **0.0730** | | **227.4003** |

## 3.5 Site Preparation - Misc. - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0635 | 0.0499 | 0.4381 | 1.0000e-003 | 0.1137 | 7.2000e-004 | 0.1144 | 0.0302 | 6.7000e-004 | 0.0308 | | 99.9509 | 99.9509 | 3.4400e-003 | | 100.0369 |
| **Total** | **0.0635** | **0.0499** | **0.4381** | **1.0000e-003** | **0.1137** | **7.2000e-004** | **0.1144** | **0.0302** | **6.7000e-004** | **0.0308** | | **99.9509** | **99.9509** | **3.4400e-003** | | **100.0369** |

## 3.6 Paving - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Paving | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.6 Paving - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Paving | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.6 Paving - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.7 Architectural Coating - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.7 Architectural Coating - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### 3.7 Architectural Coating - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

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

### 4.2 Trip Summary Information

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

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| User Defined Recreational | 6.60 | 5.50 | 6.40 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| User Defined Recreational | 0.553205 | 0.030828 | 0.204091 | 0.129951 | 0.023898 | 0.006086 | 0.017139 | 0.018453 | 0.002761 | 0.002481 | 0.007244 | 0.002707 | 0.001156 |

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

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

### 5.2 Energy by Land Use - NaturalGas

**Mitigated**

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

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| Unmitigated | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | | **5.6000e-004** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.0000e-005 | 0.0000 | 2.5000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 5.3000e-004 | 5.3000e-004 | 0.0000 | | 5.6000e-004 |
| **Total** | **2.0000e-005** | **0.0000** | **2.5000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **5.3000e-004** | **5.3000e-004** | **0.0000** | | **5.6000e-004** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# ATTACHMENT B

## Cultural Resources

## Central Coast Information Center Records Search (Confidential)
## Negative Archaeological Survey Report (Confidential)

## Native American Heritage Commission Sacred Lands Inventory Search

*Confidential Data Available at Santa Barbara County Flood Control and Water Conservation District Offices*

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# Sacred Lands File & Native American Contacts List Request

**Native American Heritage Commission**
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

*Information Below is Required for a Sacred Lands File Search*

**Project:** Cold Springs Debris Basin Expansion

**County:** Santa Barbara County

**USGS Quadrangle Name:** Santa Barbara

**Township:** 4N **Range:** 27W **Section(s):**

**Company/Firm/Agency:** Wood Environment & Infrastructure

**Street Address:** 104 W. Anapamu St. Suite 204A

**City:** Santa Barbara CA **Zip:** 93105

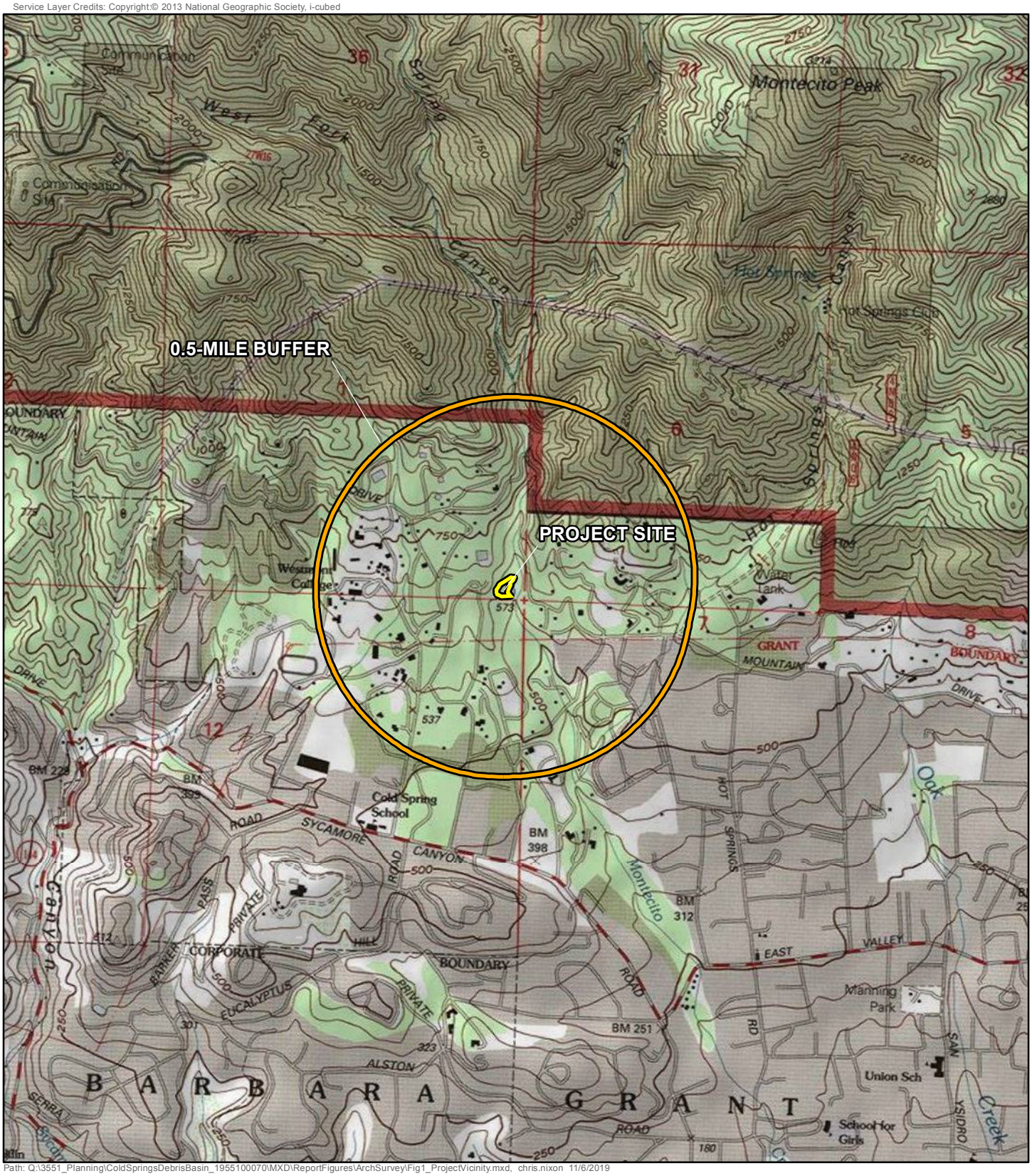
**Phone:** 805-252-1481

**Fax:** 805-966-1706

**Email:** david.f.stone@woodplc.com

**Project Description:**

Expand the existing Cold Spring Debris Basin from 1.5 acres to 2.4 acres (0.9 acre expansion).




Path: Q:\3551_Planning\ColdSpringsDebrisBasin_1955100070\MXD\ReportFigures\ArchSurvey\Fig1_ProjectVicinity.mxd, chris.nixon 11/6/2019

Project Site lies within the Santa Barbara quad,
Township: 4N, Range: 27W

1 inch = 2,000 feet
0 1,000 2,000 Feet
0 250 500 Meters

wood.

Project Site
0.5-Mile Buffer

# FIGURE 1

Project Vicinity
Archaeological Survey Report
Cold Springs Debris Basin Expansion
Santa Barbara County, CA.

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

November 19, 2019

David Stone
Wood Environment & Infrastructure, Inc.

VIA Email to: david.f.stone@woodplc.com

RE: Cold Springs Debris Basin Expansion Project, Santa Barbara County

Dear Mr. Stone:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Staff Services Analyst

Attachment

**Native American Heritage Commission**
**Native American Contact List**
**Santa Barbara County**
**11/19/2019**

***Barbareno/Ventureno Band of Mission Indians***
Julie Tumamait-Stenslie, Chairperson
365 North Poli Ave — Chumash
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com

***Barbareno/ Ventureno Band of Mission Indians***
Raudel Banuelos,
331 Mira Flores — Chumash
Camarillo, CA, 93012
Phone: (805) 427 - 0015

***Barbareno/ Ventureno Band of Mission Indians***
Patrick Tumamait,
992 El Camino Corto — Chumash
Ojai, CA, 93023
Phone: (805) 216 - 1253

***Barbareno/ Ventureno Band of Mission Indians***
Eleanor Arrellanes,
P. O. Box 5687 — Chumash
Ventura, CA, 93005
Phone: (805) 701 - 3246

***Chumash Council of Bakersfield***
Julio Quair, Chairperson
729 Texas Street — Chumash
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net

***Coastal Band of the Chumash Nation***
Gino Altamirano, Chairperson
P. O. Box 4464 — Chumash
Santa Barbara, CA, 93140
cbcn.consultation@gmail.com

***Northern Chumash Tribal Council***
Fred Collins, Spokesperson
P.O. Box 6533 — Chumash
Los Osos, CA, 93412
Phone: (805) 801 - 0347
fcollins@northernchumash.org

***San Luis Obispo County Chumash Council***
Mark Vigil, Chief
1030 Ritchie Road — Chumash
Grover Beach, CA, 93433
Phone: (805) 481 - 2461
Fax: (805) 474-4729

***Santa Ynez Band of Chumash Indians***
Kenneth Kahn, Chairperson
P.O. Box 517 — Chumash
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash.org

***yak tityu tityu yak tiłhini – Northern Chumash Tribe***
Mona Tucker, Chairperson
660 Camino Del Rey — Chumash
Arroyo Grande, CA, 93420
Phone: (805) 748 - 2121
olivas.mona@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Cold Springs Debris Basin Expansion Project, Santa Barbara County.

# ATTACHMENT C

## Notice of Availability
## Draft Mitigated Negative Declaration

## Proposed Cold Spring Basin Expansion Project
## 19NGD-00000-00015

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**COUNTY OF SANTA BARBARA**
**PUBLIC WORKS DEPARTMENT**
**FLOOD CONTROL DISTRICT**
130 E. Victoria Street, Suite 200
Santa Barbara, California 93101
805\568-3443

**SCOTT MCGOLPIN**

**Director**

December 13, 2019

# NOTICE OF AVAILABILITY
# DRAFT MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED COLD SPRINGS DEBRIS BASIN EXPANSION

**PROJECT DESCRIPTION**: The County of Santa Barbara Flood Control and Water Conservation District (District) proposes to expand the existing Cold Spring Debris Basin (Basin) from approximately 1.5 acres to approximately 2.4 acres in order to increase flood protection for downstream properties. The Cold Spring Debris Basin Expansion Project (Project) in the Montecito area of Santa Barbara County would increase the area of the basin westward.

**PROJECT LOCATION:** The Project site is located in the First Supervisorial District, in the Montecito Community Plan Area in the 1000 block of East Mountain Drive.

**PUBLIC COMMENT**: The District is soliciting comments on the adequacy and completeness of the analysis and proposed mitigation measures described in the Draft Mitigated Negative Declaration (MND). You may comment by submitting written or oral comments to Maureen Spencer, identified below, prior to the close of the public comment period on January 17, 2020 at 5 p.m.

**PROJECT DETAILS**: The purpose of the proposed Project is to expand the Basin's size from approximately 1.5 acres to approximately 2.4 acres to increase flood protection for downstream properties. Identical equipment and activity used to conduct maintenance desilting would be used to excavate the expansion area and haul the material away.

Activities associated with proposed Basin expansion would be essentially the same as those resulting from historic routine maintenance. Basin expansion would be limited to earth-moving and would not include constructing additional structures or additions to the existing dam embankment. Construction access would use the existing dirt road and ramp extending from East Mountain Drive that is used for existing debris basin maintenance.

Basin construction would begin in the summer or early fall, occur over 35 to 45 working days, and would be completed prior to the rainy season. Activity would commence as early as 2020, and would occur Monday through Friday, 7:30 a.m. – 4:30 p.m. No construction would occur on weekends and federal holidays.

**ENVIRONMENTAL REVIEW FINDINGS**: The District has prepared a Draft Mitigated Negative Declaration tiered off of the Updated Routine Maintenance Program Final Environmental Impact Report ([PEIR) 01-EIR-01 pursuant to Section 15168 of the State Guidelines for the Implementation of the California Environmental Quality Act (CEQA) and the County of Santa Barbara Guidelines for the Implementation of CEQA. The Draft MND provides mitigation measures to reduce potentially significant impacts to less than significant. Significant but mitigable effects on the environment are anticipated in the following areas: **air quality, biological resources, geologic processes, noise, transportation/circulation, and water resources/flooding**.

**DOCUMENT AVAILABILITY**: If a copy of the MND is not attached, the Draft MND may be obtained, and all documents referenced in the MND may be reviewed, at the District offices located at 130 E. Victoria Street, Suite 200, Santa Barbara.

Draft documents are also available for review at the Santa Barbara Public Library at 40 E. Anapamu Street, Santa Barbara and the Montecito Library at 1469 East Valley Rd., Montecito. An electronic copy of the Draft SEIR can be accessed through the internet at: http://bit.ly/CSDBMND.

**HOW TO COMMENT**: Written comments should be provided to the Project Manager, Maureen Spencer at Santa Barbara County Flood Control and Water Conservation District, 130 E. Victoria Street, Suite 200, Santa Barbara, 93101, prior to the close of the public comment period on January 17 2020 at 5:00 p.m. Please limit comments to environmental issues such as traffic, biology, noise, etc. You will receive notice of the dates of future public hearings to consider project approval or denial.

# ATTACHMENT D

# Draft Mitigated Negative Declaration
# Public Comment Letters and Responses

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## Draft Mitigated Negative Declaration
## Public Comment Letters and Responses

| Letter | Individual | Organization | Date |
|---|---|---|---|
| A. | Rick G. Draeger, Regional Engineer | Department of Water Resources, Division of Safety and Dams | December 31, 2019 |
| B. | Scott Morgan, Director | Governor's Office and Planning and Research, State Clearinghouse and Planning Unit | January 15, 2020 |
| C. | Heidi George | Los Padres National Forest | January 17, 2020 |
| D. | Louis Andaloro | Santa Barbara Urban Creeks Council | January 17, 2020 |

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STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY
GAVIN NEWSOM, *Governor*

**DEPARTMENT OF WATER RESOURCES**
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

A

DEC 31 2019

Ms. Maureen Spencer, Environmental Services Manager
County of Santa Barbara Public Works Department
130 E. Victoria Street, Suite 200
Santa Barbara, California 93101

Environmental Document Transmittal for the Cold Springs Debris Basin Expansion Project SCH2019129053
Santa Barbara County

Dear Ms. Spencer:

The Division of Safety of Dams (DSOD) has reviewed the Draft Mitigated Negative Declaration for the Cold Springs Debris Basin Expansion Project (Project) which describes the proposed expansion of an existing debris basin to be used for flood protection on the subject parcels.

Insufficient information is provided regarding the debris basin in the Project description to make an accurate jurisdictional determination with regards to the described work and it is unclear whether part or all the work will be subject to State jurisdiction for dam safety. The information provided mentions the expansion of an existing debris basin, but design drawings were not provided. Therefore, the County of Santa Barbara needs to submit preliminary plans so that DSOD can make an accurate jurisdictional determination. A-1

As defined in Sections 6002 and 6003, Division 3, of the California Water Code, dams 25 feet or higher with a storage capacity of more than 15 acre-feet, and dams higher than 6 feet with a storage capacity of 50 acre-feet or more are subject to State jurisdiction. The dam height is the vertical distance measured from the maximum possible water storage level to the downstream toe of the barrier. A-2

If the dam is subject to State jurisdiction, a construction application, together with plans, specifications, and the appropriate filing fee must be filed with DSOD for this project. All dam safety related issues must be resolved prior to approval of the application, and the work must be performed under the direction of a Civil Engineer registered in California. Erik Malvick, our Design Engineering Branch Chief, is responsible for the application process and can be reached at (916) 565-7840.

If you have any questions or need additional information, you may contact, Area Engineer Ashley Moran at (916) 565-7830 or me at (916) 565-7827.

Sincerely,

Rick G. Draeger, Regional Engineer
Southern Region
Field Engineering Branch
Division of Safety of Dams

cc: Governor's Office of Planning and Research
State Clearinghouse
state.clearinghouse@opr.ca.gov

**A. Rick G. Draeger, Regional Engineer, Department of Water Resources, Division of Safety and Dams. December 31, 2019**

**A-1** The Draft Mitigated Negative Declaration Section 2.0, Debris Basin Maintenance Background, explains that the existing 1.5-acre Cold Springs Debris Basin was constructed in 1964 by the U.S. Army Corps of Engineers after the Coyote Fire burned a large percentage of the watershed. Subsequently routinely maintained by the District, the Basin has never been subject to the jurisdiction of the Division of Safety of Dams. Public Draft MND Figure 3 illustrates the proposed extent of the Basin Expansion area.

**A-2** The height of the existing Basin grouted rock dam and embankment is greater than 6 feet and less than 25 feet. The proposed expansion will not result in any changes to the current dam embankment structure. Proposed Basin expansion requiring 19,000 cubic yards (11.77 acre-feet) of grading and the 20,000 cubic yards of debris (12.40 acre-feet) removed after the January 9, 2018 Debris Flow are substantially less than 50 acre-feet. Therefore, the Cold Spring Debris Expansion is not subject to Division of Safety of Dams jurisdiction. The Santa Monica Debris Basin is the only facility maintained by the District that is subject to Division of Safety of Dams jurisdiction, as its capacity exceeds the criteria identified in this comment. No revisions to the Draft MND are required.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Gavin Newsom
Governor

Kate Gordon
Director

B

January 15, 2020

Maureen Spencer
Santa Barbara County Flood Control District
130 E. Victoria Street, Suite 200
Santa Barbara, CA 93108

Subject: Cold Spring Debris Basin Expansion
SCH#: 2019129053

Dear Maureen Spencer:

The State Clearinghouse submitted the above named MND to selected state agencies for review. The review period closed on 1/14/2020, and the comments from the responding agency (ies) is (are) available on the CEQA database for your retrieval and use. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

B-1

**Check the CEQA database for submitted comments for use in preparing your final environmental document: https://ceqanet.opr.ca.gov/2019129053/2 .** Should you need more information or clarification of the comments, **we recommend that you contact the commenting agency directly**.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

cc: Resources Agency

**B. Scott Morgan, Director, Governor's Office and Planning and Research, State Clearinghouse and Planning Unit. January 15, 2019**

**B-1** This letter does not address the adequacy of the Draft MND environmental analysis. No revisions to the Draft MND are required.

C

**From:** George, Heidi W -FS <heidi.george@usda.gov>
**Sent:** Friday, January 17, 2020 3:39 PM
**To:** Shank, Seth; Spencer, Maureen
**Cc:** Klose, Kristie A -FS; Lieske, Patrick D -FS
**Subject:** RE: Cold Springs Expansion

Dear City of Santa Barbara,

Thank you for your NOA Draft Mitigated Negative Declaration for the Proposed Cold Springs Debris Basin Expansion notification letter to the U.S. Forest Service, Los Padres National Forest.

Please accept my response to the request for comments for: "Cold Springs Debris Basin Expansion Project December 11, 2019 Case# 19NGD-00000-00015 Draft Initial Study and Mitigated Negative Declaration due today January 17, 2020."

The Los Padres National Forest would like to be included in further opportunities to comment on this project expansion (as introduced under "3.2 Other Pending and Approved Projects" Table 3 Project Name 1. Cold Springs Debris Basin Improvement, "Modification of the existing debris basin dam embankment to allow sediment delivery and fish passage". We would also appreciate being informed regarding all other projects on this list that have an aquatic habitat connectivity to the National Forest. C-1

Because the upper portion of Cold Springs Creek on National Forest is identified as having historical Southern California Steelhead habitat, any opportunities to remove blockage to fish passage are of interest in maintaining habitat connectivity. Please share any design efforts that are considered to accommodate aquatic passage. C-2

Sincerely Yours, Heidi George

**C. Heidi George, Los Padres National Forest. January 17, 2019**

**C-1** The District appreciates the interest of the Los Padres National Forest (LPNF) in establishing future fish passage through the Cold Springs Debris Basin. Projected Cold Springs Debris Basin Improvements will be addressed in the future, as explained in Draft MND Table 3.

**C-2** The District shares the LPNF's interest in maintaining aquatic habitat connectivity throughout drainages within their jurisdiction. Proposed concepts for future improvements within existing Debris Basins to achieve this goal will be shared with the LPNF. These are not being considered as part of the currently proposed Debris Basin expansion. No revisions to the Draft MND are required.

D

**From:** Louis Andaloro <louis@silcom.com>
**Sent:** Friday, January 17, 2020 4:33 PM
**To:** Shank, Seth <sshank@cosbpw.net>
**Subject:** Fwd: Public Comments On The Cold Springs Debris Basin Expansion Project (19NGD-00000-00015)

**From:** Louis Andaloro <louis@silcom.com>
**Subject: Re: Public Comments On The Cold Springs Debris Basin Expansion Project (19NGD-00000-00015)**
**Date:** January 17, 2020 at 4:30:27 PM PST
**To:** shank@cosbpw.net, fccontact@cosbpw.net
**Cc:** natasha lohmus <Natasha.Lohmus@wildlife.ca.gov>, mary.larsen@wildlife.ca.gov, mark capelli <mark.capelli@noaa.gov>, Rick.Bush@noaa.gov

fish passage through the proposed expansion of the cold springs debris basin, may be greatly impaired or prevented from happening for a couple of reasons. even debris basins w/o dams cause sediments and debris to collect during high intensity storms. these sediments can be anywhere from inches to several feet thick. as the creek flows over these sediments, a head cut may form, constituting a major barrier or impediment to steelhead migration.
in addition to this, the accumulated debris, rock and sediments can change the geomorphology of the creek, resulting in a disrupted stream channel, that may not contain the navigable waterways, and the pools necessary for upstream steelhead migration.

D-1

the post storm maintenance required to remove head cuts, obstructed channels, and to re-create pools is unlikely to occur in a timely fashion, given the extremely short duration window that steelhead upstream migration requires. cleaning out an obstructed debris basin and restoring the

stream channel would likely take several days to accomplish, and it is highly likely that steelhead would not be able to get upstream when they have to in order to reach spawning habitat located upstream. this inability to act quickly after large rain events, to restore the potential for steelhead passage is especially troubling to us. D-1 cont.

we are also concerned that the large "industrial" footprint of the proposed debris basin does not have the characteristics of a natural creek, and that the normal riparian cover associated w/ steelhead creeks will not develop in a way that nurtures steelhead. a debris basin such as this one may also lead to higher water temperatures that would be detrimental to steelhead survival. D-2

thank you for considering our concerns about the potentially harmful effects this project will have upon our cold springs creek native steelhead population.

sincerely,

louis andaloro
santa barbara urban creeks council

**D. Louis Andaloro, Santa Barbara Urban Creeks Council. January 17, 2019**

**D-1** The existing Cold Springs Debris Basin was not designed to provide fish passage. Proposed expansion would not influence the existing characteristics of the Debris Basin relative to potential fish passage. Therefore, no new impacts to aquatic biological resources including fish potentially migrating up Cold Springs Creek, including steelhead trout, would occur. No revisions to the Draft MND are required.

Fish passage through the Cold Spring Debris Basin would be an element of the future Cold Springs Debris Basin Improvements design, as explained in Draft MND Table 3. The Gobernador Debris Basin is an example of a District facility where fish passage has been restored, and maintenance of the pilot channel has successfully provided spawning opportunities for migrating fish species.

**D-2** The objective of flood control debris basins to maximize public safety to properties and lives residing downstream requires an expanded footprint beyond normal creek flow regimes. No standard “industrial” dimensions exist for construction of a debris basin; sizing is dependent on creek watershed and demonstrated debris flow characteristics along with site constraints.

Riparian vegetation has consistently re-established within debris basins subsequent to routine maintenance in a matter of years. This habitat has been observed to grow up to the edges of the pilot channel; the vegetation height provides shade to the pilot channel flows. This shade would be reasonably expected to moderate potential increases in pilot channel water temperatures.

Proposed expansion would not influence the existing characteristics of the Debris Basin relative to potential fish passage. Therefore, no new impacts to aquatic biological resources including fish potentially migrating up Cold Springs Creek, including steelhead trout, would occur. No revisions to the Draft MND are required.