

---

**Colorado River Aqueduct  
Master Reclamation Plan for San Bernardino and  
Riverside Counties**

**Proposed Draft Initial Study-Mitigated Negative  
Declaration**

**The Metropolitan Water District of Southern California**  
700 North Alameda Street  
Los Angeles, CA 90012



Report No. 1639

*November 2022*

---

## TABLE OF CONTENTS

	Page
<b>Contents</b>	
1. Project Description.....	1
1.1 Introduction .....	1
1.2 Project Background .....	4
1.3 Project Overview .....	5
1.4 Project Objectives.....	6
1.5 Project Location and Land Use .....	7
1.6 Description of Existing Conditions and Proposed Reclamation Activities within the Project Area.....	18
1.7 Borrow Site Proposed Reclamation Activities .....	39
1.8 Revegetation Plan .....	44
2. Initial Study.....	48
2.1 Legal Authority and Findings.....	48
2.2 Impact Analysis and Significance Classification .....	50
2.3 Initial Study and Environmental Checklist Form.....	51
2.4 Environmental Factors Potentially Affected .....	52
2.5 Determination .....	53
3. Evaluation of Environmental Impacts .....	54
3.1 Aesthetics.....	54
3.2 Agricultural Resources .....	56
3.3 Air Quality .....	58
3.4 Biological Resources .....	72
3.5 Cultural Resources.....	88
3.6 Energy.....	92
3.7 Geology and Soils.....	97
3.8 Greenhouse Gas Emissions .....	102
3.9 Hazards and Hazardous Materials .....	109
3.10 Hydrology and Water Quality .....	113
3.11 Land Use and Planning.....	118
3.12 Mineral Resources .....	119
3.13 Noise.....	120
3.14 Population and Housing.....	125
3.15 Public Services .....	126
3.16 Recreation.....	128

3.17	Transportation.....	130
3.18	Tribal Cultural Resources.....	133
3.19	Utilities and Service Systems .....	135
3.20	Wildfire.....	137
3.21	Mandatory Findings of Significance .....	141
4.	List of Preparers.....	143
4.1	The Metropolitan Water District of Southern California .....	143
4.2	Rincon Consultants.....	143
5.	List of Acronyms .....	144
6.	References.....	147

## Tables

Table 1.5-1.	Borrow Site Locations – San Bernardino and Riverside Counties.....	8
Table 1.5-2.	Borrow Sites – Assessor’s Parcel Numbers and Acreages .....	9
Table 1.7-1.	Representative Off-Road Vehicle List – Reclamation.....	41
Table 1.8-1.	Proposed Revegetation Seed Mix <sup>1</sup> .....	46
Table 3.3-1.	Air Basin Characteristics .....	58
Table 3.3-2.	Air Quality Standards and Air Basin Attainment Status .....	61
Table 3.3-3.	SCAQMD Regional Significance Thresholds .....	63
Table 3.3-4.	MDAQMD Significance Thresholds .....	63
Table 3.3-5.	Representative Off-Road Vehicle List – Reclamation Construction Activities.....	64
Table 3.3-6.	Representative Maximum Daily Emissions for Proposed Reclamation Construction Activities (lbs/day) – RV-1 (Largest Project Site).....	66
Table 3.3-7.	Representative Annual Emissions for Reclamation Construction Activities (tons/year) – RV-1 (Largest Project Site).....	67
Table 3.3-8.	Maximum Daily Emissions for Restoration Monitoring Activities (lbs/day) – SB-1 (Furthest Driving Distance from Iron Mountain Pumping Plant).....	68
Table 3.3-9.	Annual Emissions for Restoration Monitoring Activities (tons/year) – SB- 1 (Furthest Driving Distance from Iron Mountain Pumping Plant).....	69
Table 3.4-1.	Special Status Wildlife with Potential to Occur Within the Project Sites .....	77
Table 3.6-1.	Representative Off-Road Vehicle List – Reclamation Construction.....	93
Table 3.6-2.	Driving Distance Between Iron Mountain Pumping Plant and Project Sites .....	94
Table 3.6-3.	Total Estimated Fuel Consumption for Reclamation of All Project Sites (gallons) .....	95

Table 3.8-1. Representative Off-Road Vehicle List – Reclamation Construction Activities .....	104
Table 3.8-2. Representative Greenhouse Gas Emissions – Proposed Reclamation Construction Activities at RV-1 (Largest Project Site) .....	107
Table 3.8-3. Representative Greenhouse Gas Emissions – Restoration Monitoring Activities at SB-1 (Furthest Driving Distance from Iron Mountain Pumping Plant).....	108
Table 3.13-1. Maximum Vibration Levels for Preventing Building Damage.....	121
Table 3.13-2. Vibration Annoyance Potential Criteria for Humans (in/sec PPV) .....	121

## **Figures**

Figure 1.1-1. Project Area – San Bernardino County.....	2
Figure 1.1-2. Project Area – Riverside County .....	3
Figure 1.5-1. Aerial Views of Borrow Sites SB-1 through SB-3 .....	11
Figure 1.5-2. Aerial Views of Borrow Sites SB-4 through SB-6 .....	12
Figure 1.5-3. Aerial Views of Borrow Sites SB-7, SB-I-1, and SB-1-2.....	13
Figure 1.5-4. Aerial Views of Borrow Sites SB-I-3, RV-1, and RV-2.....	14
Figure 1.5-5. Aerial Views of Borrow Sites RV-3 through RV-5.....	15
Figure 1.5-6. Aerial Views of Borrow Sites RV-6, RV-7, and RV-I-1 .....	16
Figure 1.5-7. Aerial Views of Borrow Sites RV-I-2 and RV-I-3 .....	17
Figure 1.6-1. View of Borrow Site SB-1, View Facing West .....	20
Figure 1.6-2. View of Borrow Site SB-2, View Facing West .....	21
Figure 1.6-3. View of Borrow Site SB-3, View Facing Northeast.....	22
Figure 1.6-4. View of Borrow Site SB-4, View Facing Northwest.....	23
Figure 1.6-5. View of Borrow Site SB-5, View Facing South.....	24
Figure 1.6-5. View of Borrow Site SB-6, View Facing North.....	25
Figure 1.6-7. View of Borrow Site SB-7, View Facing Southeast.....	26
Figure 1.6-8. View of Borrow Site SB-I-1, View Facing East.....	27
Figure 1.6-9. View of Borrow Site SB-I-2, View Facing Northwest.....	28
Figure 1.6-10. View of Borrow Site SB-I-3, View Facing East.....	29
Figure 1.6-11. View of Borrow Site RV-1, View Facing East.....	30
Figure 1.6-12. View of Borrow Site RV-2, View Facing East.....	31
Figure 1.6-13. View of Borrow Site RV-3, View Facing East.....	32
Figure 1.6-14. View of Borrow Site RV-4, View Facing North .....	33

Figure 1.6-15. View of Borrow Site RV-5, View Facing West .....	34
Figure 1.6-16. View of Borrow Site RV-6, View Facing West .....	35
Figure 1.6-17. View of Borrow Site RV-7, View Facing East.....	36
Figure 1.6-18. View of Borrow Site RV-I-1, View Facing East .....	37
Figure 1.6-19. View of Borrow Site RV-I-2, View Facing East .....	38
Figure 1.6-20. View of Borrow Site RV-I-3, View Facing North.....	39
Figure 3.3-1. Air Basin and Air District Boundaries in Relation to Project Sites SB-1 through SB-7, SB-I-1, SB-I-2, RV-1, RV-2, and RV-I-1 .....	59
Figure 3.3-2. Air Basin and Air District Boundaries in Relation to Project Sites Project Sites SB-I-3, RV-3 through RV-7, RV-I-2, and RV-I-3 .....	60
Figure 3.20-1. High Fire Hazard Severity Zones – SB-1 through SB-7, SB-I-1, SB-I-2, RV-1, RV-2, and RV-I-1 .....	138
Figure 3.20-2. High Fire Hazard Severity Zones – SB-I-3, RV-3 through RV-7, RV-I-2, and RV-I-3 .....	139

## Appendices

- A. Colorado River Aqueduct Master Reclamation Plan
- B. Borrow Site Numbering Convention Comparison Matrix
- C. Biological Resources Technical Report
- D. Air Pollutant and Greenhouse Gas Emissions Modeling
- E. Cultural Resources Assessment
- F. Energy Modeling
- G. Noise Modeling

# 1. Project Description

## 1.1 Introduction

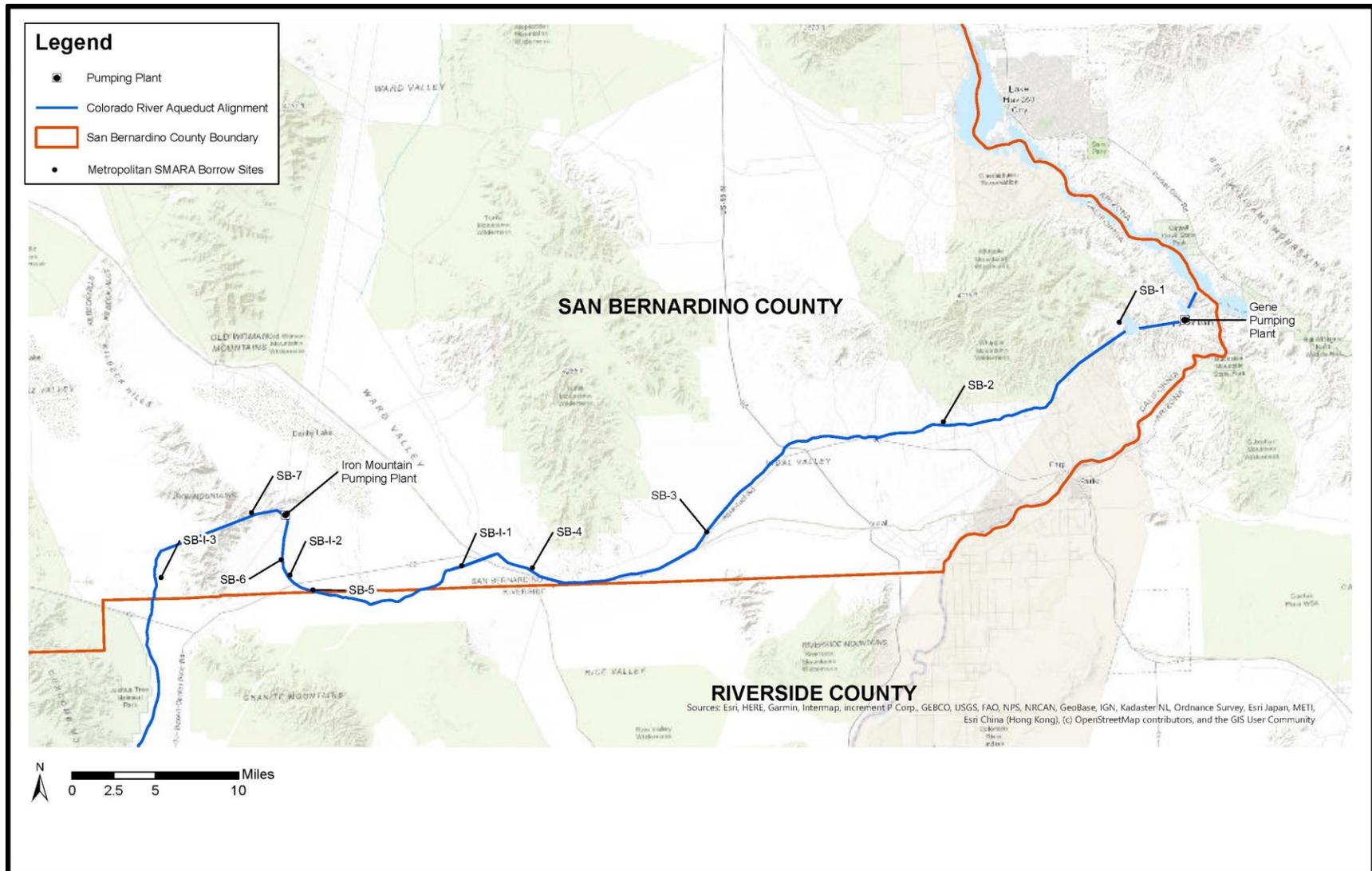
The Metropolitan Water District of Southern California (Metropolitan) is a regional water wholesaler that provides water for 26 public agency members that, in turn, provide water to approximately 19 million people in parts of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. The mission of Metropolitan is to provide its service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. Metropolitan owns and operates the Colorado River Aqueduct (CRA), which is a regional water conveyance system that consists of five pumping plants, 450 miles of high voltage power lines, one electric substation, four reservoirs, and 242 miles of siphons, canals, conduits, and tunnels terminating at Lake Mathews in Riverside County, California. Figures 1.1-1 and 1.1-2 show the relevant portions of the CRA alignment, pumping plants, and related operational areas/right-of-way (ROW) in relation to the Project sites within San Bernardino County and Riverside County, which are discussed further in Section 1.5 (Project Location and Land Use).

In 1932, Congress provided Metropolitan with authority to acquire fee ownership of the CRA ROW as well as additional land to be used for surface mining of stone, earth, gravel, sand, and other earthen materials needed to support the operations and maintenance of the CRA. Metropolitan acquired fee ownership of the ROW roughly between 1932 and 1941. Because the materials are taken from these sites for use at other areas associated with the CRA, they are referred to as “borrow sites.” Metropolitan operates seven borrow sites in San Bernardino County and seven borrow sites in Riverside County (see Figures 1.1-1 and 1.1-2).

The proposed Project consists of the reclamation of these borrow sites pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA; Public Resources Code [PRC] Sections 2710-2796). SMARA provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. While Metropolitan’s existing operations are permitted by right and therefore are not subject to discretionary approval, SMARA requires persons conducting surface mining operations to develop and implement a reclamation plan that must be approved by the applicable SMARA Lead Agency. Per SMARA Article 2, Section 2728, the SMARA “Lead Agencies” represent the city, county, board, or other governing body that has the principal responsibility for approving a reclamation plan. The State of California Mining and Geology Board (State Board) is the SMARA Lead Agency for this Project and therefore has the authority to approve the reclamation plan and oversee reclamation activities at Metropolitan’s borrow sites.

As discussed above, the borrow sites are areas where earthen materials, such as rock, sand, and gravel are taken for use at the CRA during operations and maintenance activities. The materials are extracted by typical surface mining techniques, which include the use of off-road mobile equipment (e.g., dozers, loaders, excavators, and graders). Once

Figure 1.1-1. Project Area – San Bernardino County





operations at a borrow site cease, reclamation of the borrow sites would commence. The timing of this would be different for each site. It is anticipated that operation and maintenance of the CRA would require the extraction of materials from the majority of the borrow sites for up to the next approximately 100 years, with material depletion at the majority of the borrow site locations conservatively assumed to occur by 2122.

Metropolitan's borrow sites are located along an approximately 125-mile stretch within the ROW of the CRA (the entirety of which is owned by Metropolitan), through San Bernardino and Riverside counties, and reclamation activities may take place in potentially different time periods. As a result, a programmatic approach has been established for the reclamation of the borrow sites. This Master Reclamation Plan (MRP) has been prepared to address reclamation of Metropolitan's borrow sites pursuant to SMARA. (The MRP is provided in Appendix A). Because approval of the MRP by Metropolitan's Board of Directors and the SMARA Lead Agency (i.e., State Board) constitutes a discretionary action, reclamation of the borrow sites as contemplated within the MRP is considered a "Project" under the California Environmental Quality Act (CEQA). Therefore, the reclamation of the borrow sites is the Project being evaluated under CEQA. While the State Board is the Lead Agency pursuant to SMARA, Metropolitan is the Lead Agency under CEQA because it is the public agency with the principal responsibility for carrying out the Project and has discretionary approval authority over the Project.

## **1.2 Project Background**

In 1932, pursuant to federal legislation (June 18, 1932 Act, 47 Stat. 324; House Resolution 10048, collectively referred to as the "1932 Act"), the United States Congress granted certain public and reserved lands of the United States located in Los Angeles, Riverside, and San Bernardino counties to Metropolitan to construct, operate, and maintain the CRA. The 1932 Act gave Metropolitan the right to acquire fee ownership of its CRA ROW and additional land for construction of transmission lines, roads, reservoirs, diagonal dikes, and camp sites. Included in this grant was the right for Metropolitan to take for its own use earth, stone, gravel, and other materials of like character within these lands.

In 1933, Metropolitan began construction of the CRA and its related infrastructure. During infrastructure development and aqueduct construction, Metropolitan initiated material extraction (herein referred to as "surface mining" for consistency with state regulatory provisions) at various on-site sources of sand, gravel, stone, and undifferentiated earthen materials for use in construction, operation, and maintenance of CRA infrastructure. These extraction areas, located along the CRA in San Bernardino and Riverside counties, are referred to as "borrow sites." When Metropolitan completed construction of the CRA and began operations in 1941, it retained fee title to the land beneath and adjacent to the CRA. The fee title land, including the borrow sites, was also utilized throughout the 1950s during planned expansions of the CRA facilities. Metropolitan continues to use earth, stone, sand, gravel, and other materials sourced from these lands to restore, repair, protect, and maintain essential berms, access roads, and pipeline cover after storm events and for other critical operations and maintenance activities along the CRA. Today, Metropolitan operates seven borrow sites in San Bernardino County and seven borrow sites in Riverside County. All sites are generally located near the CRA to facilitate access to material in remote locations.

Under California law, Metropolitan has mining rights for its fee-owned lands because the 1932 Act authorized Metropolitan to extract materials to construct and continuously operate and maintain the CRA, and because Metropolitan initiated the surface mining operations prior to the establishment of local land use zoning ordinances.

### **1.3 Project Overview**

The proposed Project consists of the reclamation of 14 borrow sites located in San Bernardino and Riverside counties. Metropolitan initially identified 20 borrow site reclamation locations where surface mining activities either actively occur or had occurred in the past (ten in San Bernardino County and ten in Riverside County). An analysis of potential environmental impacts from reclamation activities was conducted for all 20 borrow site locations; however, six of the 20 borrow sites are inactive and have already been passively reclaimed and therefore are not subject to SMARA and SMARA reclamation requirements (SMARA; PRC Sections 2710-2796). In an effort to provide a comprehensive environmental review, all 20 borrow site locations are analyzed within this document even though only 14 sites are active and would be subject to reclamation.

As discussed above, the borrow sites are areas where earthen materials, such as rock, sand, and gravel, have been or are being taken for CRA operations and maintenance activities. The materials are extracted by typical surface mining techniques that include the use of off-road mobile equipment (e.g., dozers, loaders, excavators, and graders). As described in Section 1.1 (Introduction), surface mining activities must be reclaimed in accordance with SMARA requirements. Per SMARA, a reclamation plan that identifies the specific reclamation activities, final end use of the reclaimed site, and success criteria and monitoring/reporting must be prepared and approved by the SMARA Lead Agency.

Figures 1.1-1 and 1.1-2 in Section 1.1 (Introduction) show the locations of all the borrow sites; Tables 1.1-1 and 1.1-2 in Section 1.5 (Project Location and Land Use) identify the name, location, size, and parcel numbers for each site; and Section 1.6 (Description of Existing Conditions and Proposed Reclamation Activities within the Project Area) and Section 1.7 (Borrow Site Proposed Reclamation Activities) provide detailed descriptions of the proposed reclamation activities, site locations, and environmental settings for all borrow sites. A brief general description of the proposed Project activities is provided below.

Once operations at a borrow site cease, reclamation would begin; however, as discussed above, the timing of this would be different for each site. The MRP accounts for surface mining operations at the majority of the borrow sites to remain active until the material is depleted or no longer needed. It is anticipated this could take up to 100 years or more with material depletion at the majority of borrow site locations conservatively assumed to occur by 2122.

The majority of the borrow sites are in undeveloped, isolated desert land comprised of low-lying desert foothills and alluvial washes. The sites typically consist of a shallow pit where materials have been or would be extracted. The sites may also have some equipment storage, stockpiling of materials, and other auxiliary activities. Individual site descriptions are provided in Section 1.6 (Description of Existing Conditions and Proposed Reclamation Activities within the Project Area).

The proposed reclamation activities generally would consist of placing nominal quantities of excavated material back into the shallow borrow site excavation pits to ensure the sides (slopes) of the pit walls are stable. The amount of material depends on the condition of the specific site, such as the depth of the pit and the conditions of the slopes. SMARA requires that reclaimed slopes do not exceed a two horizontal to one vertical (2H:1V) angle.

Mobile equipment would be used to knockdown existing stockpiles, regrade slopes, and spread salvaged topsoil to facilitate revegetation, as feasible. Stormwater Best Management Practices (BMPs), such as berms, earthen dikes, or fiber rolls, would be installed to ensure stormwater remains within the Project site and to control erosion. Water would be utilized for dust control, and minimal quantities of water may also be used to irrigate revegetated areas, as needed. Because there are no existing or proposed water wells or water storage tanks within the Project Area, water for dust suppression and revegetation would be transported to the site via a mobile water truck. The proposed revegetation seed mix for the borrow sites is based on baseline vegetation surveys completed by Rincon Consultants, Inc. (Rincon; Appendix C) and includes a large percentage of plant species native or common to the surrounding desert scrubland environment. During reclamation of the borrow sites, there would be no change in the number of employees and/or operating schedule compared to current operations. It is estimated that a maximum of three Metropolitan employees would conduct reclamation operations and be on site at any given time during reclamation of each borrow site.

The final end use of the borrow sites would be revegetated open space consistent with the surrounding environment. Section 1.7 (Borrow Site Proposed Reclamation Activities) provides a detailed description of the proposed reclamation activities.

The MRP has been prepared and organized pursuant to the requirements outlined within SMARA. The MRP includes a Table of Compliance for SMARA Requirements, which summarizes where the specific California Code of Regulations citations are discussed and addressed within the MRP. The MRP is provided in Appendix A.

## 1.4 Project Objectives

The proposed Project objectives include the following:

- To develop a programmatic approach that allows for efficient management and implementation of the reclamation of Metropolitan's borrow sites located in San Bernardino and Riverside counties.
- To implement an MRP that complies with SMARA and CEQA requirements, as well as other applicable regulatory requirements.
- To provide flexibility in the implementation of the approved MRP for the borrow sites such that it does not interfere with Metropolitan's ability to provide a reliable supply of high-quality water to the 26 public agencies that are dependent on Metropolitan for their water needs.
- To ensure that the implementation of reclamation activities for each borrow site does not interfere with Metropolitan's ability to maintain the CRA and associated facilities in an environmentally safe and economically responsible manner.

- To identify reclamation and revegetation techniques for each borrow site that are designed to meet the specific needs of any unique environmental and safety concerns associated with the specific site area.

## 1.5 Project Location and Land Use

The Project Area consists of 20 borrow sites (14 active sites and 6 inactive sites). There are ten Metropolitan borrow sites located in unincorporated San Bernardino County and ten Metropolitan borrow sites located in unincorporated Riverside County, which are referred to as the “Project sites” in this document (see Figures 1.1-1 and 1.1-2 in Section 1.1 [Introduction]). The Project Area is composed of all 20 borrow sites; the active borrow sites are referred to herein as San Bernardino (SB) numbers 1 through 7 (SB-1 through SB-7) and Riverside (RV) numbers 1 through 7 (RV-1 through RV-7). The inactive borrow sites are referred to herein as San Bernardino-Inactive-numbers 1 through 3 (SB-I-1 through SB-I-3) and Riverside-Inactive-numbers 1 through 3 (RV-I-1 through RV-I-3). However, the Biological Resources Technical Report and Cultural Resources Technical Report prepared in support of this IS-MND utilized a different site numbering convention than that used herein. To facilitate comparison of the information contained in these technical studies with the information contained in this IS-MND, refer to Appendix B for a comparison matrix of the borrow site numbering convention.

The Project Area is located within the southern Mojave Desert, extending from the Copper Basin Reservoir to the east to the Cottonwood Mountains near the Julian Hinds Pumping Plant to the southwest. Encompassing a total area of approximately 149.3 acres (79.8 acres in San Bernardino County and 69.5 acres in Riverside County), the Project Area includes the boundaries of the 20 borrow sites (each of which includes the Project work areas) and is located along an approximately 125-mile stretch of the CRA adjacent to State Route (SR) 62, SR-95, SR-177, and Interstate 10 (I-10). Table 1.5-1 summarizes the Section, Township, and Range; the United States Geological Survey 7.5-minute topographic quadrangles; and the approximate site coordinates for each of the 20 borrow sites. Table 1.5-2 summarizes the Assessor’s Parcel Numbers, county land use designations, current status, proposed final end uses, and size for all of Metropolitan’s borrow sites.

A total of 14 of the 20 Project sites are active and would continue to provide materials to support Metropolitan’s operations and maintenance activities. Extraction of materials would continue to occur until the material has been depleted. Due to the infrequent use of materials from each site, the Project sites are not expected to deplete for up to 100 years or more. Therefore, the MRP assumes material depletion at these locations would occur by 2122, at which point reclamation would commence. Regardless of when a site is depleted of material, Metropolitan would fully reclaim all Project sites in accordance with applicable SMARA performance standards as outlined in the MRP (see Appendix A).

**Table 1.5-1. Borrow Site Locations – San Bernardino and Riverside Counties**

<b>Borrow Site Name</b>	<b>USGS 7.5-Minute Topographic Quadrangle</b>	<b>Section/Township/Range</b>	<b>Approximate Coordinates</b>
SB-1	Gene Wash, California (1959)	Section 3, Township 1 North, Range 26 East, San Bernardino Baseline and Meridian	Latitude: 34.29° W Longitude: 114.24° N
SB-2	Parker NW, California (2012)	Section 2, Township 1 North, Range 24 East, San Bernardino Baseline and Meridian	Latitude: 34.21° W Longitude: 114.43° N
SB-3	Vidal NW, California (2018)	Section 5, Township 1 South, Range 22 East, San Bernardino Baseline and Meridian	Latitude: 34.12° W Longitude: 114.68° N
SB-4	Rice, California (1965)	Section 15, Township 1 South, Range 20 East, San Bernardino Baseline and Meridian	Latitude: 34.09° W Longitude: 114.87° N
SB-5	Granite Pass, California (2018)	Section 16, Township 1 South, Range 18 East, San Bernardino Baseline and Meridian	Latitude: 34.08° W Longitude: 115.10° N
SB-6	Granite Pass, California (2018)	Section 6, Township 1 South, Range 18 East, San Bernardino Baseline and Meridian	Latitude: 34.11° W Longitude: 115.13° N
SB-7	Iron Mountains, California (1948)	Section 23, Township 1 South, Range 17 East, San Bernardino Baseline and Meridian	Latitude: 34.15° W Longitude: 115.16° N
SB-I-1	Arica Mountains, California (2012)	Section 12, Township 1 South, Range 19 East, San Bernardino Baseline and Meridian	Latitude: 34.10° W Longitude: 114.94° N
SB-I-2	East of Granite Pass, California (2015)	Section 17, Township 1 South, Range 18 East, San Bernardino Baseline and Meridian	Latitude: 34.09° W Longitude: 115.12° N
SB-I-3	Cadiz Valley SE, California (1985)	Section 12, Township 1 South, Range 16 East, San Bernardino Baseline and Meridian	Latitude: 34.09° W Longitude: 115.26° N
RV-1	East of Granite Pass, California (2015)	Section 19, Township 1 South, Range 19 East, San Bernardino Baseline and Meridian	Latitude: 34.07° W Longitude: 115.03° N
RV-2	East of Granite Pass, California (2015)	Section 22, Township 1 South, Range 18 East, San Bernardino Baseline and Meridian	Latitude: 34.08° W Longitude: 115.08° N
RV-3	Cadiz Valley SE, California (1985)	Section 13, Township 2 South, Range 16 East, San Bernardino Baseline and Meridian	Latitude: 33.99° W Longitude: 115.26° N
RV-4	Coxcomb Mountains, California (1987)	Section 22, Township 3 South, Range 16 East, San Bernardino Baseline and Meridian	Latitude: 33.90° W Longitude: 115.29° N
RV-5	Pinto Wells, California (2012)	Section 20, Township 3 South, Range 15 East, San Bernardino Baseline and Meridian	Latitude: 33.89° W Longitude: 115.43° N
RV-6	Desert Center, California (2018)	Section 12, Township 5 South, Range 14 East, San Bernardino Baseline and Meridian	Latitude: 33.74° W Longitude: 115.48° N
RV-7	Hayfield Spring, California (1986)	Section 20, Township 5 South, Range 13 East, San Bernardino Baseline and Meridian	Latitude: 33.70° W Longitude: 115.63° N
RV-I-1	East of Granite Pass, California (2015)	Section 19, Township 1 South, Range 19 East, San Bernardino Baseline and Meridian	Latitude: 34.07° W Longitude: 115.02° N
RV-I-2	Cadiz Valley SE, California (1985)	Section 23, Township 1 South, Range 16 East, San Bernardino Baseline and Meridian	Latitude: 34.07° W Longitude: 115.26° N
RV-I-3	Cottonwood Spring, California (2016)	Section 3, Township 6 South, Range 11 East, San Bernardino Baseline and Meridian	Latitude: 33.68° W Longitude: 115.83° N

Note: USGS (United States Geological Survey)

See Figures 1.1-1 and 1.1-2 in Section 1.1 (Introduction) for the locations of the borrow sites.

**Table 1.5-2. Borrow Sites – Assessor’s Parcel Numbers and Acreages**

<b>Borrow Site Name</b>	<b>County Assessor's Parcel Number</b>	<b>Zoning/General Plan Designation</b>	<b>Current Status</b>	<b>Final Reclaimed End Use</b>	<b>Size</b>
SB-1	0661-181-04-0000	Resource/Land Management (RLM)	Active	Revegetated Open Space	4.6 acres
SB-2	0647-321-05-0000 0647-331-17-0000	Resource/Land Management (RLM)	Active	Revegetated Open Space	21.0 acres
SB-3	0646-201-02-0000 0646-201-03-0000 0646-211-15-0000	Resource/Land Management (RLM)	Active	Revegetated Open Space	10.7 acres
SB-4	0646-091-09-0000 0646-101-02-0000	Resource/Land Management (RLM)	Active	Revegetated Open Space	12.3 acres
SB-5	0646-011-07-0000 0646-011-02-0000	Resource/Land Management (RLM)	Active	Revegetated Open Space	4.3 acres
SB-6	0646-021-01-0000 0646-021-12-0000	Resource/Land Management (RLM)	Active	Revegetated Open Space	6.7 acres
SB-7	0643-221-07-0000 0643-221-21-0000	Resource/Land Management (RLM)	Active	Revegetated Open Space	14.2 acres
SB-I-1	0646-081-07-0000	Resource/Land Management (RLM)	Inactive	Revegetated Open Space	2.7 acres
SB-I-2	0646-021-14-0000	Resource/Land Management (RLM)	Inactive	Revegetated Open Space	1.5 acres
SB-I-3	0643-171-07-0000	Resource/Land Management (RLM)	Inactive	Revegetated Open Space	1.8 acres
<b>Total Active Site Area - San Bernardino County:</b>					<b>73.8 acres</b>
<b>Total Inactive Site Area - San Bernardino County:</b>					<b>6.0 acres</b>
<b>Total Area - San Bernardino County:</b>					<b>79.8 acres</b>
RV-1	800-130-019	Non-Area Plan (N-A) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	23.7 acres
RV-2	800-120-004	Non- Area Plan (N-A) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	5.5 acres
RV-3	800-040-033	Non-Area Plan (N-A) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	7.1 acres
RV-4	800-101-044	Non-Area Plan (N-A) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	2.1 acres
RV-5	800-090-029	Mineral Resources & Related Manufacturing (M-R-A) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	3.6 acres
RV-6	811-020-023 811-020-028	Non-Area Plan (N-A) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	5.6 acres
RV-7	705-230-031	Non-Area Plan (N-A) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	5.3 acres
RV-I-1	800-130-019	Non-Area Plan (N-A) / Open Space Rural (OS-RUR)	Inactive	Revegetated Open Space	2.2 acres
RV-I-2	800-021-008 800-021-010	Non-Area Plan (N-A) / Open Space Rural (OS-RUR)	Inactive	Revegetated Open Space	1.8 acres

**Table 1.5-2. Borrow Sites – Assessor’s Parcel Numbers and Acreages**

<b>Borrow Site Name</b>	<b>County Assessor's Parcel Number</b>	<b>Zoning/General Plan Designation</b>	<b>Current Status</b>	<b>Final Reclaimed End Use</b>	<b>Size</b>
RV-I-3	715-080-001 715-080-002	Controlled Development Areas (W-2-10) / Open Space Rural (OS-RUR)	Active	Revegetated Open Space	12.6 acres
<b>Total Active Site Area – Riverside County:</b>					<b>52.9 acres</b>
<b>Total Inactive Site Area – Riverside County:</b>					<b>16.6 acres</b>
<b>Total Site Area – Riverside County:</b>					<b>69.5 acres</b>
<b>Project Area Total – San Bernardino and Riverside Counties:</b>					<b>149.3 acres</b>

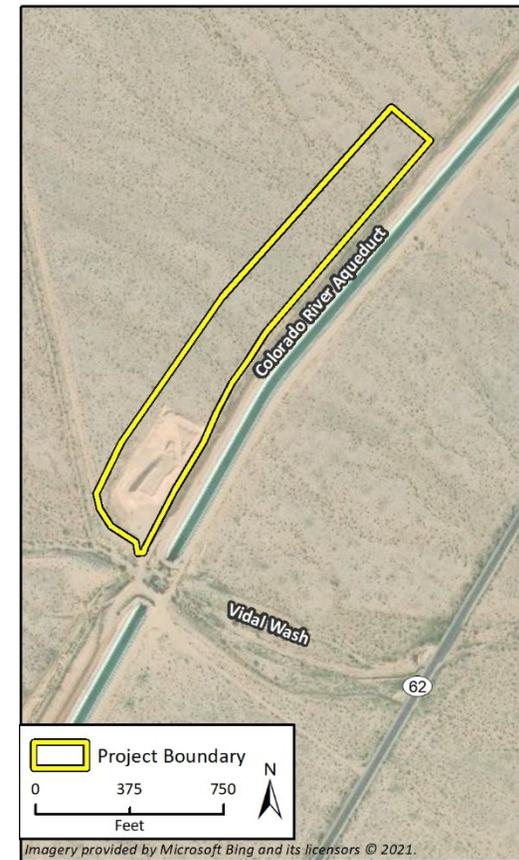
Figure 1.5-1. Aerial Views of Borrow Sites SB-1 through SB-3



Aerial View of SB-1.



Aerial View of SB-2.



Aerial View of SB-3.

Figure 1.5-2. Aerial Views of Borrow Sites SB-4 through SB-6



Aerial View of SB-4.



Aerial View of SB-5.



Aerial View of SB-6.

Figure 1.5-3. Aerial Views of Borrow Sites SB-7, SB-I-1, and SB-1-2



Aerial View of SB-7.



Aerial View of SB-I-1.



Aerial View of SB-I-2.

Figure 1.5-4. Aerial Views of Borrow Sites SB-I-3, RV-1, and RV-2



Aerial View of SB-I-3.



Aerial View of RV-1.



Aerial View of RV-2.

Figure 1.5-5. Aerial Views of Borrow Sites RV-3 through RV-5



Aerial View of RV-3.

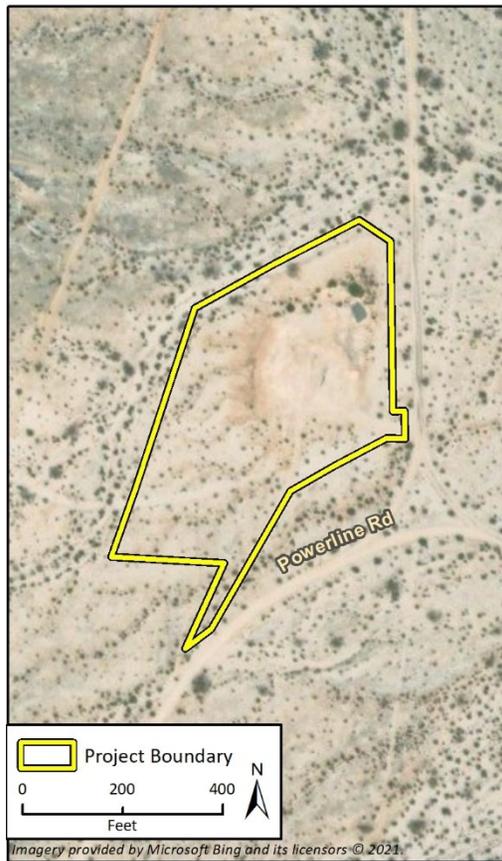


Aerial View of RV-4.



Aerial View of RV-5.

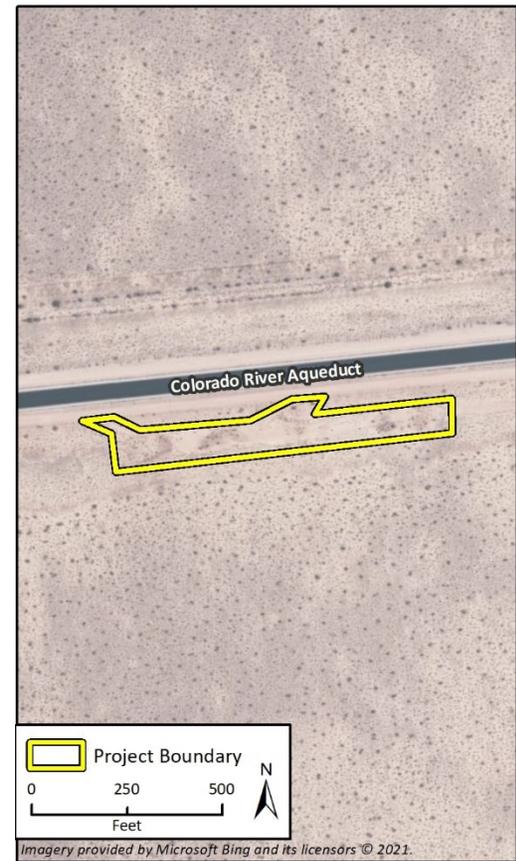
Figure 1.5-6. Aerial Views of Borrow Sites RV-6, RV-7, and RV-I-1



Aerial View of RV-6.



Aerial View of RV-7.



Aerial View of RV-I-1.

Figure 1.5-7. Aerial Views of Borrow Sites RV-I-2 and RV-I-3



Aerial View of RV-I-2.



Aerial View of RV-I-3.

## **1.6 Description of Existing Conditions and Proposed Reclamation Activities within the Project Area**

### **1.6.1 Regional Environmental Setting**

The proposed Project is located in a region of California where an assemblage of mountain ranges are interspersed with long, broad alluvial valleys that often contain dry lakes. The existing topography surrounding the Project Area generally consists of flat undeveloped desert land and alluvial washes as well as low-lying desert foothills.

Topographic features and mountain ranges near the Project Area in San Bernardino County include the Whipple Mountains (adjacent to SB-1 and to the northwest of SB-2), the Turtle Mountains (approximately 9.0 miles north of SB-3, SB-4, and SB-I-1), and the Iron Mountains (adjacent to SB-I-2 through SB-I-3). Topographic features and mountain ranges near Metropolitan's Riverside County operations include the Arica Mountains (approximately 7.0 miles northwest of RV-I-1 through RV-2), the Coxcomb Mountains (approximately 3.0 miles east of RV-I-2 and RV-3 and adjacent to RV-4), the Eagle Mountains (adjacent to RV-5 and RV-6), and the Cottonwood Mountains (adjacent to RV-7 and RV-I-3). The closest perennial surface waterbody to the Project Area is the Copper Basin Reservoir located approximately 0.3 mile west of SB-1.

The Project Area can be generally characterized as undeveloped desert land, comprised of low-lying desert foothills and alluvial wash basins. The Project sites are generally located in isolated areas, with few nearby cities, communities, or other developments, with the exception of Metropolitan's existing employee communities adjacent to the Gene, Iron Mountain, Eagle Mountain, and Julian Hinds pumping plants. SB-1 is located approximately 6.0 miles west of the community of Parker, Arizona and approximately 14.0 miles southwest of Lake Havasu City, Arizona. RV-6 is located approximately 4.9 miles west of the census-designated community of Desert Center. The remaining sites are located near the CRA in Riverside and San Bernardino counties. Nearby prominent roadways include SR-62, SR-177, SR-95, and I-10, which are the primary routes into the Project Area. Section 1.6.2 (San Bernardino County Borrow Sites) and Section 1.6.3 (Riverside County Borrow Sites) provide more detailed descriptions of each borrow site.

The proposed Project region is identified under the Köppen climate classification as a "hot desert climate" zone (PRISM Climate Group 2021). The regional climate is characterized by hot, dry summers and mild winters. The majority of the average 4.6 inches of annual rainfall in the region usually occurs in the winter months beginning in November and lasting through April. Winters can average temperatures from 42 to 68 degrees Fahrenheit (°F) and are generally considered to be warm and mild in nature while summers are hot and dry with average temperatures ranging from 78° to 106° F (Western Regional Climate Center 1893-2016). This climate results in relatively stable weather patterns throughout the year.

Much of the Project Area is crossed by expansive alluvial wash deposits. Soils are predominantly sandy gravel with high runoff coefficients and fast percolation (United States Department of Agriculture 2007). The Project Area vegetation comprises creosote bush scrub and disturbed land (Appendix C). The Project Area is located in the Mojave Desert geomorphic region.

The Project Area is also located within the Basin and Range Physiographic Province, which is comprised of a series of mountain ranges consisting of various Mesozoic granitic and older metamorphic and sedimentary rocks separated by valley basins filled with Quaternary alluvial material. Moreover, Tertiary-age volcanic rocks are exposed throughout the region. The Basin and Range Physiographic Province covers a larger area of the Mojave Desert of California. It is defined by unique basin and range topography associated with tectonic extension, which is characterized by abrupt changes in elevation, alternating between narrow faulted mountain chains and flat arid valleys or basins. With the exception of SB-1, located in the Whipple Mountains, and SB-7, located in the Iron Mountains, the Project sites are situated within the alluvial plains that occur between individual and disconnected mountain ranges.

### **1.6.2 San Bernardino County Borrow Sites**

In San Bernardino County, Metropolitan currently operates seven borrow sites (see Figure 1.1-1 in Section 1.1 [Introduction]), all within Metropolitan's fee property. Borrow sites SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, and SB-7 are currently active and are being used for material extraction and temporary storage for miscellaneous supplies and mobile equipment. SB-I-1, SB-I-2, and SB-I-3 are currently inactive.

**SB-1:** SB-1 is approximately 4.6 acres and located west of the Copper Basin Reservoir on the eastern portion of the Whipple Mountains. The unincorporated community of Parker Dam, Arizona is located approximately 6.0 miles to the east near the California-Arizona border. Land uses adjacent to the site are primarily undeveloped desert foothills/scrubland. SR-95 is located approximately 5.0 miles to the southeast across the Colorado River. The site is accessed via Metropolitan’s existing unpaved access road located along the perimeter of Copper Basin Reservoir, which connects with Parker Dam Road located west of Parker, Arizona. See Figure 1.6-1 for a photo of current site conditions.

The site generally slopes west to east and is comprised of undeveloped, disturbed desert scrubland. Metropolitan has utilized the site to extract alluvial material and rock in the hillside slope to a current pit floor elevation of approximately less than 5 feet below ground surface (bgs) using mobile equipment. The highwall (the unexcavated face of exposed material) is presently about 40 feet above the pit floor. Metropolitan also actively uses portions of the site as a material storage yard. Other than a small stockpile of material, there are no existing structures or other prominent features on the site. The site entrance is currently fenced with a gate.

The existing extraction area encompasses the easterly half of the site with the western area currently undisturbed. Metropolitan anticipates the site would continue to be utilized approximately two to three times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed. When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the SB-1 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-1. View of Borrow Site SB-1, View Facing West**



**SB-2:** SB-2 is approximately 21.0 acres and located on the eastern side of the Whipple Mountains, approximately 1.5 miles north of SR-62. Localized shallow excavation of alluvial materials, grading, surface scalping, and material piling have occurred throughout the site. The unincorporated community of Parker, Arizona is located approximately 8.0 miles to the northeast. Land uses adjacent to the site are primarily undeveloped desert foothills/scrubland. Vehicular access to the site is provided by a graded, unpaved access road that connects with SR-62. Figure 1.6-7 provides a photo of current site conditions.

SB-2 is currently active, and material extraction at SB-2 would continue to occur over the majority of the site with a final floor depth of 25 to 30 feet bgs. When material extraction and ancillary activities, including equipment laydown and/or materials storage, are complete at the SB-2 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-2. View of Borrow Site SB-2, View Facing West**



**SB-3:** SB-3 is approximately 10.7 acres and located in an isolated area immediately north of the CRA, approximately 0.2 mile west of SR-62. Land uses adjacent to the site are primarily undeveloped desert lands. The site is currently being used to extract alluvial material using mobile equipment and for equipment storage. The existing borrow site excavation pit is approximately 6 to 10 feet bgs and contains associated stockpiles of material. There are no existing structures on the site. The site is accessed by an unpaved access road that extends from SR-62 and connects with the CRA maintenance road that runs along the southern boundary of the site. See Figure 1.6-2 for a photo of current site conditions.

Metropolitan presently excavates material from the western end of the borrow site. Extraction is expected to proceed from the west to the east and generally parallel the CRA alignment. The existing pit depth is less than 10 feet and would be extended vertically as mining progresses to 25 to 30 feet bgs. Metropolitan anticipates the site would continue to be utilized approximately two to three times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site for the next 100 years unless the material is depleted sooner or is no longer needed.

When material extraction and ancillary activities, including equipment laydown and material storage, are complete at the SB-3 borrow site (estimated to occur by 2122), the borrow site pit would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-3. View of Borrow Site SB-3, View Facing Northeast**



**SB-4:** The SB-4 borrow site is a long, rectangular area approximately 12.3 acres in size, oriented parallel to the CRA. It is located in an isolated area 0.3 mile north of SR-62 and a rail line operated by Burlington Northern Santa Fe Railway. The town of Rice, formerly named Blythe Junction, is located approximately 1.7 miles to the southeast. Land uses adjacent to the site are primarily undeveloped desert lands. Vehicular access to the site is provided by a Metropolitan-owned unpaved access road located about 1.5 miles east of the site, which connects to SR-62. This access road crosses over the CRA, where it connects to the aqueduct maintenance road. Metropolitan has easement rights to this road. Figure 1.6-3 provides a photo of current site conditions.

Metropolitan extracts alluvial material at SB-4 using mobile equipment. The current depth of excavation varies up to about 15 feet bgs. The planned final borrow site pit depth is anticipated to be 25 to 30 feet bgs. There are small stockpiles of material and an erosion control berm along the north perimeter of the site. No structures are present on the site. Metropolitan anticipates the site would continue to be utilized approximately six times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years or until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the SB-4 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-4. View of Borrow Site SB-4, View Facing Northwest**



**SB-5:** SB-5 is approximately 4.3 acres and located in an isolated area immediately north of and parallel to the CRA. This borrow site is situated 0.4 mile south of SR-62, northeast of the junction of SR-177, and is accessed from the highway via an unpaved access road. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. There are no existing structures on the site. Figure 1.6-4 provides a photo of current site conditions.

In addition to extraction of clayey sands and intermixed coarser-grained materials, Metropolitan utilizes the site to store materials and equipment. To date, material extraction has occurred within the western half of the site with future mining progressing in an easterly direction. The site would also continue to be used for storage of imported crushed rock and other materials for infrastructure repair. The present borrow pit floor depth is less than 10 feet bgs with a projected maximum depth of 25 to 30 feet bgs. Metropolitan anticipates the site would continue to be utilized approximately two times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or equipment storage, are complete at the SB-5 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-5. View of Borrow Site SB-5, View Facing South**



**SB-6:** SB-6 is approximately 6.7 acres and located in an isolated area immediately north of the CRA, about 1.5 miles north of SR-62. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. Metropolitan utilizes the site to extract alluvial material and to store equipment. Vehicular access to the site is provided via the unpaved Metropolitan-owned maintenance road that parallels the CRA, which intersects with SR-62 to the south. Figure 1.6-5 provides a photo of current site conditions.

Depth of excavation is presently 10 feet bgs or less with a planned maximum pit depth of 25 to 30 feet bgs. Besides serving as a source for borrow material, the borrow site is occasionally used to store stockpiled materials. Presently, material extraction has occurred primarily along the western side of the site. Metropolitan anticipates the site would continue to be utilized approximately one time per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or materials storage, are complete at the SB-6 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-5. View of Borrow Site SB-6, View Facing North**



**SB-7:** SB-7 is approximately 14.2 acres and located within the Iron Mountains, approximately 2.0 miles west of Metropolitan’s Iron Mountain Pumping Plant. The SB-7 site is a portion of the larger Iron Mountain site where material extraction has and will continue to occur; the balance of the Iron Mountain site represents areas where historic construction activities and materials storage occurred in connection with the Iron Mountain Tunnel. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands and undeveloped desert foothills/scrubland. Vehicular access to the site from the pumping plant is provided via West Basin Road, an unpaved maintenance road, and an unnamed dirt road that runs westerly toward the Iron Mountains. The site is situated within a saddle that bisects the mountain range. Figure 1.6-6 provides a photo of current site conditions.

Metropolitan has utilized the site to extract rock and alluvium and to store equipment and materials. Extraction occurs by removing materials along the west-facing slope within the saddle with materials stockpiled at various locations on a fill platform that was created from the tunnel spoils as part of the CRA construction project. Since the fill platform is related to CRA construction, which took place in the 1930s, this fill feature is not subject to SMARA, and therefore is not part of the MRP. Other than material excavation, miscellaneous material stockpiles, and periodic equipment storage, there are no other existing uses for the site.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the SB-7 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-7. View of Borrow Site SB-7, View Facing Southeast**



**SB-I-1:** SB-I-1 is approximately 2.7 acres and located in an isolated area immediately south of the CRA, approximately 0.7 mile south of SR-62. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. The site is accessed via an unpaved CRA maintenance road where it crosses SR-62. Figure 1.6-8 provides a photo of current site conditions.

Metropolitan has utilized the site in the past to extract sand, along with intermixed coarser grained materials, and to store equipment. The extent of material extraction is limited, with the present depth of excavation generally 5 to 7 feet bgs. Presently, the site is inactive.

**Figure 1.6-8. View of Borrow Site SB-I-1, View Facing East**



**SB-I-2:** SB-I-2 is approximately 1.5 acres and located in an isolated area adjacent to the CRA. The site is located 0.5 mile northwest of SR-62 and is accessed where the unpaved CRA maintenance road crosses the highway. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. Material extraction at SB-I-2 has taken place in discrete areas throughout the site with excavation depths generally less than 5 to 7 feet bgs. Figure 1.6-9 provides a photo of current site conditions. Presently, the site is inactive.

**Figure 1.6-9. View of Borrow Site SB-I-2, View Facing Northwest**



**SB-I-3:** SB-I-3 is approximately 1.8 acres and located about 1.5 miles west of the Iron Mountains and approximately 2.5 miles north of SR-62. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. Metropolitan utilized the site to extract alluvium and to store equipment. The site is accessed by traveling along the unpaved, Metropolitan-owned, CRA maintenance road north for about 2.5 miles from its intersection with SR-62. From the aqueduct maintenance road, there is an approximately 0.25-mile segment of the CRA maintenance road system that leads to the site. Figure 1.6-10 provides a photo of current site conditions.

The current borrow pit configuration for SB-I-3 is a polygonal-shaped excavation that extends into the southern edge of a small hill (bedrock outcrop). Materials are removed from the hill slope as well as below grade on the alluvial plain. Current pit depths vary but are generally less than 10 feet bgs. The site is presently inactive.

**Figure 1.6-10. View of Borrow Site SB-I-3, View Facing East**



### **1.6.3 Riverside County Borrow Sites**

In Riverside County, Metropolitan currently maintains seven borrow sites (see Figure 1-2 in Section 1.1 [Introduction]). RV-1 through RV-7 are currently active and are being used for material extraction and temporary storage for miscellaneous supplies and mobile equipment. Sites RV-I-1, RV-I-2, and RV-I-3 are currently inactive. Per the MRP (see Appendix A), Metropolitan would fully reclaim all borrow sites located in Riverside County in accordance with applicable SMARA performance standards.

**RV-1:** RV-1 is an approximately 23.7-acre polygonal area located adjacent to the CRA. The site is isolated and situated 2.0 miles south of SR-62. Vehicular access to RV-1 is provided via a Metropolitan-owned unpaved access road from SR-62 located north of the site. This borrow site is located 0.4 mile to the west of RV-I-1. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands and undeveloped desert foothills/scrubland. Figure 1.6-11 provides a photo of current site conditions.

Metropolitan utilizes the site to extract alluvial material and store equipment and stockpiled materials. Depth of excavation is presently 15 feet bgs, and other than existing material stockpiles, there are no existing features or structures on the site. Metropolitan intends to continue extracting material at RV-1 to a planned maximum pit depth of 25 to 30 feet bgs. Metropolitan anticipates the site would continue to be utilized approximately two times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or is no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or materials storage, are complete at the RV-2 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-11. View of Borrow Site RV-1, View Facing East**



**RV-2:** RV-2 is approximately 5.5 acres and located in an isolated area immediately north of the CRA. Vehicular access to the site is provided via an unpaved access road from SR-62 located 0.9 mile to the north. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands and undeveloped desert foothills/scrubland. Figure 1.6-12 provides a photo of current site conditions.

Metropolitan utilizes the site to extract alluvial material and store equipment and stockpiled materials. Presently, there is a single, borrow pile located roughly in the center of the site. There are no structures on site or other features besides the stockpiled materials. Current pit depths are generally 10 to 15 feet bgs with planned final pit depths of 25 to 30 feet bgs. Metropolitan anticipates the site would continue to be utilized approximately two times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-12. View of Borrow Site RV-2, View Facing East**



**RV-3:** RV-3 comprises a 7.1-acre rectangular area and is situated along the CRA approximately 1.2 miles west of SR-177. The site is accessed by an unpaved access road that connects with SR-177. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands and undeveloped desert foothills/scrubland. Figure 1.6-13 provides a photo of current site conditions.

Metropolitan utilizes the site to extract alluvial material and store/stage equipment and stockpiled materials. To date, excavation of materials has occurred solely in the northwest corner of the site. Material stockpiling also takes place in this area. The excavation at RV-3 is generally limited to surface scalping the first few feet of material; however, future use would extend the excavation downward to depths of 25 to 30 feet bgs. There are no existing structures on the site.

Metropolitan anticipates the site would continue to be utilized approximately two times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or is no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the RV-3 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-13. View of Borrow Site RV-3, View Facing East**



**RV-4:** RV-4 is approximately 2.1 acres and located in an isolated area along the eastern flank of the Coxcomb Mountains immediately east of the CRA. It lies 2.6 miles west of SR-177 and is accessed from the highway via a mostly unpaved, Metropolitan-owned CRA maintenance road. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. Metropolitan utilizes the site to extract alluvial material and store equipment. Figure 1.6-14 provides a photo of current site conditions.

The current RV-4 borrow pit is characterized as a shallow excavation (scalping of surface materials), generally a few feet in depth. Future material extraction activities would extend the pit to final depths of 25 to 30 feet bgs. Other than the excavation area and some small material piles, there are no additional features or structures on the site. Metropolitan anticipates the site would continue to be utilized approximately one time per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the RV-4 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-14. View of Borrow Site RV-4, View Facing North**



**RV-5:** RV-5 is a 3.6-acre rectangular area located on an alluvial plain that extends southeasterly from the base of the Eagle Mountain Range. The site occurs in an isolated area north of the CRA, which is accessed from the Metropolitan-owned, CRA maintenance road that intersects with Eagle Mountain Road. SR-177 is located 9.6 miles to the southeast of RV-5. The Kaiser Steel Mill community is located approximately 2.5 miles to the southwest, and Metropolitan’s Eagle Mountain Pumping Plant is 5.9 miles to the south. Land uses adjacent to the site are primarily undeveloped desert lands. Figure 1.6-15 provides a photo of current site conditions.

Metropolitan extracts alluvial material at this site, which is also used to store equipment and supplies and stockpile materials. Currently, the excavation is 10 feet bgs or less and is planned to be extended to final borrow pit floor depths of 25 to 30 feet bgs. There are no existing structures on the site. Metropolitan anticipates the site would continue to be utilized approximately one to two times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the RV-5 borrow site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-15. View of Borrow Site RV-5, View Facing West**



**RV-6:** RV-6 is 5.6 acres and located in an isolated area on an alluvial plain that extends to the southeast from the flank of the Eagle Mountains. The CRA runs to the south and west of the site, tunneling through the Eagle Mountains. The intersection of SR-177 and I-10 is located approximately 5.1 miles to the southeast. The census-designated community of Desert Center is also located approximately 5.0 miles to the southeast, and Metropolitan’s Eagle Mountain Pumping Plant is located approximately 4.7 miles to the north. Land uses adjacent to the site are primarily undeveloped desert lands. Vehicular access to the site is provided by an unpaved, Metropolitan-owned, CRA maintenance road that generally runs north-south along the CRA and provides access to Metropolitan’s 230-kilovolt powerlines. The access road connects to Eagle Mountain Road, which connects to Metropolitan’s Eagle Mountain Pumping Plant to the north and I-10 to the south. Figure 1.6-16 provides a photo of current site conditions.

Past material extraction at RV-6 has generally been limited to the first 10 feet bgs with future planned excavation to depths of 25 to 30 feet bgs. Metropolitan currently extracts alluvial material and stockpiles materials at the site. There are no existing structures on the site. Metropolitan anticipates the site would continue to be utilized approximately one to two times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-16. View of Borrow Site RV-6, View Facing West**



**RV-7:** RV-7 is approximately 5.3 acres and located at Metropolitan’s Julian Hinds Pumping Plant, 2.2 miles north of I-10. The site is situated in an area where Metropolitan historically stored construction spoils associated with the pumping plant. These materials are not part of the borrow site extraction activities and are therefore not included in the MRP. Land uses immediately adjacent to the site are primarily undeveloped desert lands. The Julian Hinds Pumping Plant and ancillary sub-station are located immediately north of RV-7. Vehicular access to the site is provided by an unpaved access road that connects to Hayfield Road to the north, which is the main access road to the Julian Hinds Pumping Plant. Figure 1.6-17 provides a photo of current site conditions.

Metropolitan utilizes the site to extract alluvial material and to store/stage equipment and stockpiled materials. The RV-7 excavation pit presently ranges from roughly 10 to 15 feet bgs in depth with coalescing stockpiles in the western portion of the pit footprint. Planned excavation would advance the pit floor to final depths of 25 to 30 feet bgs. There are no other features or structures on site. Metropolitan anticipates the site would continue to be utilized approximately one to two times per year for an approximate duration of two to three weeks per year. The MRP accounts for extraction at this site over the next 100 years until the material is depleted or no longer needed.

When material extraction and ancillary activities, including equipment laydown and/or material storage, are complete at the site (estimated to occur by 2122), the borrow site would be reclaimed to its final end use of revegetated open space in accordance with SMARA performance standards. Refer to the MRP (Appendix A) for more detail.

**Figure 1.6-17. View of Borrow Site RV-7, View Facing East**



**RV-I-1:** RV-I-1 is an approximately 2.2-acre rectangular area located along the southern side of the CRA, approximately 1.9 miles south of SR-62. The site is accessed by an unpaved CRA maintenance road from SR-62. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. Figure 1.6-18 provides a photo of current site conditions.

At present, the borrow pit depth is generally less than 10 feet bgs. Metropolitan utilized the site to extract alluvial material and as a stockpile storage yard; however, this site is inactive and will no longer be used to extract material.

**Figure 1.6-18. View of Borrow Site RV-I-1, View Facing East**



**RV-I-2:** RV-I-2 is approximately 1.8 acres and situated in an isolated area along the CRA, approximately 0.7 mile north of SR-62. There are no nearby communities or cities, and land uses adjacent to the site are primarily undeveloped desert lands. Vehicular access to the site is provided by an unpaved Metropolitan-owned CRA maintenance road that connects to SR-62 to the south. The site is presently inactive. Figure 1.6-19 provides a photo of current site conditions.

**Figure 1.6-19. View of Borrow Site RV-I-2, View Facing East**



**RV-I-3:** RV-I-3 comprises a 12.6-acre area located near the southern boundary of Joshua Tree National Park. RV-10 lies approximately 1.4 miles north of I-10 and is accessed from Cottonwood Springs Road to the east via an unpaved CRA maintenance road that leads west, paralleling the CRA. The area is somewhat isolated and immediately north the CRA. The community of Chiriaco Summit is located approximately 6.4 miles east of RV-I-3. Land uses adjacent to the site are primarily undeveloped desert lands and undeveloped desert foothills/scrubland. Figure 1.6-20 provides a photo of current site conditions.

Metropolitan utilized RV-I-3 to extract alluvial material and store/stage equipment and supplies and stockpiled materials. Additionally, broken concrete rubble was temporarily placed on site. There are no existing structures on the site. Excavation at this site has advanced the borrow pit floor to depths of roughly 50 feet bgs, specifically along the northerly and westerly highwalls. Presently, the site is inactive.

**Figure 1.6-20. View of Borrow Site RV-I-3, View Facing North**



## **1.7 Borrow Site Proposed Reclamation Activities**

The MRP, which is included in Appendix A, has been prepared and organized pursuant to the requirements outlined within SMARA. The MRP includes a Table of Compliance for SMARA Requirements, which summarizes where the specific California Code of Regulations citations are discussed and addressed within the MRP. This section provides a summary of the key aspects of the proposed reclamation activities. These reclamation activities are generally common to all the Project sites being evaluated in accordance with CEQA in this document.

Once operations at the Project sites is complete, the Project sites would be reclaimed in accordance with SMARA requirements. The final end use of the Project sites would be revegetated open space consistent with the surrounding environment. Proposed reclamation activities at the Project sites would generally consist of removing deleterious materials and debris, recontouring Project site slopes and floors to ensure slopes do not exceed a 2H:1V angle,

installing stormwater BMPs to control erosion, and revegetating reclaimed areas with a native plant hydroseed mix. These reclamation activities would take approximately 30 days to complete at each site.

Following reclamation/revegetation activities, a monitoring program as required by SMARA would commence. Monitoring would be conducted on a semi-regular basis (likely quarterly) for a period of up to three years by a monitoring biologist or other qualified staff to ensure BMPs, revegetation, and all other reclamation activities meet the SMARA performance standards. Annual monitoring reports would be prepared and would include a summary of the revegetation effort, site conditions, issues encountered, evaluation of the data collected and success achieved, and recommendations for meeting the performance criteria. Reports would be submitted to the State Board for review annually during the monitoring period.

In accordance with SMARA, the State Board, acting as SMARA Lead Agency, would also conduct annual inspections to determine the status of Project reclamation. Once final reclamation and revegetation is complete, and the appropriate SMARA success criteria have been sufficiently met, Metropolitan would prepare a Completion Report. The Completion Report would be submitted to and reviewed by the State Board, which would conduct a final inspection to determine if reclamation of each borrow site has been achieved. Once the State Board deems reclamation of the Project Area (i.e., borrow sites) is complete, the financial assurances would be released. Proposed reclamation and monitoring activities are discussed in detail below.

### **1.7.1 Proposed Reclamation Schedule**

Once operations have ceased at a Project site, reclamation of the Project site would commence. As discussed above, the MRP accounts for extraction up to the next 100 years with material depletion at the 14 active Project sites anticipated no later than 2122.

### **1.7.2 Reclaimed Slopes**

Once reclamation commences, unused equipment, deleterious materials (e.g., tailings, overburden, sediment, waste rock), and rubbish would be removed from the sites as needed. Metropolitan would flatten any remaining material stockpiles and recontour excavation slopes and floors using mobile equipment to ensure no slopes exceed a 2H:1V angle in accordance with SMARA performance standards.

Based on the maximum pit depths and final slope grades anticipated at the completion of material excavation activities, only minimal regrading of the excavation pit slopes and surplus excavated material at the proposed Project sites is anticipated. However, if any slope cannot be regraded to comply with SMARA's 2H:1V performance standard, Metropolitan would complete a site-specific geologic and engineering analysis demonstrating that proposed final reclaimed slopes maintain a minimum slope stability factor of safety. The slope stability analysis would determine the static and seismic factors of safety and ensure the reclaimed slopes are acceptable for the borrow site design features and considered representative of stable slope configurations. Additionally, existing stormwater control features (e.g., berms, earthen dikes) may be maintained or new structures installed to control erosion at the Project sites post-reclamation. Proposed revegetation at the Project sites would help further stabilize the reclaimed side slopes and prevent erosion once roots are established.

### 1.7.3 Reclamation Backfilling

Other than the placement of nominal quantities of excavated material into the shallow excavation pits to ensure side slopes do not exceed 2H:1V, no substantial backfilling of the proposed Project sites would occur as part of site reclamation. Based on the anticipated excavation depth and slope conditions, minimal backfilling may be necessary at a few of the Project sites. Additionally, for Project sites where topsoil and subsoil were stored separately (i.e., in perimeter berms, stockpiles), these materials may be spread across the excavation areas to help facilitate successful revegetation efforts. Any remaining stockpiles of overburden or other natural materials (e.g., stone, sand) may also be knocked down and placed back in the pits to help achieve the final desired slope conditions.

### 1.7.4 Equipment

To facilitate proposed reclamation of the Project sites, mobile equipment would be utilized to knockdown stockpiles, regrade slopes, and spread topsoil/subsoil prior to revegetation. A mobile water truck would be utilized for dust control. The estimated type and number of equipment and support vehicles to be used during reclamation of each Project site is listed in Table 1.7-1 below.

**Table 1.7-1. Representative Off-Road Vehicle List – Reclamation**

Equipment	Make and Model	Quantity	Average Horsepower	Average Hours/Day
Water Truck	Freightliner – 4,000-gallon	1	300	4
Dozer	Caterpillar D-6	1	215	8
Excavator	Caterpillar 330	1	273	8
Loaders	Caterpillar 966	1	276	8
Grader	Caterpillar 140M, 160M, or 14M Motor	1	187	4
Dump Truck	Freightliner 114SD	1	16	4
Hydroseed Spreader	Freightliner – 1,000-gallon	1	172	8

During proposed reclamation activities, existing unpaved Metropolitan access roads would be maintained, as needed, by a grader with use of a water truck to control fugitive dust emissions. The existing unpaved access roads would not be widened, and no new paved or unpaved roads would be installed on site. Additionally, passenger trucks to transport employees to and from the Project site would be required during proposed reclamation activities. Refer to Section 1.7.7 (Transportation) for additional detail regarding on-road vehicles and estimated employee trips during proposed reclamation activities.

### 1.7.5 Employees and Hours of Operation

It is estimated that a maximum of three Metropolitan employees would conduct proposed reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) and be on site at any given time during reclamation of each proposed Project site. These employees would be based from Metropolitan’s Iron Mountain Pumping Plant. Only one Project site is anticipated to be reclaimed at a time. Typical employee shifts during reclamation would commence between approximately 6:00 a.m. to 7:00 a.m. and end between approximately 3:00 p.m. to 4:00 p.m. (approximately 8- to 10-hour shifts), four days per week (typically Monday through Thursday). Reclamation activities (e.g., knocking down piles/berms, removing rubbish,

etc.) and associated site preparation at each Project site would be conducted by Metropolitan staff in a single phase until the site is stabilized and prepared. This process is estimated to take a maximum of one month at each individual Project site. Following site preparation, a monitoring biologist would continue to access the site periodically (estimated four times per year) for up to a period of three years to facilitate maintenance and monitoring of revegetated areas as needed.

### **1.7.6 Material Processing and Blasting**

Due to the nature of proposed reclamation activities at each Project site, material processing and/or blasting would not be required. Therefore, no stationary processing equipment or explosives would be stored or utilized within the Project sites.

### **1.7.7 Transportation**

During reclamation, Metropolitan employees and related contractors (i.e., monitoring biologist) would move between the Project sites, as needed. Typical vehicles would include small work trucks to transport employees and light-duty trucks to transport equipment/materials. In general, these vehicles would access the sites by public roadways and existing roads within Metropolitan's ROW. Excess materials and/or rubbish generated during reclamation activities, would be moved off site to the Iron Mountain Pumping Plant or other proper disposal sites.

The maximum trip distance a single employee/contractor would have to travel during reclamation is estimated to be 77.6 miles (one-way trip), which represents the distance between Metropolitan's Iron Mountain Pumping Plant and SB-1 located west of the Copper Basin Reservoir on the eastern portion of the Whipple Mountains.

### **1.7.8 Water Use**

#### ***Fresh Water***

During reclamation, fresh water would primarily be utilized for dust control within the Project sites. If needed, minimal quantities of water may also be used as needed to irrigate revegetated areas. There are no existing or proposed water wells or water storage tanks within the Project Area. Water for dust suppression and landscaping would be transported to the site via a mobile water truck. Metropolitan would employ one water truck with a 1,000-gallon or larger affixed tank and attached pump to apply the water as needed.

Primarily, water would be obtained at various locations along the CRA by pumping water into the water truck directly from the CRA, which is administered and controlled by Metropolitan. Additionally, due to its proximity to Metropolitan's Julian Hinds Pumping Plant, water used during the reclamation of RV-7 would be obtained from an existing water hydrant located at the plant. It is estimated that approximately 16,000 gallons of water would be obtained from the CRA to facilitate reclamation (including grading, recontouring, and hydroseeding) at a single Project site during its 30-day reclamation period (320,000 gallons of water total for all Project sites).

## ***Wastewater***

Because the proposed Project reclamation activities would not involve material extraction or require processing, material washing is not required. Additionally, proposed reclamation of the Project sites would not generate any process wastewater.

Temporary portable toilets are placed at the Project sites when surface mining activities occur and would remain in place at the sites during reclamation activities as needed. Existing portable toilet facilities are placed within secondary containment and are regularly maintained by either Metropolitan's staff or a local contractor (see Section 1.7.9 [Domestic Water and Sanitation Facilities] for more detail). Reclamation of Metropolitan's Project sites would not produce any industrial or domestic wastewater discharges on site.

### **1.7.9 Domestic Water and Sanitation Facilities**

No septic systems or commercial bathrooms are required for the proposed Project. Metropolitan employees would continue to utilize portable toilets at the Project sites during the proposed reclamation activities. On-site portable toilets would continue to be regularly serviced by a local contractor and would continue to utilize secondary containment (i.e., tray). All domestic waste would be removed at the end of each day. The proposed Project would not produce any industrial wastewater discharges. Once reclamation activities are complete, the existing portable toilets would be removed from each Project site.

### **1.7.10 Hazardous Materials/Hazardous Waste**

Proposed Project reclamation activities would not routinely generate hazardous waste. No on-site portable generators would be required during reclamation activities. There would be no permanent storage of fuel, lubricants, or hazardous materials on the Project sites during reclamation. The only hazardous materials present on site would be fuels and oils stored "in use" by mobile equipment (e.g., scrapers, excavators, dozers, loaders) operating on the Project sites. Minor maintenance (lubing and greasing) and/or re-fueling of mobile equipment or maintenance trucks may occur on site, and if needed, small amounts of fuels, lubricating oils, or other equipment/maintenance supplies may be brought on site to conduct minor/routine maintenance of off-road vehicles. However, all equipment would generally be returned to Metropolitan's fleet shop located at the Iron Mountain Pumping Plant for refueling, repairs, and maintenance. As applicable, handling and transfer of fuel and lubrication would follow best practices and would include any measures identified in the Stormwater Pollution Prevention Plan, if required, and would follow applicable health and safety regulations and/or local ordinances. Emergency spill response materials would be available in an employee support vehicle in the unlikely event of a spill. The employee responsible for the site activities would be appropriately trained in spill response and any potentially hazardous waste would be properly removed and transported to an approved facility. Metropolitan standard cleanup requirements and stormwater BMPs would be implemented on site to control erosion and ensure stormwater is properly contained and kept free of contaminants. These requirements and BMPs include, but are not limited to, the following:

- Spill prevention, control, and cleanup;
- Vehicle and equipment fueling, cleaning, and repair;
- Waste handling and disposal;

- Grading to direct stormwater away from low-lying areas;
- Perimeter berms along certain boundary segments; and
- Use of silt fencing, fiber rolls, waddles, or similar perimeter controls, as needed.

In addition, all vehicles contain fire extinguishers, and staff are trained in fire suppression.

### **1.7.11 Utilities/Electrical Service**

The Project sites do not have permanent electrical connections, nor would electrical connections be required during proposed reclamation activities. Additionally, no natural gas or propane would be utilized during reclamation.

### **1.7.12 Lighting**

Because Metropolitan's proposed reclamation activities would occur during the daytime hours only, lighting would not be utilized at the Project sites. No permanent or portable lighting has been installed at the Project sites, and permanent or portable lighting would not be installed before or during proposed reclamation.

### **1.7.13 Fencing and Security**

With the exception of SB-1, which has a small entrance gate, and RV-7, which is located inside the Julian Hinds Pumping Plant facility boundaries, none of the Project sites are fenced or gated. As needed, certain private access roads controlled by Metropolitan may be gated and/or locked to prevent public access. If considered necessary for public safety, appropriate fencing and signage may be installed at the Project sites.

### **1.7.14 Visibility**

Due to the isolated nature of Project sites, proposed reclamation activities would not be visible from nearby public locations. Therefore, no visual screening (landscaping, berms, etc.) would be required during reclamation.

## **1.8 Revegetation Plan**

The proposed revegetation approach and methods for the proposed Project would be consistent with standard industry practices and would reclaim the borrow sites according to the designated end uses. Specifically, the revegetation plan would be based on the characteristics of the final excavation pits, which are expected to range from approximately 25 to 30 feet bgs with contoured side slopes at a maximum gradient of 2H:1V. Hydroseeding at the Project sites would occur during optimal seasonal conditions within two years following completion of material extraction. Revegetation is anticipated to take approximately three years once each site is hydroseeded. The proposed revegetation seed mix for the Project sites, as outlined in Section 1.8.1 (Seed Mixes) is based on document baseline vegetation surveys (Appendix C) and includes plant species native to the surrounding desert scrubland environment.

As part of the revegetation plan, test plots would be established at two representative borrow sites (SB-5 and RV-7) to determine appropriate planting procedures to achieve successful

revegetation. The test plots would be used to assess the response of seed mixes to various soil blends and depths and to confirm the planting methods implemented would successfully support native vegetation capable of self-regeneration without continued dependence on irrigation, soil amendments, or fertilizer. A qualified biologist who has experience with the desired vegetation communities in this ecoregion would ensure both test plot and subsequent revegetation efforts at each borrow site are sufficiently successful to achieve compliance with the revegetation objectives and performance standards required under SMARA.

The following typical sequence of proposed revegetation activities would be undertaken, as feasible:

- Re-contouring of planting areas, if necessary;
- Control of invasive weeds;
- Placement of topsoil and subsoil, if feasible;
- Installation of temporary irrigation systems, if feasible;
- Installation of erosion control devices, if necessary;
- Planting and seeding;
- Maintenance and monitoring; and
- Reporting.

The revegetation plan generally addresses and defines the following components:

- Description of planting zones;
- Timing;
- Soil preparation;
- Weed control;
- Planting and seeding materials and techniques;
- Implementation monitoring;
- Establishment maintenance;
- Horticultural monitoring; and
- Biological monitoring.

The revegetation plan is included as part of the MRP and would be reviewed and approved by the State Board as part of its review of the overall MRP (Appendix A).

In accordance with SMARA, the Project sites would be monitored following revegetation to ensure SMARA performance standards are met and successful revegetation is achieved. Revegetation monitoring is anticipated to require up to an additional three years. Within the three-year monitoring period following revegetation, trend analyses would be performed to assess whether the revegetation plantings are progressing toward a mature reference habitat.

Generally, revegetation success is based on achieving: 1) acceptable survivorship of plants through the first year following hydroseeding; 2) vigorous growth resulting in progressively higher rates of cover throughout the revegetation monitoring period following hydroseeding; and 3) adequate germination of seeded species to control weed growth and erosion. Specific SMARA performance standards for revegetation success are based on achieving vegetation density, cover, and species richness comparable with pre-mining conditions, or with naturally occurring habitats in the area based on appropriate reference sites. Annual monitoring reports would be prepared and would include a summary of the revegetation effort, site conditions, issues encountered, evaluation of the data collected and success achieved, and recommendations for meeting the performance criteria. Reports would be submitted to the State Board for review annually during the monitoring period. Once final reclamation and revegetation is complete, and the appropriate SMARA success criteria have been met, Metropolitan would prepare a Completion Report. The Completion Report would be submitted to and reviewed by the State Board, which would conduct a final inspection to determine if reclamation of each borrow site has been achieved.

### 1.8.1 Seed Mixes

The proposed seed mix shown in Table 1.8-1 would be applied to all revegetation areas. It is noted, if determined appropriate by the monitoring biologist, this seed mix may be revised to ensure successful revegetation in accordance with SMARA performance standards and specific site environmental conditions.

Common Name	Scientific Name	Seeding Rate (pounds/acre) <sup>2</sup>	
		Minimum	Maximum
<b>SB-1 through SB-7 and RV-1 through RV-4</b>			
Brittlebush <sup>3</sup>	<i>Encelia farinosa</i>	1.0	3.0
Burrobush <sup>3</sup>	<i>Ambrosia dumosa</i>	1.0	3.0
California buckwheat	<i>Eriogonum fasciculatum</i>	1.0	3.0
Cheese-brush	<i>Ambrosia salsola</i>	1.0	3.0
Creosote bush <sup>3</sup>	<i>Larrea tridentata</i>	3.0	5.0
Desert needle grass	<i>Stipa speciosa</i>	1.0	3.0
Indian rice grass	<i>Stipa hymenoides</i>	1.0	3.0
Nevada ephedra	<i>Ephedra nevadensis</i>	1.0	3.0
Shadscale	<i>Atriplex confertifolia</i>	1.0	3.0
<b>Total:</b>		<b>5.0</b>	<b>11.0</b>
<b>RV-5 through RV-7<sup>4</sup></b>			
Creosote bush <sup>3</sup>	<i>Larrea tridentata</i>	3.0	5.0
Blue paloverde woodland	<i>Parkinsonia florida</i>	1.0	3.0
Sweetbush scrub	<i>Bebbia juncea</i>	1.0	3.0
<b>Total:</b>		<b>5.0</b>	<b>11.0</b>
<b>Alternative Species<sup>5</sup></b>			
Beavertail cactus	<i>Opuntia basilaris</i>	1.0	3.0
Blackbrush	<i>Coleogyne ramosissima</i>	1.0	3.0
Boxthorn	<i>Lycium andersonii</i> or <i>L. cooperi</i>	1.0	3.0
Desert trumpet	<i>Eriogonum inflatum</i>	1.0	3.0
Mojave yucca	<i>Yucca schidigera</i>	1.0	3.0

**Table 1.8-1. Proposed Revegetation Seed Mix<sup>1</sup>**

Common Name	Scientific Name	Seeding Rate (pounds/acre) <sup>2</sup>	
		Minimum	Maximum
<b>SB-1 through SB-7 and RV-1 through RV-4</b>			
Silver cholla cactus	<i>Cylindropuntia echinocarpa</i>	1.0	3.0
Spiny hopsage	<i>Grayia spinosa</i>	1.0	3.0

Notes:

- 1) The seed mixes are based on the existing plant communities within and around the Project sites, which are described generally as "creosote bush scrub" and "disturbed." (Appendix C)
- 2) Seed rate application estimates (pounds/acre) based on those from a nearby existing/approved reclamation plan/mine site (Webber & Webber Mining Consultants 2013).
- 3) Range shown represents minimum and maximum seeding rate (pounds/acre) that should be utilized during hydroseeding.
- 4) The seed mix for RV-5, RV-6 and RV-7 is based on Biological Resources Assessment Report and related vegetation surveys conducted at the nearby Eagle Mountain Pumping Plant (Psomas 2018).
- 5) Alternative species are included in the event that the primary proposed species are not available from a seed supplier.

## 2. Initial Study

This document is a proposed Initial Study and Mitigated Negative Declaration (IS-MND), which addresses the potential environmental effects resulting from the proposed Project.

### 2.1 Legal Authority and Findings

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines and relevant provisions of CEQA of 1970, as amended.

**Initial Study.** Section 15063 of the CEQA Guidelines describes an Initial Study as a preliminary method for analyzing the potential environmental consequences of a project. The purposes of an Initial Study include:

- (1) Providing the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration;
- (2) Enabling the Lead Agency to modify a project during the planning stage by mitigating adverse impacts prior to preparation of CEQA documentation, thus avoiding the need to prepare an EIR; and
- (3) Providing documentation of the factual basis for the finding in a Mitigated Negative Declaration that the significant environmental impacts of a project have been mitigated to a less-than-significant level.

**Negative Declaration or Mitigated Negative Declaration.** Section 15070 of the CEQA Guidelines states that a public agency shall prepare a Negative Declaration or Mitigated Negative Declaration for a project subject to CEQA when:

- (a) The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment; or
- (b) The Initial Study identifies potentially significant effects but:
  1. Revisions in the project plans or proposals made by, or agreed to by, the applicant before a proposed Mitigated Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and
  2. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

An IS-MND may be used to satisfy the requirements of CEQA when a proposed project would have no significant unmitigable effects on the environment. As discussed further in subsequent sections of this document, implementation of the proposed Project would not result in any significant effects on the environment that cannot be reduced to below the level of significance with the mitigation measures included herein.

The MRP accounts for extraction of material for up to the next 100 years at the 14 active borrow sites, with material depletion at these locations conservatively anticipated to occur by 2122, at which time reclamation would commence. This analysis utilizes existing environmental

conditions as the baseline and evaluates environmental impacts at a project level. However, Metropolitan, as the CEQA Lead Agency, also anticipates future conditions when Project activities are proposed to occur pursuant to CEQA Guidelines Section 15125(a)(1). In the interim time period between potential Project approval and actual implementation of reclamation activities at the Project sites, environmental conditions, especially with regard to biological resources and drainage features, are likely to change from their present conditions due to both natural processes and current and future mining activities. Therefore, because environmental baseline conditions as they would exist in the future (i.e., in 2122) are not known, the environmental impacts analysis of these Project sites in the IS-MND has been prepared at a programmatic level using the best presently available data. As a result, this IS-MND has been prepared as a hybrid program/project-level IS-MND.

Consistent with the requirements of Section 15168 of the CEQA Guidelines for a program EIR, a program IS-MND is one that is prepared for a series of actions that can be characterized as one large project and are related either (1) geographically; (2) as logical parts in a chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways. Specifically, the proposed Project involves reclamation activities at a series of individual Project sites in the same geographic area (i.e., Metropolitan fee property in Riverside and San Bernardino counties) carried out under the same authorizing statutory authority of SMARA with generally similar environmental effects across all sites. A program IS-MND has the same requirements as a project-level IS-MND, focusing primarily on the changes in the environment that would result from proposed Project activities included in the program during all phases of the program, including planning, construction, and operation (CEQA Guidelines Section 15063[a][1]). However, a program IS-MND is typically more conceptual and may contain a more general discussion of Project impacts and mitigation measures than a project-level IS-MND.

If the programmatic analysis addresses the proposed Project's effects specifically and comprehensively, many subsequent activities could be found to be within the scope of this IS-MND, and additional environmental documents may not be required pursuant to CEQA Guidelines Section 15162 and 15164. When a Lead Agency relies on a program IS-MND for a subsequent activity, it must incorporate applicable mitigation measures developed in the program IS-MND into the subsequent activities, consistent with the requirements for program EIRs in CEQA Guidelines Section 15168(c)(3). If a subsequent activity would have effects not identified in the program IS-MND due to substantial changes in the proposed Project, substantial changes in the circumstances, or new information of substantial importance, the CEQA Lead Agency must prepare a subsequent IS-MND or subsequent EIR, depending on the level of impact. In this case, the program IS-MND still serves a valuable purpose as the first-tier environmental analysis. However, if only minor changes or additions are necessary and do not trigger the requirements for a subsequent IS-MND pursuant to CEQA Guidelines Section 15162, then an addendum to the IS-MND may be prepared in accordance with the requirements of CEQA Guidelines Section 15164.

The analysis in this IS-MND uses programmatic-level thresholds rather than project-level thresholds for the 14 active sites. Prior to implementation of reclamation activities at each active Project site, proposed Project activities and the environmental baseline condition existing at each

Project site at the time of reclamation will be examined in light of this IS-MND to determine what, if any, additional CEQA documentation needs to be prepared.

## **2.2 Impact Analysis and Significance Classification**

The following sections of this IS-MND provide discussions of the possible environmental effects of the proposed Project for specific resource areas as identified on the CEQA Environmental Checklist Form in Appendix G of the CEQA Guidelines (as updated in December 2018). For each resource area, potential effects are discussed and evaluated.

A “significant effect on the environment” is defined by Section 15382 of the CEQA Guidelines as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment” but “may be considered in determining whether the physical change is significant.”

Following the evaluation of each environmental effect determined to be potentially significant is a discussion of mitigation measures and the residual effects or level of significance remaining after the implementation of the measures.

## 2.3 Initial Study and Environmental Checklist Form

- a) Project Title: Colorado River Aqueduct Master Reclamation Plan for San Bernardino and Riverside Counties (proposed Project)
- b) Lead Agency Name and Address: The Metropolitan Water District of Southern California  
700 North Alameda Street  
Los Angeles, CA 90012
- c) Contact Person and Phone Number: Michelle Morrison, Environmental Planning Section  
The Metropolitan Water District of Southern California  
(213) 217-7906
- d) Project Location: The proposed Project includes a total of 20 borrow sites along the Colorado River Aqueduct right-of-way with ten borrow sites located in unincorporated San Bernardino County and ten borrow sites in unincorporated Riverside County. Figure 1.1-1 in Section 1.1 (Introduction) provides an overview of the Project Area in San Bernardino County, and Figure 1.1-2 in Section 1.1 (Introduction) provides an overview of the Project Area in Riverside County.
- e) Project Sponsor's Name and Address: The Metropolitan Water District of Southern California  
700 North Alameda Street  
Los Angeles, CA 90012
- f) General Plan Designation: All of the Project sites in San Bernardino County currently have a General Plan land use designation of RLM (Resource/Land Management). All of the Project sites in Riverside County currently have a General Plan land use designation of Open Space-Rural (OS-RUR). The land use designations of each of the Project sites are detailed in Table 1.5-2 in Section 1.5 (Project Location and Land Use).
- g) Zoning: All of the Project sites in San Bernardino County currently have a County zoning designation of RLM (Resource/Land Management). The majority of the Project sites in Riverside County currently have a County

zoning designation of N-A (Non-Area Plan) with the exception of RV-5 and RV-I-3. RV-5 has a zoning designation of M-R-A (Mineral Resources & Related Manufacturing), and RV-I-3 has a zoning designation of W-2-10 (Controlled Development Areas). The zoning designations of each of the Project sites are detailed in Table 1.5-2 in Section 1.5 (Project Location and Land Use).

- h) Description of Project: Refer to Section 1 (Project Description).
- i) Surrounding Land Uses and Setting: Section 1.6 (Description of Existing Conditions and Proposed Reclamation Activities within the Project Area) describes the surrounding land uses and setting of the proposed Project.
- j) Other Agencies Whose Approval May be Required: State of California Mining and Geology Board
- k) Have California Native American tribes traditionally and culturally affiliated with the Project Area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? Yes, Metropolitan has conducted consultation pursuant to PRC Section 21080.3.1 and has made an impact determination. See Section 3.18 (Tribal Cultural Resources).

## 2.4 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the proposed Project, requiring implementation of mitigation as indicated by the checklist on the following pages that is “Less Than Significant With Mitigation Incorporated.”

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality                                   |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Energy  |
| <input type="checkbox"/> Geology/Soils                   | <input type="checkbox"/> Greenhouse Gas Emissions         | <input type="checkbox"/> Hazards & Hazardous Materials                 |
| <input type="checkbox"/> Hydrology/Water Quality         | <input type="checkbox"/> Land Use/Planning                | <input type="checkbox"/> Mineral Resources                             |
| <input type="checkbox"/> Noise                           | <input type="checkbox"/> Population/Housing               | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                      | <input type="checkbox"/> Transportation                   | <input type="checkbox"/> Tribal Cultural Resources                     |
| <input type="checkbox"/> Utilities/Service Systems       | <input type="checkbox"/> Wildfire                         | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## 2.5 Determination

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project may have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

*Jennifer Harriger*

11-8-2022

---

Jennifer Harriger

Date

Section Manager, Environmental Planning Section

### 3. Evaluation of Environmental Impacts

The following discussion addresses impacts to various environmental resources, per the Environmental Checklist Form contained in Appendix G of the State CEQA Guidelines. The proposed Project consists of the reclamation of 14 borrow sites located in San Bernardino and Riverside counties. Metropolitan initially identified 20 borrow site reclamation locations where surface mining activities either actively occur or had occurred in the past (ten in San Bernardino County and ten in Riverside County). An analysis of potential environmental impacts from reclamation activities was conducted for all 20 borrow site locations; however, six of the 20 borrow sites are inactive and have already been passively reclaimed and therefore are not subject to SMARA and SMARA reclamation requirements (SMARA; PRC Sections 2710-2796). In an effort to provide a comprehensive environmental review, all 20 borrow site locations are analyzed within this document even though only 14 sites are active and will be subject to reclamation.

#### 3.1 Aesthetics

##### AESTHETICS

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion. *Would the Project:*

*a. Have a substantial adverse effect on a scenic vista?*

**No Impact.** No, the Project would not have a substantial adverse effect on a scenic vista. A scenic vista is defined as a viewpoint that provides panoramic or focused views of a highly valued landscape or scenic resource for the benefit of the general public. The San Bernardino County Policy Plan states that regionally significant scenic vistas and natural features include prominent hillsides, ridgelines, dominant landforms, and reservoirs (County of San Bernardino 2020b). According to the Riverside County General Plan, Riverside County’s natural visual resources include low-lying valleys, ridgelines, mountain ranges, rock formations, rivers, and lakes (County of Riverside 2018). In the Project Area, scenic vistas primarily consist of views of mountain ranges and ridgelines.

The Project Area is located in a remote and isolated area consisting of desert landscape and is obscured from public viewing points by the CRA access roads and v-dike berms that protect the aqueduct within the Metropolitan ROW. The Project Area is located on Metropolitan fee property and cannot be accessed by the general public via a public road. The Project Area is isolated in nature, and reclamation activities would not be visible from nearby public locations. Thus, the proposed Project would not result in substantial adverse effects on a scenic vista, and no impact would occur.

- b. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

**No Impact.** No, the Project would not substantially damage scenic resources within a State scenic highway. According to the California Department of Transportation (Caltrans), there are no designated State scenic highways within 30 miles of the Project Area, but SR-62 is an eligible State scenic highway (Caltrans 2021). However, the Project Area is obscured from public views from SR-62 by the CRA access roads and v-dike berms that protect the aqueduct within the Metropolitan ROW. Therefore, the Project would not damage scenic resources within view of a State scenic highway because the Project Area is not visible from SR-62, and there would be no impact to scenic resources within a State scenic highway.

- c. *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?*

**No Impact.** No, the Project would not substantially degrade the existing visual character or quality of public views of the Project Area and its surroundings. The Project is located in a non-urbanized area and can be generally characterized as undeveloped desert land, comprised of low-lying desert foothills and alluvial wash basins. Due to the isolated nature of the Project Area, reclamation activities would not be visible from nearby public locations. Furthermore, upon completion of reclamation activities, the sites would function as revegetated open space, which would improve the visual quality of the Project Area as compared to existing conditions by restoring the Project sites to a more natural, less disturbed state consistent with the surrounding environment. Therefore, the Project would not degrade the existing visual character or quality of public views of the Project Area and their surroundings, and no impact would occur.

- d. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**No Impact.** No, the proposed Project would not create new sources of substantial light or glare which would adversely affect day or nighttime views in the area. The proposed Project would only involve periodic daytime work during reclamation and monitoring activities, and no new structures or equipment would be permanently installed at any Project site. No new sources of light or glare are proposed; therefore, no impact would occur.

### 3.2 Agricultural Resources

#### AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, Lead Agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, Lead Agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

- a. *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

**No Impact.** No, the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The Project Area is located in an area surrounded by desert landscape within Metropolitan fee property. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are mapped within the Project Area (California Department of Conservation 2016). As such, no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur as a result of the proposed Project.

- b. *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**No Impact.** No, the proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The Project Area is located in areas surrounded by desert landscape within Metropolitan fee property. The Project Area is neither zoned for agricultural use nor under a

Williamson Act contract, and no zoning changes are proposed (County of San Bernardino 2020a; County of Riverside 2021). No impact would occur.

- c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

**No Impact.** No, the proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned as Timberland Production. The Project Area is located in areas surrounded by desert landscape within Metropolitan fee property. The Project Area is not zoned for forest land or timberland, and no zoning changes are proposed (County of San Bernardino 2020a; County of Riverside 2021). Therefore, no impact pertaining to zoning for forest land or timberland would occur.

- d. Result in the loss of forest land or conversion of forest land to non-forest use?*

**No Impact.** No, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. The Project Area is located in an area surrounded by desert landscape within Metropolitan fee-owned property. No forest land exists within or adjacent to the Project Area. Therefore, no impact related to the loss of forest land or conversion of forest land to non-forest use would occur.

- e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

**No Impact.** No, the proposed Project does not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. The Project Area is located in an area surrounded by desert landscape within Metropolitan fee-owned property. The Project Area and its surroundings do not contain farmland or forest land (California Department of Conservation 2016); therefore, the proposed Project would not result in the conversion or loss of agriculture or forest land. No impact would occur.

### 3.3 Air Quality

#### AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### **OVERVIEW OF AIR POLLUTION, AIR QUALITY STANDARDS, ATTAINMENT STATUS, AND AIR QUALITY MANAGEMENT**

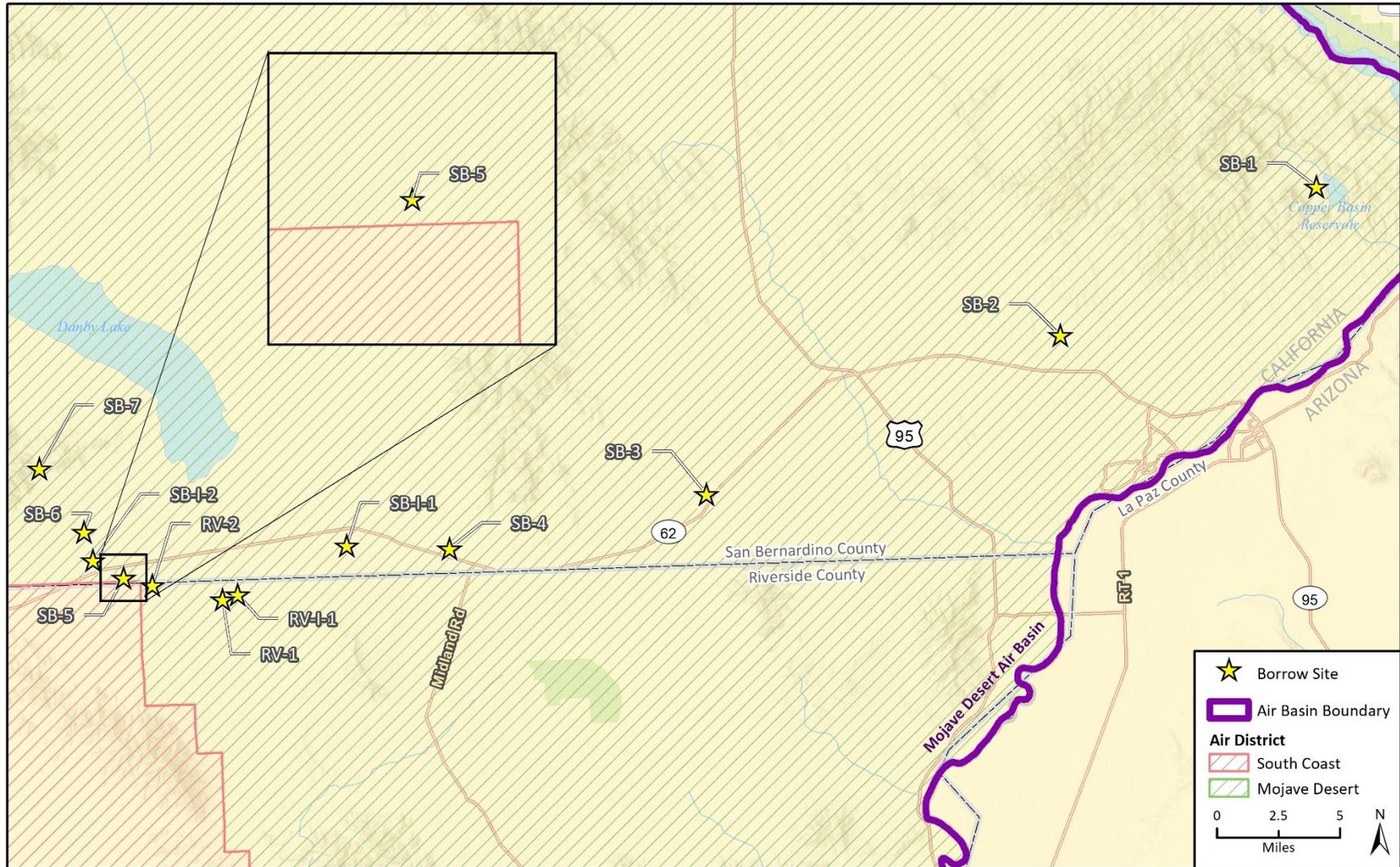
The Project Area is located in two air basins – the Mojave Desert Air Basin (MDAB) and the Salton Sea Air Basin (SSAB). The MDAB is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD) and the Mojave Desert Air Quality Management District (MDAQMD). The SSAB is within the jurisdictional boundaries of the SCAQMD and the Imperial County Air Pollution Control District. The characteristics of these two air basins, including their boundaries and respective air districts, as well as a description of the Project sites within each air basin and air district, are summarized in Table 3.3-1. Figures 3.3-1 and 3.3-2 show the boundaries of each air basin and air district in relation to the Project sites.

**Table 3.3-1. Air Basin Characteristics**

Air Basin	Location of Air Basin	Air Districts with Jurisdiction over Air Basin	Project Sites within Air Basin/Air District Boundaries
Mojave Desert Air Basin (MDAB)	Desert portions of Los Angeles, San Bernardino, Riverside, and Kern Counties	Mojave Desert Air Quality Management District	SB-1 through SB-7, SB-I-1 through SB-I-3, RV-1, RV-2, RV-I-1
		South Coast Air Quality Management District	RV-5, RV-6, RV-I-2,
Salton Sea Air Basin (SSAB)	Imperial County and most of the low desert areas of central Riverside County	South Coast Air Quality Management District	RV-7, RV-I-3
		Imperial County Air Pollution Control District	None

The federal and state Clean Air Acts mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants, which are summarized in Table 3.3-2. Some pollutants are

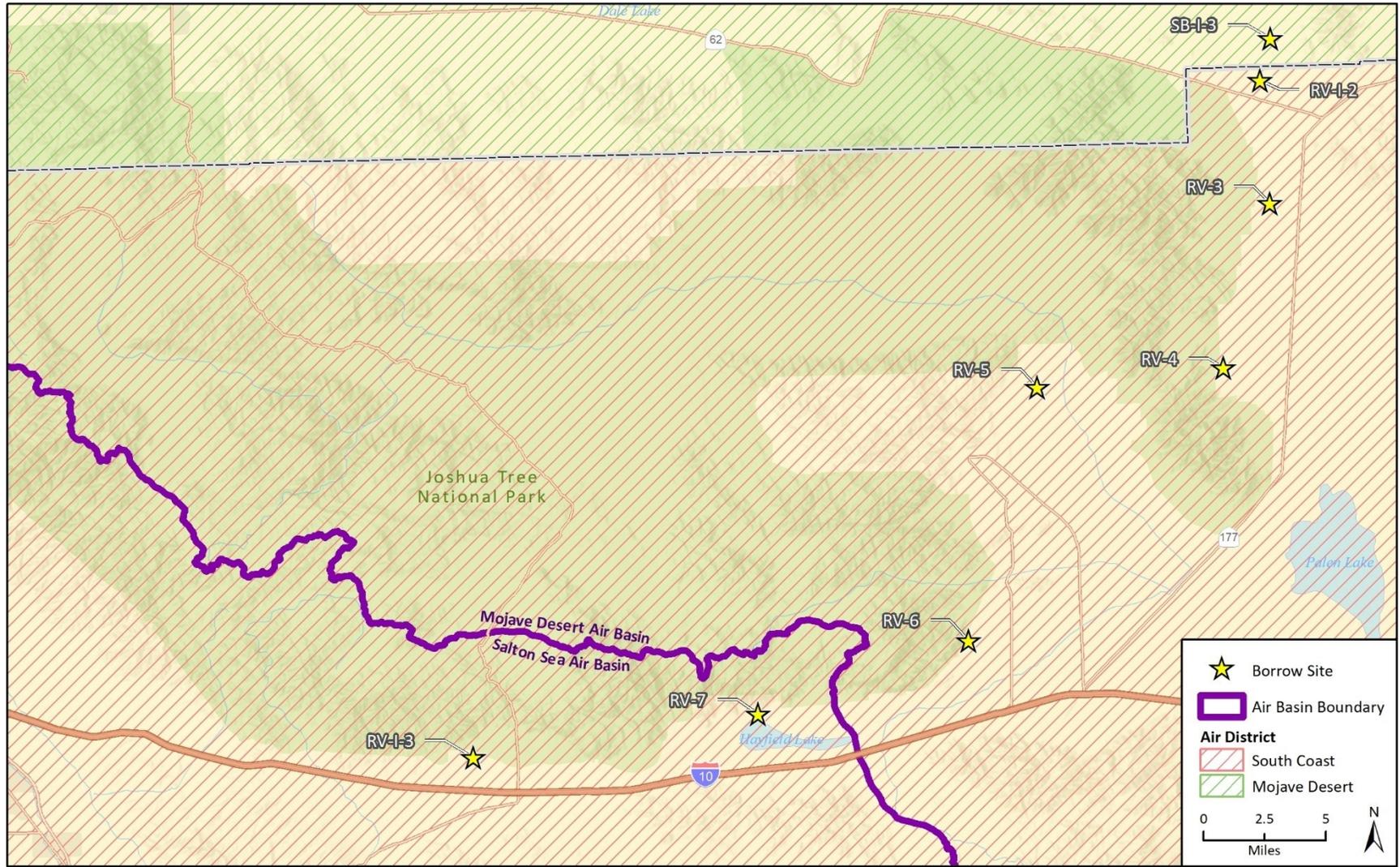
Figure 3.3-1. Air Basin and Air District Boundaries in Relation to Project Sites SB-1 through SB-7, SB-I-1, SB-I-2, RV-1, RV-2, and RV-I-1



Imagery provided by Microsoft Bing and its licensors © 2022.

Fig X Air Basins\_Pg1

**Figure 3.3-2. Air Basin and Air District Boundaries in Relation to Project Sites Project Sites SB-I-3, RV-3 through RV-7, RV-I-2, and RV-I-3**



Imagery provided by Microsoft Bing and its licensors © 2022.

Fig X Air Basins\_Pg2

emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),<sup>1</sup> nitrogen oxides, particulate matter with diameters of 10 microns or less (PM<sub>10</sub>) and 2.5 microns or less (PM<sub>2.5</sub>), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and nitrogen oxides. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog). The local air quality management agencies, SCAQMD and MDAQMD, are required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the MDAB and the SSAB are classified as being in “attainment” or “nonattainment.” The attainment status of the MDAB and SSAB for each pollutant regulated by the NAAQS and CAAQS is summarized in Table 3.3-2.

**Table 3.3-2. Air Quality Standards and Air Basin Attainment Status**

<b>Pollutant</b>	<b>Federal Standard (NAAQS)</b>	<b>California Standard (CAAQS)</b>	<b>SSAB Attainment Status</b>	<b>MDAB Attainment Status</b>
Ozone	0.070 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.070 ppm (8-hr avg)	N (federal and state)	N (federal and state) <sup>1</sup>
Carbon Monoxide	35.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)	20.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)	U (federal) A (state)	U (federal) U/A (state)
Nitrogen Dioxide	0.100 ppm (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)	U (federal) A (state)	U (federal) A (state)
Sulfur Dioxide	0.075 ppm (1-hr avg) 0.5 ppm (3-hr avg) 0.14 ppm (24-hr avg) 0.030 ppm (annual avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)	U (federal) A (state)	U (federal) A (state)
Lead	0.15 µg/m <sup>3</sup> (rolling 3-month avg) 1.5 µg/m <sup>3</sup> (calendar quarter)	1.5 µg/m <sup>3</sup> (30-day avg)	U (federal) A (state)	U (federal) A (state)
Particulate Matter (PM <sub>10</sub> )	150 µg/m <sup>3</sup> (24-hr avg)	50 µg/m <sup>3</sup> (24-hr avg) 20 µg/m <sup>3</sup> (annual avg)	N (federal and state)	N (federal and state)
Particulate Matter (PM <sub>2.5</sub> )	35 µg/m <sup>3</sup> (24-hr avg) 12 µg/m <sup>3</sup> (annual avg)	12 µg/m <sup>3</sup> (annual avg)	N (federal and state) <sup>2,3</sup>	U (federal) N (state) <sup>4</sup>

<sup>1</sup> CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this IS-MND.

**Table 3.3-2. Air Quality Standards and Air Basin Attainment Status**

Pollutant	Federal Standard (NAAQS)	California Standard (CAAQS)	SSAB Attainment Status	MDAB Attainment Status
Visibility-Reducing Particles	No Federal Standards	Extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more (0.07 - 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape (8-hr avg)	U (state)	U (state)
Sulfates	No Federal Standards	25 µg/m <sup>3</sup> (24-hr avg)	A (state)	A (state)
Hydrogen Sulfide	No Federal Standards	0.03 ppm (1-hr avg)	U (state)	N (state) <sup>5</sup>
Vinyl Chloride	No Federal Standards	0.01 ppm (24-hr avg)	U (state)	U (state)

Notes: NAAQS (National Ambient Air Quality Standard), CAAQS (California Ambient Air Quality Standard), MDAB (Mojave Desert Air Basin), SSAB (Salton Sea Air Basin), ppm (parts per million), hr (hour), avg (average), µg/m<sup>3</sup> (micrograms per cubic meter), N (nonattainment), A (attainment), U (unclassified).

Source: CARB 2016 and 2019a through 2019j; USEPA 2021a through 2021g

<sup>1</sup> Only the southwest corner of the desert portion of San Bernardino County is designated nonattainment for the eight-hour ozone NAAQS.

<sup>2</sup> Only the Imperial County portion of the SSAB is designated nonattainment for the PM<sub>2.5</sub> NAAQS.

<sup>3</sup> Only the City of Calexico in Imperial County is designated nonattainment for the PM<sub>2.5</sub> CAAQS.

<sup>4</sup> Only the San Bernardino County portion of the MDAB is designated nonattainment for the PM<sub>2.5</sub> CAAQS.

<sup>5</sup> Only the Searles Valley, located in the northwest corner of San Bernardino County, is designated nonattainment for the hydrogen sulfide CAAQS.

The SCAQMD (in conjunction with the Southern California Association of Governments) and the MDAQMD have developed air quality management plans (AQMPs) to meet the requirements of the federal Clean Air Act. The latest iterations of these plans are the SCAQMD (2017) *Final 2016 Air Quality Management Plan* and the MDAQMD (2017) *Federal 75 ppb (parts per billion) Ozone Attainment Plan (Western Mojave Desert Nonattainment Area)*. These plans address various federal non-attainment and attainment/maintenance planning requirements, are incorporated into the State Implementation Plan by the CARB, and are approved or disapproved by the USEPA.

### **AIR POLLUTANT EMISSION THRESHOLDS**

All sites are being evaluated under the current air quality standards and air pollutant emission thresholds for analysis purposes.

#### ***SCAQMD***

The SCAQMD has recommended quantitative regional significance thresholds for temporary Project construction activities and long-term Project operation within its jurisdictional boundaries, as shown in Table 3.3-3.

**Table 3.3-3. SCAQMD Regional Significance Thresholds**

	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Thresholds (pounds per day)	75	100	550	150	150	55
Operational Thresholds (pounds per day)	55	55	550	150	150	55

Notes: SCAQMD (South Coast Air Quality Management District), VOC (volatile organic compounds), NO<sub>x</sub> (nitrogen oxides), CO (carbon monoxide), SO<sub>x</sub> (sulfur oxides), PM<sub>10</sub> (particulate matter 10 micrometers or less in diameter), PM<sub>2.5</sub> (particulate matter 2.5 micrometers or less in diameter).

Source: SCAQMD 2019

### ***MDAQMD***

The MDAQMD has also recommended quantitative significance thresholds for temporary construction activities and long-term operation within its jurisdictional boundaries, as shown in Table 3.3-4.

**Table 3.3-4. MDAQMD Significance Thresholds**

	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Thresholds (pounds per day)	137	137	548	137	82	65
Construction Thresholds (tons per year)	25	25	100	25	15	12
Operational Thresholds (pounds per day)	137	137	548	137	82	65
Operational Thresholds (tons per year)	25	25	100	25	15	12

Notes: MDAQMD (Mojave Desert Air Quality Management District), VOC (volatile organic compounds), NO<sub>x</sub> (nitrogen oxides), CO (carbon monoxide), SO<sub>x</sub> (sulfur oxides), PM<sub>10</sub> (particulate matter 10 micrometers or less in diameter), PM<sub>2.5</sub> (particulate matter 2.5 micrometers or less in diameter).

Source: MDAQMD 2016

### **METHODOLOGY**

Air pollutant emissions associated with proposed reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) and restoration monitoring activities (i.e., periodic site visits by a monitoring biologist) were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0. CalEEMod uses Project-specific information, including the Project's land uses and location, to estimate a Project's emissions. The Project's emissions were estimated separately for the proposed reclamation construction activities and the proposed restoration monitoring activities because these activities would not occur simultaneously and would involve substantially different emissions characteristics (e.g., emission sources, frequency and duration of emissions, temporary versus periodically recurring). Air pollutant and greenhouse gas emissions modeling is attached as Appendix D.

#### ***Reclamation Construction Activities***

Proposed reclamation construction activities were modeled to occur in year 2022. This approach is considered conservative because activities occurring in future years would be expected to generate fewer emissions due to increasingly stringent fuel efficiency standards, such as future iterations of the federal construction equipment emissions standards, Corporate Average Fuel Economy standards, and cleaner mobile equipment engine models that would phase in over time.

To provide a conservative estimate of Project impacts, air pollutant emissions generated by reclamation construction activities for the largest single Project site (RV-1) were modeled and compared to the most stringent air emission thresholds recommended by SCAQMD and MDAQMD for each pollutant. Only one Project site is anticipated to be reclaimed at a time; therefore, reclamation construction activities would be consecutive and would not likely occur simultaneously. To provide flexibility, emissions generated by reclamation construction activities at RV-1 were multiplied to determine the maximum number of Project sites that could undergo reclamation construction activities simultaneously without exceeding the thresholds. The results of this analysis are provided under checklist item (b) below.

Emissions modeled for the proposed reclamation construction activities at RV-1 include emissions generated by heavy equipment used on site and emissions generated by vehicle trips, such as worker, water truck, and dump truck trips. The schedule, list of heavy equipment, and number of vehicle trips used in CalEEMod were based on information summarized previously in Section 1 (Project Description). As stated therein, it was assumed each Project site would require a month to reclaim with workers on site four days each week.<sup>2</sup> Assumptions for the type and number of equipment and support vehicles to be used during reclamation of each Project site is listed in Table 3.3-5. It was also assumed three Metropolitan employees would be on site during reclamation construction activities and would travel from the Iron Mountain Pumping Plant to each Project site (a one-way trip distance of approximately 15 miles for RV-1). In addition, it was assumed one water truck and one dump truck would travel to and from RV-1 each day with a one-way trip distance of approximately 6.9 miles for the water truck and a one-way trip distance of approximately 20 miles for the dump truck, based on CalEEMod default trip distances for the MDAQMD region.

**Table 3.3-5. Representative Off-Road Vehicle List – Reclamation Construction Activities**

Equipment	Make and Model	Quantity	Average Horsepower	Average Hours/Day
Water Truck	Freightliner – 4,000-gallon	1	300	4
Dozer	Caterpillar D-6	1	215	8
Excavator	Caterpillar 330	1	273	8
Loaders	Caterpillar 966	1	276	8
Grader	Caterpillar 140M, 160M, or 14M Motor	1	187	4
Dump Truck	Freightliner 114SD	1	16	4
Hydroseed Spreader	Freightliner – 1,000-gallon	1	172	8

***Restoration Monitoring Activities***

Restoration monitoring activities would occur following the completion of reclamation construction activities at each Project site. Proposed restoration monitoring activities were modeled to occur in year 2022, which is a conservative approach as explained above in the prior subsection. To provide a conservative estimate of Project impacts, air pollutant emissions

<sup>2</sup> CalEEMod does not include an option for a four-day work week; therefore, the modeling conservatively assumes a five-day work week.

generated by restoration monitoring activities at the furthest individual Project site from the Iron Mountain Pumping Plant (SB-1) were modeled and compared to the most stringent air emission thresholds recommended by SCAQMD and MDAQMD for each pollutant.

Modeling for the proposed restoration monitoring activities at SB-1 include emissions generated by periodic vehicle trips by the biologist to each Project site. To provide a conservative estimate of Project impacts, it was assumed the one-way trip distance for each biologist visit would be approximately 77.6 miles, which is the distance between the Iron Mountain Pumping Plant and SB-1. As stated in Section 1 (Project Description), it was assumed a monitoring biologist would visit each Project site four times per year for up to three years following completion of reclamation construction activities. It was also assumed staff vehicle trips would be made in a light-duty truck with a gross vehicle weight rating of less than 6,000 pounds and an equivalent test weight between 3,750 and 5,750 pounds (e.g., a small pickup truck similar to a Toyota Tacoma).

Only one Project site is anticipated to be reclaimed at a time; therefore, restoration monitoring activities would be consecutive and would not likely occur simultaneously. To provide flexibility, the emissions generated by restoration monitoring activities at SB-1 were multiplied to determine the maximum number of Project sites that could undergo restoration monitoring activities simultaneously without exceeding the thresholds. The results of this analysis are provided under checklist item (b) below.

*Discussion. Would the Project:*

*a. Conflict with or obstruct implementation of the applicable air quality plan?*

**No Impact.** No, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. The project would be consistent with the AQMP if it complies with all applicable air district rules and regulations, complies with all proposed control measures not yet adopted from the AQMP, and is consistent with the growth forecasts used in development of the AQMP (MDAQMD 2016). The Project is subject to the SCAQMD and the MDAQMD AQMPs.

As the Project sites undergo proposed reclamation, on-site activities would involve removing deleterious materials, grading and final slope contouring, installing stormwater BMPs, revegetating by hydroseeding, and monitoring. The Project does not include permanent stationary emissions sources. Therefore, no SCAQMD or MDAQMD regulations pertaining to permanent emission sources apply to the Project. With respect to regulations that apply to temporary emission sources, such as SCAQMD Rule 403 (Fugitive Dust) and MDAQMD Rule 403 (Fugitive Dust), the proposed Project would comply with those applicable rules and regulations. No new facilities or structures are proposed, and the proposed Project would not increase water supply to the area or otherwise directly or indirectly induce population growth. Therefore, the proposed Project would not conflict with or obstruct the applicable air quality plan, and no impact would occur.

*b. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard?*

**Less than Significant.** The proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard.

***Proposed Reclamation Construction Activities – Daily Emissions***

Proposed reclamation construction activities would involve removing deleterious materials and debris, recontouring Project site slopes and floors, installing stormwater BMPs to control erosion, and revegetating reclaimed areas with a native plant hydroseed mix. Air pollutant emissions would be generated by heavy equipment used on site and by vehicle trips, such as worker, water truck, and dump truck trips for a period of one month at each Project site. Emissions modeling assumptions are outlined above under *Methodology*. Both the SCAQMD and MDAQMD recommend the use of maximum daily air pollutant emission thresholds to evaluate Project impacts (Tables 3.3-3 and 3.3-4). Table 3.3-6 summarizes maximum daily emissions for proposed reclamation construction activities at the largest Project site (RV-1) as compared to the most stringent daily air emission thresholds recommended by the SCAQMD and MDAQMD for construction activities. As shown therein, maximum daily emissions generated by reclamation construction activities at the largest individual Project site (RV-1) would not exceed the most stringent air emission thresholds. Reclamation construction activities at the remaining Project sites would generate similar or fewer daily air pollutant emissions because the Project sites are smaller in size than RV-1; therefore, air pollutant emissions generated at these Project sites would also not exceed the significance thresholds.

As discussed previously, only one Project site is anticipated to be reclaimed at a given time. However, maximum daily emissions would not exceed the most stringent thresholds even if reclamation construction activities were conservatively assumed to occurred at up to five Project sites simultaneously.<sup>3</sup> Therefore, maximum daily emissions associated with reclamation construction activities would not result in a cumulatively considerable net increase of any criteria pollutant. Impacts would be less than significant.

**Table 3.3-6. Representative Maximum Daily Emissions for Proposed Reclamation Construction Activities (lbs/day) – RV-1 (Largest Project Site)**

	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
RV-1	2.1	19.6	13.6	< 0.1	4.0	2.4
Most Stringent SCAQMD/MDAQMD Significance Thresholds <sup>1,2</sup>	75	100	548	137	82	55
<i>Significant (Exceeds Thresholds)?</i>	NO	NO	NO	NO	NO	NO

Notes: VOC (volatile organic compounds), NO<sub>x</sub> (nitrogen oxides), CO (carbon monoxide), SO<sub>x</sub> (sulfur oxides), PM<sub>10</sub> (particulate matter 10 micrometers or less in diameter), PM<sub>2.5</sub> (particulate matter 2.5 micrometers or less in diameter), lbs/day (pounds per day), SCAQMD (South Coast Air Quality Management District), MDAQMD (Mojave Desert Air Quality Management District).

<sup>1</sup> Emissions generated by reclamation construction activities are compared to the most stringent daily SCAQMD/MDAQMD significance thresholds for construction emissions because the nature of reclamation construction activities would be similar to that of construction activities in that they would be temporary and short-term in duration, use heavy equipment, and require grading activities.

<sup>2</sup> As shown in Tables 3.3-3 and 3.3-4, the most stringent daily construction thresholds recommended by SCAQMD and MDAQMD are the SCAQMD thresholds for VOC, NO<sub>x</sub>, and PM<sub>2.5</sub> and the MDAQMD thresholds for CO, SO<sub>x</sub>, and PM<sub>10</sub>.

Source: Appendix D; SCAQMD 2019; MDAQMD 2016

<sup>3</sup> The limiting factor for reclamation construction activities is nitrogen oxides emissions. Simultaneous reclamation construction activities at five Project sites would generate approximately 98 pounds per day of nitrogen oxides (19.6 pounds per day per site), which would be below the SCAQMD regional significance threshold of 100 pounds per day.

***Proposed Reclamation Construction Activities – MDAQMD Annual Emissions***

In addition to daily air pollutant emission thresholds, the MDAQMD recommends the use of annual air pollutant emission thresholds to evaluate Project impacts (Table 3.3-4; the SCAQMD has no such annual air pollutant emission thresholds with which to evaluate project impacts.). Table 3.3-7 summarizes annual emissions for Project reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) at the largest Project site (RV-1) as compared the MDAQMD thresholds. As shown therein, annual emissions for reclamation construction activities at RV-1 would not exceed the MDAQMD significance thresholds for annual air pollutant emissions. Reclamation construction activities at the remaining Project sites would generate similar or fewer air pollutant emissions because these Project sites are smaller in size than RV-1; therefore, annual air pollutant emissions generated at these Project sites would also not exceed the annual significance thresholds. Furthermore, while it is anticipated that only one Project site will be reclaimed at a time, all Project sites could undergo reclamation construction activities in the same year, and annual air pollutant emissions would not exceed the MDAQMD significance thresholds.<sup>4</sup> <sup>5</sup> Therefore, annual emissions associated with reclamation construction activities would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

**Table 3.3-7. Representative Annual Emissions for Reclamation Construction Activities (tons/year) – RV-1 (Largest Project Site)**

	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
RV-1	< 0.1	0.3	0.2	< 0.1	0.1	< 0.1
MDAQMD Significance Thresholds <sup>1</sup>	25	25	100	25	15	12
<i>Significant (Exceeds Thresholds)?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Notes: VOC (volatile organic compounds), NO<sub>x</sub> (nitrogen oxides), CO (carbon monoxide), SO<sub>x</sub> (sulfur oxides), PM<sub>10</sub> (particulate matter 10 micrometers or less in diameter), PM<sub>2.5</sub> (particulate matter 2.5 micrometers or less in diameter), MDAQMD (Mojave Desert Air Quality Management District).

<sup>1</sup> Emissions generated by reclamation construction activities are compared to MDAQMD annual significance thresholds for construction emissions because the nature of reclamation construction activities would be similar to that of construction activities in that they would be temporary and short-term in duration, use heavy-duty equipment, and require grading activities.

Source: Appendix D; MDAQMD 2016

***Proposed Restoration Monitoring Activities – Daily Emissions***

Air pollutant emissions associated with the proposed restoration monitoring activities (i.e., periodic site visits by a monitoring biologist) would be generated by quarterly vehicle trips by staff between the Iron Mountain Pumping Plant and each Project site for up to three years after the completion of reclamation construction activities. Air pollutant emissions modeling assumptions are outlined above under *Methodology*. Both the SCAQMD and MDAQMD recommend the use of maximum daily air pollutant emission thresholds to evaluate Project impacts (Tables 3.3-3 and 3.3-4). Table

<sup>4</sup> Only 13 of the 20 Project sites are located in MDAQMD jurisdiction (see Table 3.3-1 under *Overview of Air Pollution, Air Quality Standards, Attainment Status, and Air Quality Management*). However, because the SCAQMD does not have annual air emission thresholds, air pollutant emissions from reclamation construction activities at all 20 Project sites are compared to the MDAQMD annual air emission thresholds in this analysis to provide a conservative evaluation of the Project’s emissions.

<sup>5</sup> The evaluation of air pollutant emissions from reclamation construction activities occurring at all 20 Project sites in the same year is very conservative.

3.3-8 summarizes maximum daily emissions for restoration monitoring activities for the individual Project site located the furthest driving distance from Iron Mountain Pumping Plant (i.e., SB-1) because this is the site for which restoration monitoring activities would generate the highest air pollutant emissions. As shown therein, maximum daily emissions for restoration monitoring activities at SB-1 would not exceed the most stringent SCAQMD/MDAQMD significance thresholds. Restoration monitoring activities at the remaining Project sites would generate similar or fewer air pollutant emissions because they are closer in distance to Iron Mountain Pumping Plant than SB-1; therefore, daily air pollutant emissions generated at these Project sites would also not exceed the significance thresholds. Only one Project site is anticipated to be reclaimed at a time. However, up to 17 Project sites could undergo restoration monitoring activities in the same day, and daily air pollutant emissions would not exceed the most stringent thresholds.<sup>6</sup> As a result, maximum daily emissions associated with restoration monitoring activities would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

**Table 3.3-8. Maximum Daily Emissions for Restoration Monitoring Activities (lbs/day) – SB-1 (Furthest Driving Distance from Iron Mountain Pumping Plant)**

	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
SB-1	0.9	3.2	0.5	< 0.1	0.1	< 0.1
Most Stringent Significance Thresholds <sup>1,2</sup>	55	55	548	137	82	55
<i>Significant (Exceeds Thresholds)?</i>	NO	NO	NO	NO	NO	NO

Notes: VOC (volatile organic compounds), NO<sub>x</sub> (nitrogen oxides), CO (carbon monoxide), SO<sub>x</sub> (sulfur oxides), PM<sub>10</sub> (particulate matter 10 micrometers or less in diameter), PM<sub>2.5</sub> (particulate matter 2.5 micrometers or less in diameter), lbs/day (pounds per day), SCAQMD (South Coast Air Quality Management District), MDAQMD (Mojave Desert Air Quality Management District).

<sup>1</sup> Emissions generated by restoration monitoring activities are compared to the most stringent SCAQMD/MDAQMD daily significance thresholds for operational emissions because the nature of restoration monitoring activities would be similar to that of operational activities associated with typical land use development projects (e.g., residential, commercial) in that they would be recurring, would be long-term in duration, and would consist of passenger vehicle trips.

<sup>2</sup> As shown in Tables 3.3-3 and 3.3-4, the most stringent daily operational thresholds recommended by SCAQMD and MDAQMD are the SCAQMD thresholds for VOC, NO<sub>x</sub>, and PM<sub>2.5</sub> and the MDAQMD thresholds for CO, SO<sub>x</sub>, and PM<sub>10</sub>.

Source: Appendix D; SCAQMD 2019; MDAQMD 2016

***Proposed Restoration Monitoring Activities – MDAQMD Annual Emissions***

In addition to daily air pollutant emission thresholds, the MDAQMD recommends the use of annual air pollutant emission thresholds to evaluate Project impacts (Table 3.3-4; the SCAQMD has no such annual air pollutant emission thresholds with which to evaluate project impacts). Table 3.3-9 summarizes annual emissions for restoration monitoring activities (i.e., periodic site visits by a monitoring biologist) for the individual Project site located the furthest driving distance from Iron Mountain Pumping Plant (i.e., SB-1) because conservatively this is the site for which restoration monitoring activities would generate the highest air pollutant emissions. As shown therein, annual emissions for restoration monitoring activities at SB-1 would not exceed the MDAQMD annual significance thresholds. Restoration monitoring activities at the remaining Project sites would

<sup>6</sup> The limiting factor for restoration monitoring activities is nitrogen oxides emissions. Simultaneous reclamation construction activities at 17 Project sites would generate approximately 54 pounds per day of nitrogen oxides (3.2 pounds per day per site), which would be below the SCAQMD regional significance threshold of 55 pounds per day.

generate similar or fewer air pollutant emissions because they are closer in distance to Iron Mountain Pumping Plant than SB-1; therefore, annual air pollutant emissions generated at these Project sites would also not exceed the significance thresholds. Furthermore, even if all 20 Project sites underwent restoration monitoring activities in the same year, annual air pollutant emissions would still not exceed the significance thresholds.<sup>7, 8</sup> As a result, annual emissions associated with restoration monitoring activities would not result in a cumulatively considerable net increase of any criteria pollutant on an annual basis, and impacts would be less than significant.

**Table 3.3-9. Annual Emissions for Restoration Monitoring Activities (tons/year) – SB-1 (Furthest Driving Distance from Iron Mountain Pumping Plant)**

	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
SB-1	< 0.1	< 0.1	0.3	< 0.1	0.1	< 0.1
MDAQMD Significance Thresholds	25	25	100	25	15	12
<i>Significant (Exceeds Thresholds)?</i>	<i>NO</i>	<i>NO</i>	<i>NO</i>	<i>NO</i>	<i>NO</i>	<i>NO</i>

Notes: VOC (volatile organic compounds), NO<sub>x</sub> (nitrogen oxides), CO (carbon monoxide), SO<sub>x</sub> (sulfur oxides), PM<sub>10</sub> (particulate matter 10 micrometers or less in diameter), PM<sub>2.5</sub> (particulate matter 2.5 micrometers or less in diameter), MDAQMD (Mojave Desert Air Quality Management District).

<sup>1</sup> Conservatively assumes the maximum trip distance between Iron Mountain Pumping Plant and the furthest Project site (i.e., 77.6 miles).

<sup>2</sup> Emissions generated by restoration monitoring activities are compared to MDAQMD significance thresholds for operational emissions because the nature of restoration monitoring activities would be similar to that of operational activities associated with typical land use development projects (e.g., residential, commercial) in that they would be recurring, long-term in duration, and consist of passenger vehicle trips.

Source: Appendix D; MDAQMD 2016

### ***Post-Reclamation Uses***

After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations that would generate air emissions; therefore, there would be no operational impacts related to criteria air pollutant emissions.

#### *c. Expose sensitive receptors to substantial pollutant concentrations?*

**Less than Significant Impact.** No, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Sensitive receptors include schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent homes, hospitals, retirement homes, and residences. The Project Area is located in desert landscape within Metropolitan fee property. RV-7 is the only Project site located within 0.25 mile of sensitive receptors, which are Metropolitan employee residences at the Julian Hinds Pumping Plant that are leased by Metropolitan employees and located approximately 1,000 feet to the west of RV-7. Although RV-7 is anticipated to be reclaimed between 2027 and 2122, it is being evaluated under the current air quality standards and air pollutant emission thresholds for analysis purposes.

<sup>7</sup> Only 13 of the 20 Project sites are located in MDAQMD jurisdiction. However, because the SCAQMD does not have annual air emission thresholds, air pollutant emissions from restoration monitoring activities at all 20 Project sites are compared to the MDAQMD annual air emission thresholds in this analysis to provide a conservative evaluation of the Project's emissions.

<sup>8</sup> The evaluation of air pollutant emissions from restoration monitoring activities occurring at all 20 Project sites in the same year is very conservative.

### ***Carbon Monoxide Hotspots***

Traffic-congested roadways and intersections have the potential to generate elevated localized carbon monoxide levels (i.e., carbon monoxide hotspots). In general, carbon monoxide hotspots occur in areas with poor circulation or areas with heavy traffic. RV-7 is located in a largely undeveloped region of Riverside County with low existing levels of traffic. The proposed Project would result in minor increases in vehicle traffic near RV-7 as a result of worker vehicle trips, delivery of heavy-duty equipment and materials, and haul trips during reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) and infrequent, periodic monitoring visits during restoration monitoring activities. Because RV-7 is not located in an area with poor circulation or heavy traffic and would generate minimal additional traffic, Project-related traffic would not cause or contribute to potential temporary carbon monoxide hotspots. Therefore, the proposed reclamation construction activities would not expose sensitive receptors to substantial concentrations of carbon monoxide, and impacts would be less than significant.

After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations that would generate carbon monoxide emissions; therefore, there would be no operational impacts related to carbon monoxide hotspots.

### ***Toxic Air Contaminants***

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs generally consist of four types: organic chemicals, such as benzene, dioxins, toluene, and perchloroethylene; inorganic chemicals such as chlorine and arsenic; fibers such as asbestos; and metals such as mercury, cadmium, chromium, and nickel. The primary TAC emitted by proposed Project reclamation activities would be diesel particulate matter (DPM) generated by heavy equipment and diesel-fueled delivery and dump trucks used during reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) at RV-7. Substantial TACs would not be emitted during restoration monitoring activities because the monitoring biologist would utilize a gasoline-powered vehicle, which would not emit DPM, to access RV-7 during site visits.

The amount of TACs to which receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The California Office of Environmental Health Hazard Assessment has not identified short-term health effects from DPM.

Reclamation construction activities would be temporary and short-term (i.e., one month) at RV-7 and would not generate emissions in a fixed location for extended periods of time. The nearest sensitive receptors to RV-7 are located approximately 1,000 feet away, and exhaust from mobile equipment dissipates rapidly. Furthermore, the duration of exposure would be short. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of reclamation activities. DPM emissions from the one-month period of reclamation activities would represent 0.3 percent of the typical 30-year exposure duration used in health risk assessments; therefore, reclamation activities would not represent the type of long-term TAC emission sources typically subject to health risk assessments. Reclamation activities would

also be subject to and would comply with California regulations limiting the idling of heavy equipment to no more than five minutes, which would further reduce the exposure of the nearest sensitive receptors to temporary and variable DPM emissions. Moreover, reclamation activities would utilize relatively few pieces of diesel-powered mobile equipment (i.e., an excavator, a grader, a hydroseed spreader, a dozer, a backhoe, and a pump). As such, reclamation activities would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations that would generate TACs emissions; therefore, there would be no operational impacts related to TAC emissions.

*d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

**No Impact.** No, the proposed Project would not result in other emissions adversely affecting a substantial number of people. The Project Area is located in desert landscape within Metropolitan fee property. RV-7 is the only Project site located within 0.25 mile of sensitive receptors, and the closest sensitive receptors to RV-7 are Metropolitan employee residences at the Julian Hinds Pumping Plant that are leased by Metropolitan employees and located approximately 1,000 feet to the west of RV-7. The Project would generate oil and diesel fuel odors from heavy-duty equipment operating at RV-7 during reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation). However, these odors would be localized, limited to the one-month period of reclamation construction activities at RV-7, and would dissipate rapidly with distance. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to odors. Accordingly, the proposed Project would not result in other emissions, such as those leading to odors, adversely affecting a substantial number of people, and no impact would occur.

### 3.4 Biological Resources

#### BIOLOGICAL RESOURCES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### OVERVIEW OF BIOLOGICAL RESOURCES

Rincon prepared a Biological Resources Assessment report to document existing conditions and to evaluate the potential for impacts to biological resources during implementation of the proposed Project. Regulated or sensitive resources studied and analyzed herein include special status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. The Biological Resources Assessment is attached as Appendix C.<sup>9</sup>

#### REGULATORY FRAMEWORK

The following is a summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. Many federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the Project Area include:

- United States Army Corps of Engineers (USACE) (wetlands and other waters of the United States);

<sup>9</sup> The Biological Resources Technical Report prepared in support of this IS-MND utilized a different site numbering convention than that used herein. To facilitate comparison of the information contained in this report with the information contained in this IS-MND, refer to Appendix B for a comparison matrix of the borrow site numbering convention.

- Regional Water Quality Control Board (RWQCB) (waters of the State);
- United States Fish and Wildlife Service (USFWS) (federally listed species and migratory birds); and
- California Department of Fish and Wildlife (CDFW) (riparian areas and other waters of the State, state listed species).

Special status habitats are vegetation types, associations, or sub-associations that support concentrations of special status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g., USFWS), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e., CDFW), pursuant to the California Endangered Species Act (CESA) or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g., Audubon Society, California Native Plant Society [CNPS], The Wildlife Society), and the scientific community.

## **METHODOLOGY**

Biological conditions were evaluated by confirming applicable regulations, policies, and standards; reviewing biological literature and querying available databases pertinent to the Project sites and vicinity (within five miles for CDFW's California Natural Diversity Data Base [CNDDDB] and within nine topographic quadrangles for CNPS); and conducting a reconnaissance-level biological survey of the Project sites and 500-foot survey buffer.<sup>10</sup> Prior to conducting the biological field survey for the proposed Project, a variety of literature was reviewed to obtain baseline information about the biological resources with potential to occur within the Project sites and surrounding areas, including databases from CDFW, USFWS, and the CNPS. Refer to Appendix C for the full list of literature reviewed.

On June 29 and 30, 2020, Rincon biologist Megan Minter conducted a general biological reconnaissance survey of the Project sites to document existing site conditions and the potential presence of regulated biological resources, including special status plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The survey was performed by walking and driving throughout the Project sites to characterize the existing biological resources present (e.g., vegetative communities, potential presence of listed species and/or their habitats, and presence of potentially jurisdictional waters). Weather conditions were sunny and clear with temperatures in the 90s and 100s °F with variable winds ranging from one to five miles per hour. A follow-up survey was conducted on January 20, 2021 to survey the remaining Project sites that were not surveyed in June 2020. The January 2021 survey followed the same methodology as the June 2020 surveys detailed above. Weather conditions were sunny and clear with temperatures in the 60s and 70s °F and variable winds ranging from one to five miles per hour.

---

<sup>10</sup> Special status species known to occur in the Project Area, such as burrowing owl (*Athene cunicularia*), mountain lion (*Puma concolor*), and Joshua tree (*Yucca brevifolia*) that were not identified in the CNDDDB or CNPS database queries were included to provide a comprehensive analysis.

While a formal jurisdictional delineation was not performed, the biologist mapped approximate limits of the tops of banks at the following inactive Project sites (SB-I-1 through SB-I-3, RV-I-1, and RV-I-2) with a Trimble Global Positioning System by walking the perimeter of significant, potentially jurisdictional features within or immediately adjacent to the Project sites, based on topography and ordinary high water mark / flow indicators such as sediment sorting, benching, scour, and lack of vegetation. The approximate boundaries of significant, potentially jurisdictional waters for the remaining Project sites and other significant features within the general vicinity of the Project sites were mapped based on a desktop analysis of aerial imagery. Smaller swale-like, potentially jurisdictional features that may be visible from aerial imagery were not mapped because those features cannot be accurately assessed from a desktop analysis and should be verified in the field closer to the time of the proposed reclamation activities.

### **EXISTING CONDITIONS**

This assessment provides the existing biological conditions of the Project sites at the time of the literature review and reconnaissance surveys. However, the biological conditions of the Project sites are likely to change from their present conditions prior to implementation of Project activities (i.e., reclamation) due to both natural processes and current and future mining activities.

Two vegetation communities/land cover types were mapped within the Project sites during the reconnaissance survey: creosote bush scrub and disturbed/unvegetated areas. Creosote bush scrub within the Project sites provides habitat for many wildlife species. Wildlife observed during the biological reconnaissance surveys consisted of common desert species, including coast horned lizard (*Phrynosoma blainvillii*), California ground squirrel (*Otospermophilus beecheyi*), coyote (*Canis latrans*), burro (*Equus asinus*), bighorn sheep (*Ovis canadensis*), desert iguana (*Dipsosaurus dorsalis*), jackrabbit (*Lepus californicus*), and greater roadrunner (*Geococcyx californianus*). Avian wildlife species observed flying over the Project sites during the biological reconnaissance surveys included common raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and European starling (*Sturnus vulgaris*).

The literature review included querying available databases pertinent to the Project sites and vicinity (within five miles for CNDDDB and within nine topographic quadrangles for CNPS).<sup>11</sup> Based on the results of the literature review, 22 special status plant species are known to occur within five miles of the Project sites.<sup>12</sup> No special status plant species were observed within the Project sites during the biological reconnaissance surveys.

Additionally, 12 special status wildlife species have the potential to occur within five miles of the Project sites, and ten of those 12 special status wildlife species have moderate to high potential to occur at one or more Project site.<sup>13</sup> These species include: Mojave desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), prairie falcon (*Falco mexicanus*), Yuma myotis (*Myotis yumanensis*), cave myotis (*Myotis velifer*), California leaf-nosed bat (*Macrotus*

---

<sup>11</sup> Special status species known to occur in the Project Area, such as burrowing owl, mountain lion and Joshua tree that were not identified in the CNDDDB or CNPS were included to provide a comprehensive analysis.

<sup>12</sup> The following five plant species have been documented with non-specific locations that overlap portions of the Project sites: desert scaleseed (RV-7), mesquite nedstraw (RV-7), Hardwood's milk-vetch (SB-4), desert beardtongue (SB-1), and Hardwood's eriastrum (SB-I-3).

<sup>13</sup> The following six wildlife species have been documented on CNDDDB with non-specific locations that overlap portions of the Project sites: bald eagle (SB-1), California leaf-nosed bat (SB-1), cave myotis (SB-1), desert tortoise (SB-3, RV-3, and RV-4), Mojave fringe-toed lizard (SB-4), and prairie falcon (RV-3, RV-4, RV-7, SB-I-1, and SB-7).

*californicus*), Townsend's big-eared bat (*Corynorhinus townsendii*), desert bighorn sheep (*Ovis canadensis nelsoni*), mountain lion (*Puma concolor*), and bald eagle (*Haliaeetus leucocephalus*). These species and an analysis of their potential to occur at each Project site are discussed in further detail below.

## **METROPOLITAN STANDARD PRACTICE**

### **Environmental Assessment**

As an internal practice, Metropolitan conducts Environmental Assessments or similar studies prior to project commencement to determine if any resources have the potential to be present at each project site. The Environmental Assessment evaluates the potential for impacts to all biological resources including, but not limited to special status species, nesting birds, wildlife movement, sensitive plant communities/critical habitat, potentially jurisdictional features, and other resources, policies, plans, or ordinances, determined to be sensitive by local, state, and/or federal agencies. The Environmental Assessment also includes habitat assessments for special status plants and wildlife and identifies avoidance measures or further technical studies, surveys, or consultations with State, federal, or local agencies that may be needed to reduce impacts to biological resources.

### **Worker Environmental Awareness Protections Training**

Metropolitan routinely conducts pre-construction Worker Environmental Awareness Protections Training (WEAP) for both capital projects and operations and maintenance activities. WEAP trainings are project-specific and cover potential environmental concerns or considerations including, but not limited to, awareness of biological resources, special status species near project sites, jurisdictional waters, cultural resources, paleontological resources, environmentally sensitive areas, and/or avoidance areas.

### **Desert Tortoise Awareness Training**

Metropolitan conducts Desert Tortoise Awareness Training for all Metropolitan staff and contractors working at Metropolitan's desert facilities or on the CRA. Desert Tortoise Awareness Training consists of a presentation and handout discussing the protected status of the desert tortoise and its habitat, predators, and avoidance measures. Avoidance measures include, but are not limited to the following:

- Work areas shall be delineated with flagging if determined necessary by the qualified staff person.
- Access to project sites shall be restricted to designated existing routes of travel.
- Workers shall inspect for tortoises under vehicles and equipment prior to use. If a tortoise is present, workers would only move the vehicle when the tortoise would not be injured by the vehicle or would wait for the tortoise to move out from under the vehicle.

### **Nesting Bird Surveys**

To achieve compliance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513, Metropolitan routinely performs surveys for nesting birds on projects that occur during the bird breeding season. Survey timeframes vary depending on a project's geographic location. For proposed reclamation activities occurring during the nesting season in the Mojave Desert (from January 15 through August 31 for raptors and hummingbirds and from March 15 through August 31 for other bird species), surveys for nesting birds would be

conducted by a monitoring biologist no more than 72 hours prior to vegetation removal or earth-moving activities at each borrow site.

The survey area for all nesting bird surveys includes the applicable Project site and an appropriate buffer, as determined by the monitoring biologist. If active nests (i.e., nests with eggs or chicks) are located, the monitoring biologist would establish an appropriate avoidance buffer based on the species' biology and the current and anticipated disturbance levels occurring in the vicinity of the nest. The size of the buffer may be influenced by the existing conditions and disturbance regime, relevant landscape characteristics, and the nature, timing and duration of the expected disturbance. All buffers would be marked using high-visibility flagging or fencing, and, unless approved by the monitoring biologist, no project activities would be allowed within the buffers until the young have fledged from the nest or the nest fails. Documentation of nesting bird surveys and nest monitoring (if applicable) would be prepared prior to the start of reclamation.

*Discussion. Would the Project:*

- a. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Less Than Significant with Mitigation Incorporated.** No, the proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS with incorporation of mitigation measures.

**Special Status Plants**

No special status plant species were observed within any Project site during the biological reconnaissance surveys. Conditions within the Project sites are heavily disturbed by active use for CRA operations and maintenance, and many sites contain little to no vegetation. Special status plants typically require highly specific, high quality habitat not found within the Project sites. Due to the heavily disturbed nature of the Project sites, it is unsuitable for rare plants that require specialized habitats, and all 22 special status plant species were determined to have low or no potential to occur within the inactive Project sites. Because special status plants have low or no potential to occur within the inactive Project sites, impacts at these sites would be less than significant.

Implementation of reclamation activities at the 14 active Project sites is proposed to occur by 2122, and the conditions at the Project sites and/or listing statuses could change within the interim time period. While much of the Project sites are currently disturbed by surface mining activities and support little to no vegetation, there is potential for special status plant species to be supported in the future. Reclamation activities such as movement of soil, vehicles driving and parking, and the foot traffic of crews could incidentally crush or damage special status plant species. However, impact areas would be small and localized at each site. Furthermore, planned revegetation activities, including recontouring, spreading of topsoil, and invasive weed control, would provide a net benefit to on-site habitat conditions for special status plants. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent

with the surrounding environment. There would be no additional activities or operations once a given borrow site is successfully revegetated.

As part of the Project, Metropolitan would implement its Standard Practices of Environmental Assessment and WEAP training to identify current site conditions and educate workers on environmental sensitivities at the Project sites. Nevertheless, because conditions within the Project sites and/or plant listing statuses may change before reclamation activities are implemented at sites to be reclaimed between 2027 and 2122, Mitigation Measures BIO-1 (Special Status Plant Species Surveys), BIO-2 (Special Status Plant Species Avoidance and Minimization), and BIO-3 (Special Status Plant Species Revegetation) would be implemented to avoid potentially significant impacts. These measures would require identification of special status plants that may be present and application of appropriate avoidance and/or mitigation measures prior to reclamation at sites to be reclaimed between 2027 and 2122. With implementation of these measures, impacts to special status plants would be reduced to less-than-significant levels.

### **Special Status Wildlife**

Twelve special status wildlife species have the potential to occur within five miles of the Project sites, and ten of those 12 special status wildlife species have moderate to high potential to occur at one or more reclamation locations. The sites are heavily disturbed, sparsely or not vegetated, and in most cases offer limited habitat for special status wildlife species. Current operational activities include excavation, dirt moving, materials storage, and heavy equipment use. These existing activities increase sound and vibration levels at the sites and potential exposure to dust and reduce the likelihood that special status wildlife species would be present. The short-term human presence and earthwork required for reclamation would be substantially similar to operational activities that are currently occurring at the Project sites. In the long term, the Project would have a positive effect on special status species habitat because native plant communities would be restored and chronic disturbance of the sites would cease. Table 3.4-1 lists the special status species with potential to occur at the Project sites, which are discussed in further detail below.

**Table 3.4-1. Special Status Wildlife with Potential to Occur Within the Project Sites**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Status</b>
desert tortoise	<i>Gopherus agassizii</i>	Federal Threatened/State Threatened
bald eagle	<i>Haliaeetus leucocephalus</i>	State Endangered/CDFW Fully Protected
prairie falcon	<i>Falco mexicanus</i>	CDFW Watch List
desert bighorn sheep	<i>Ovis canadensis nelsoni</i>	CDFW Fully Protected
mountain lion	<i>Puma concolor</i>	Candidate State Threatened/Endangered
burrowing owl	<i>Athene cunicularia</i>	CDFW SSC
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	CDFW SSC
Yuma myotis	<i>Myotis yumanensis</i>	CDFW SSC
cave myotis	<i>Myotis velifer</i>	CDFW SSC
California leaf-nosed bat	<i>Macrotus californicus</i>	CDFW SSC

Notes: CDFW (California Department of Fish and Wildlife), SSC (Species of Special Concern)

### ***Desert Tortoise***

Desert tortoise is listed as threatened under FESA and CESA. Desert tortoise has a moderate potential to occur at all 20 Project sites due to the Project sites' proximity to suitable desert scrub

habitat. Potential indirect impacts could include temporary crushing of suitable habitat, unoccupied nest/burrow destruction, increased sound and vibration levels, and exposure to dust. Worker activity within the Project sites could attract desert tortoise predators. However, as discussed above, disturbance associated with reclamation activities would be temporary in nature and would be substantially similar to that which has and will continue to occur as part of ongoing CRA operations and maintenance activities.

Direct impacts to desert tortoise may include crushing/killing of individuals with equipment or vehicles. Young desert tortoise are especially vulnerable to vehicle mortality due to their small size and inability to quickly seek refuge. However, as part of the proposed Project, Metropolitan would implement its Standard Practices of Environmental Assessment to determine site conditions at the time of reclamation and WEAP training to educate workers on environmental sensitivities at the Project sites. Furthermore, Metropolitan's Standard Practices regarding Desert Tortoise Avoidance Training would be implemented. In addition to the above listed Standard Practices, implementation of Mitigation Measures BIO-4 (Special Status Wildlife Species Surveys) and BIO-5 (Special Status Wildlife Species Avoidance and Minimization) would further reduce potential impacts to desert tortoise. These measures would require identification of desert tortoise individuals that may be present within the Project sites and application of appropriate avoidance and/or mitigation measures prior to reclamation. With the implementation of these measures, impacts to desert tortoise would be reduced to less-than-significant levels because direct impacts would be avoided and indirect impacts would be limited and not likely to impact the species' ability to persist once the Project is complete.

### ***Bald Eagle and Prairie Falcon***

Bald eagle is listed as endangered under CESA and is also a CDFW Fully Protected species. Bald eagle has a high potential to forage at SB-1 due to the site's location within one mile of suitable nesting habitat (i.e., large trees). Prairie falcon is a CDFW Watch List species and has a moderate to high potential to forage at SB-1, SB-7, SB-I-3, RV-I-1, RV-4, RV-5, RV-6, RV-7, and RV-I-3 due to the sites' locations within five miles of suitable nesting habitat (i.e., cliffs). Potential indirect impacts could include temporary crushing of suitable foraging habitat, increased sound and vibration levels, and exposure to dust. Indirect impacts could also include the temporary displacement of prey species during reclamation activities. All of these impacts would be temporary and localized, would not kill or injure individual eagles or falcons, and would not substantially disrupt these species' behavior patterns. If conducted during the nesting season, proposed reclamation activities within proximity to active bald eagle and prairie falcon nests could potentially disrupt nesting activity due to disturbance and noise from heavy equipment and human presence associated with reclamation activities. However, disturbance associated with proposed reclamation activities would be temporary in nature and would be substantially similar to that which has and will continue to occur as part of ongoing CRA operations and maintenance activities.

No direct impacts to bald eagle or prairie falcon would occur for the inactive because no nesting habitat is present within the Project sites. However, site conditions may change prior to reclamation activities at Project sites to be reclaimed between 2027 and 2122. Nevertheless, as part of the Project, Metropolitan would implement its Standard Practice of Environmental Assessment to determine site conditions at the time of reclamation and WEAP training to identify current site conditions and educate workers on environmental sensitivities at Project sites to be reclaimed

between 2027 and 2122. Furthermore, Metropolitan's Standard Practices regarding nesting bird surveys would be implemented. In addition to the above listed Standard Practices, implementation of Mitigation Measures BIO-4 (Special Status Wildlife Species Surveys) and BIO-5 (Special Status Wildlife Species Avoidance and Minimization) would be required. These mitigation measures would require identification of bald eagle and prairie falcon individuals that may be present within the Project sites and application of appropriate avoidance and/or mitigation measures prior to reclamation. With the implementation of these measures, impacts to bald eagle and prairie falcon would be reduced to less-than-significant levels because direct impacts would be avoided and indirect impacts within suitable habitat would be limited and not likely to substantially reduce local populations or these species' ability to persist once the Project is complete.

### ***Desert Bighorn Sheep***

Desert bighorn sheep is a CDFW Fully Protected species. Desert bighorn sheep has a high potential to occur at RV-7 at the grounds around Julian Hinds Pumping Plant due to the site's proximity to open, rocky, steep areas with available water and herbaceous forage. Desert bighorn sheep also has a low potential to occur in the vicinity of RV-6 due to the site's proximity to open, rocky, steep areas. Both RV-6 and RV-7 are anticipated to be reclaimed between 2027 and 2122. Direct impacts to desert bighorn sheep are not anticipated because the species is large and highly visible and therefore can be easily avoided by equipment and personnel during Project activities. Potential temporary indirect impacts could include increased sound and vibration levels and exposure to dust during proposed Project reclamation activities. However, as discussed above, disturbance associated with reclamation activities would be temporary in nature and substantially similar to ongoing operational activities in and around the Project sites.

Nevertheless, site conditions may change prior to reclamation activities at Project sites to be reclaimed between 2027 and 2122. As part of the proposed Project, Metropolitan would implement its Standard Practice of Environmental Assessment to determine site conditions at the time of reclamation and WEAP training to identify current site conditions and educate workers on environmental sensitivities. In addition to the above listed Standard Practices, implementation of Mitigation Measure BIO-4 (Special Status Wildlife Species Surveys) and BIO-5 (Special Status Wildlife Species Avoidance and Minimization) would be required to avoid potential impacts to desert bighorn sheep. These mitigation measures would require identification of desert bighorn sheep individuals that may be present in the Project sites and application of appropriate avoidance and/or mitigation measures prior to proposed reclamation activities at Project sites to be reclaimed between 2027 and 2122. With the implementation of these measures, impacts to desert bighorn sheep would be reduced to less-than-significant levels because direct impacts would be avoided and indirect impacts within suitable habitat would be limited and not likely to substantially reduce local populations or their ability to persist once the proposed Project is complete.

### ***Mountain Lion***

Mountain lion is a candidate for threatened or endangered status under CESA. Mountain lion has a moderate potential to occur at all 20 Project sites because all sites are located within open desert habitat within the species' range. While the Project sites are too small to support long-term use by mountain lions, all sites may be subject to transient travel by mountain lions in the regional vicinity.

Direct impacts to mountain lions are not anticipated because the species is large and highly visible and therefore can be easily avoided by equipment and personnel during reclamation activities. Potential indirect impacts could include increased sound and vibration levels and exposure to dust. However, as discussed above, disturbance associated with reclamation activities would be temporary in nature and would be substantially similar to that which has and will continue to occur as part of ongoing CRA operations and maintenance activities. Additionally, the Project sites are surrounded by undeveloped land and open space, providing a multitude of regional movement options within and adjacent to the Project sites. Therefore, reclamation activities at the Project sites would not significantly impact the amount of regional habitat available for mountain lions in the vicinity. While site conditions may change at the Project sites anticipated to be reclaimed between 2027 and 2122, it is unlikely that conditions would change such that they would result in new or additional impacts to mountain lion beyond those analyzed herein. Additionally, implementation of Metropolitan's Standard Practices and Mitigation Measures BIO-4 (Special Status Wildlife Species Surveys) and BIO-5 (Special Status Wildlife Species Avoidance and Minimization) would further reduce potential impacts to mountain lion. Impacts to mountain lion would be less-than-significant because direct impacts would be avoided and indirect impacts within suitable habitat would be limited and not likely to substantially reduce local populations or their ability to persist once the proposed Project is complete.

### ***Burrowing Owl***

Burrowing owl is a CDFW Species of Special Concern and has a low to moderate potential to forage at all 20 Project sites due to the Project sites' proximity to suitable desert scrub habitat. While no burrows with burrowing owl signs were observed within the Project sites, burrows could be created by small mammals and inhabited by burrowing owls in the future. Potential indirect impacts from the Project could include temporary crushing of suitable habitat, burrow destruction, increased sound and vibration levels, and exposure to dust which may also disrupt nesting activity in adjacent suitable nesting habitat. However, as discussed above, disturbance associated with reclamation activities would be temporary in nature and would be substantially similar to ongoing operational activities in and around the Project sites.

Although no suitable burrowing owl burrows were observed within the Project sites, site conditions may change prior to reclamation activities. Given the presence of suitable habitat, direct impacts to burrowing owl within the Project sites may include crushing/killing of individuals with equipment or vehicles. If burrows are present, individuals or eggs could be crushed or entombed in burrows. Therefore, there is a moderate potential for direct impacts to this species at all Project sites if site conditions change prior to implementation of proposed reclamation activities. However, as part of the proposed Project, Metropolitan would implement its Standard Practice of Environmental Assessment to determine site conditions at the time of reclamation and WEAP training to identify current site conditions and educate workers on environmental sensitivities at all Project sites. Additionally, Metropolitan's Standard Practices regarding nesting birds would be implemented. Furthermore, to avoid potentially significant impacts, implementation of Mitigation Measure BIO-4 (Special Status Wildlife Species Surveys) and BIO-5 (Special Status Wildlife Species Avoidance and Minimization) would be required. These mitigation measures would require identification of burrowing owl individuals that may be present within the Project sites and application of appropriate avoidance and/or mitigation measures prior to proposed reclamation. With the implementation of these measures, impacts to burrowing owl would be reduced to less-

than-significant levels because direct impacts would be avoided and indirect impacts within suitable habitat would be limited and not likely to substantially reduce local populations or their ability to persist once the proposed Project is complete.

### ***Special Status Bat Species***

Special status bat species, including Yuma myotis, cave myotis, California leaf-nosed bat, and Townsend's big-eared bat (all CDFW Species of Special Concern) have a moderate potential to forage at SB-1 due to the site's location directly adjacent to suitable roosting habitat (rocky outcrops). SB-1 is anticipated to be reclaimed between 2027 and 2122. During Project activities at SB-1, indirect impacts could include increased sound and vibration levels and exposure to dust. These activities could displace special status bat species, and movement of soil may result in air quality impacts that could affect adjacent individuals. However, disturbance associated with proposed Project activities would be temporary in nature and would be substantially similar to that which has and will continue to occur as part of ongoing CRA operations and maintenance activities.

While no bat roosting habitat was observed within any of the Project sites, site conditions may change to support bat roosting habitat at SB-1 prior to implementation of proposed reclamation activities between 2027 and 2122. In this event, direct impacts to special status bat species may include injury or mortality due to heavy equipment or vehicles. However, as part of the proposed Project, Metropolitan would implement its Standard Practice of Environmental Assessment to determine site conditions at the time of reclamation and WEAP training to identify current site conditions and educate workers on environmental sensitivities at all Project sites. Furthermore, to avoid potential impacts, implementation of Mitigation Measures BIO-4 (Special Status Wildlife Species Surveys) and BIO-5 (Special Status Wildlife Species Avoidance and Minimization) would be required. These mitigation measures would require identification of special status bat species that may be present within the Project sites and application of appropriate avoidance and/or mitigation measures prior to proposed reclamation. With the implementation of these measures, impacts to special status bat species would be reduced to less-than-significant levels because direct impacts would be avoided and indirect impacts within suitable habitat would be limited and not likely to substantially reduce local populations or their ability to persist once the proposed Project is complete.

## **MITIGATION MEASURES**

### ***BIO-1 Special Status Plant Species Surveys***

If the site-specific Environmental Assessment determines special status plant species may occur on site at sites to be reclaimed between 2027 and 2122, surveys for special status plants shall be completed prior to any vegetation removal, grubbing, or other reclamation activity (including staging and mobilization). The surveys shall be seasonally timed to coincide with the target species identified in the Environmental Assessment. All plant surveys shall be conducted by a monitoring biologist no more than two years before initial ground disturbance associated with reclamation construction activities and shall cover the entire area proposed for disturbance (including areas for staging and mobilization). All special status plant species identified on site shall be mapped onto a site-specific aerial photograph and topographic map. Surveys shall be conducted in accordance with the most current protocols established by the CDFW and USFWS.

If federally listed, state listed, or California Rare Plant Rank 1B species are found, avoidance and minimization measures shall be implemented in accordance with Mitigation Measure BIO-2.

***BIO-2 Special Status Plant Species Avoidance and Minimization***

If federally listed, state listed, or California Rare Plant Rank 1B species are found during special status plant surveys conducted pursuant to Mitigation Measure BIO-1, then avoidance measures shall be implemented to avoid impacting these plant species, if feasible. Rare plant occurrences that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits shall be protected at least 30 feet beyond their extent, or other distance as approved by a monitoring biologist, to protect them from harm. If avoidance of state listed or federally listed plant species is not feasible, impacts shall be fully offset through implementation of a restoration plan that results in no net loss in accordance with Mitigation Measure BIO-3.

***BIO-3 Special Status Plant Species Revegetation***

If avoidance of state listed, federally listed, and/or non-listed California Rare Plant Rank 1B species is not feasible, the individuals shall be transplanted, and surrounding topsoil shall be salvaged to be incorporated into the revegetation process for the site. A special status plant restoration plan shall be prepared and implemented that includes the following criteria at minimum:

- The number of specimens affected for each species
- Identification of on-site or off-site preservation location(s)
- Methods for restoration, enhancement, and/or transplanting, including topsoil salvage and planting seeds of the affected species
- A performance standard replacement ratio of 1:1 per impacted specimen to be achieved within three to five years
- Monitoring of on-site and off-site preservation location(s) to verify performance shall occur in conjunction with special status plant growing seasons, and no less than annually until performance standards are achieved

***BIO-4 Special Status Wildlife Species Surveys***

For all Project sites, if the site-specific Environmental Assessment determines suitable habitat may be present within the Project site footprint for a candidate, sensitive, or special-status species identified in local or regional plans, policies, or regulations, Metropolitan shall implement pre-activity wildlife surveys. Pre-activity surveys for special-status species with moderate to high potential to occur shall be conducted where suitable habitat is present not more than 72 hours prior to the start of Project activities. The survey area shall include the proposed Project site and all ingress/egress routes, plus a 100-foot buffer. If Project site habitat is determined to be suitable for desert tortoise, protocol surveys shall be conducted by a monitoring biologist within two years before reclamation at that site. Surveys shall be conducted according to the most recent General Ecology and Survey Protocol for Determining Presence/Absence and Abundance for the Desert Tortoise – Mojave Population (USFWS 2009). If the results of the site-specific Environmental Assessment and pre-activity surveys determine suitable habitat for a candidate, sensitive, or special-status species identified in local or regional plans, policies, or

regulations is present within a 100-foot buffer of the Project sites, implementation of appropriate avoidance measures shall be required in accordance with Mitigation Measure BIO-5.

***BIO-5 Special Status Wildlife Species Avoidance and Minimization***

If the results of the site-specific Environmental Assessment and pre-activity surveys conducted pursuant to Mitigation Measure BIO-4 determine suitable habitat for a candidate, sensitive, or special-status species identified in local or regional plans, policies, or regulations is present within a 100-foot buffer of the Project sites, Metropolitan shall develop and implement appropriate avoidance measures. Avoidance measures may include but are not limited to:

- Installation of Environmentally Sensitive Area/avoidance fencing
  - Flagging or fencing of any special-status species burrows by a monitoring biologist to ensure avoidance during reclamation activities
  - Monitoring by a monitoring biologist during all initial ground disturbing activities. Once initial ground disturbing activities have been completed, the biologist shall conduct daily pre-activity clearance surveys, as necessary
  - If at any time during Project activities, a special-status species enters the Project sites or otherwise may be impacted by the Project, all activities at the site where the find occurred shall cease. At that point, a monitoring biologist shall recommend an appropriate course of action
- b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*
- c. *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**Less Than Significant with Mitigation Incorporated.** No, the proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS and would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means with incorporation of mitigation measures.

The Project Area is located within large desert watersheds and alluvial areas with multiple ephemeral drainages located within or adjacent to the Project sites. These drainages have generally been formed from flashy runoff and rapid flows in response to rare precipitation events in the local area. These drainage systems are highly dynamic over time due to the infrequent nature and intensity of precipitation. Many drainages near the Project sites are part of large complex, braided ephemeral systems. Over time, the boundaries of these systems tend to migrate in response to each precipitation event. Furthermore, many of these systems have been modified by the construction of large “V-dikes” that serve to funnel flows over the CRA. The majority of the ephemeral drainages that cross the CRA are funneled toward drainage crossings that occur

throughout the CRA system. No wetlands or indicators of wetlands were observed within the Project sites during the reconnaissance-level biological surveys.

Potentially jurisdictional waters were identified within SB-I-2, SB-I-3, and RV-I-2 and adjacent to SB-1, SB-2, SB-3, SB-6, SB-7, RV-1, RV-3, RV-4, RV-5, RV-6, and RV-I-3. No other sites were identified as having potentially jurisdictional waters within or adjacent to them at the time of the assessment. In addition, no Project sites were identified to contain state or federally protected wetlands. As noted earlier under *Methodology*, a formal jurisdictional delineation was not conducted, and as such, all features identified as potentially jurisdictional should be delineated to determine their precise boundaries and applicable regulatory authority. Additionally, smaller swale-like potentially jurisdictional features that may be visible from aerial imagery were not mapped because those features cannot be accurately assessed from a desktop analysis and should be verified in the field closer to time of reclamation.

Although the intent is to avoid jurisdictional waters to the extent feasible, potential temporary impacts to jurisdictional waters, if present, would include vehicles and equipment driving and parking, and the foot traffic of crews. Temporary indirect impacts could include runoff of sediment and dust into jurisdictional areas during operation of heavy equipment. However, as part of the proposed reclamation activities, the Project sites would be graded and recontoured to 2H:1V final slopes, with drainage directed inward toward the pit floors to prevent on- or off-site erosion or siltation. Additionally, reclamation would be conducted using applicable stormwater BMPs, such as berms and/or earthen dikes as detailed in the MRP, which would reduce temporary indirect impacts and control erosion. All areas temporarily impacted would also be revegetated, as detailed in the MRP and associated revegetation plan. At certain Project sites, the perimeter topsoil/subsoil storage berms may be left in place post-reclamation for erosion control and allowed to naturally revegetate as part of the reclamation. Ultimately, reclamation of the Project sites would not substantially alter the existing drainage pattern of the sites or adjacent areas in a manner that would result in substantial erosion on- or off-site.

The proposed Project would not permanently impact jurisdictional waters, if present, because no permanent structures, direct removal, or filling is proposed in these areas. Furthermore, when Project activities are complete, more native vegetation is expected to be in place, which would enhance riparian or other sensitive natural communities, if present. Therefore, no permanent impacts to potentially jurisdictional waters would occur.

Project sites SB-1, SB-2, SB-3, SB-6, SB-7, RV-1, RV-3, RV-4, RV-5, RV-6 and RV-I-3 are located adjacent to potentially jurisdictional waters. The extent and severity of the impacts at these sites is currently unknown because the jurisdictional limits as well as applicable regulations may change. Although no wetlands have been identified at any Project sites, site conditions may change prior to reclamation. However, as part of the Project, Metropolitan would implement its Standard Practices of Environmental Assessment to determine site conditions at the time of reclamation and WEAP training to educate workers on environmental sensitivities at all Project sites. In addition, to avoid potential impacts, implementation of Mitigation Measure BIO-6 (Jurisdictional Waters Delineation and Avoidance) would be required. Mitigation Measure BIO-6 would be implemented to reduce potential impacts to less-than-significant levels through identification and avoidance of potentially jurisdictional resources where feasible. With the implementation of this measure, impacts to riparian habitat, other sensitive natural communities, and state or federally protected wetlands would be reduced to less-than-significant levels.

### ***BIO-6 Jurisdictional Waters Delineation and Avoidance***

Prior to reclamation activities at SB-1, SB-2, SB-3, SB-6, SB-7, SB-I-2, SB-I-3, RV-1, RV-3, RV-4, RV-5, RV-6, RV-I-2, and RV-I-3 (as well as any additional sites identified to have potentially jurisdictional waters during the site-specific Environmental Assessment), a formal jurisdictional delineation shall be conducted by a monitoring biologist to determine the extent of the jurisdiction for CDFW, RWQCB, and USACE on or within 100 feet of each Project site and shall be conducted in accordance with the current requirements set forth by each agency. The delineation shall serve as the basis for identifying jurisdictional areas to be avoided during reclamation activities. Jurisdictional areas that are identified shall be flagged or fenced for avoidance to ensure that reclamation activities do not inadvertently impact jurisdictional areas.

- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Less Than Significant Impact.** No, the proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or disrupt native nursery sites. Portions of the Project Area, specifically at SB-4, SB-7, SB-I-1, SB-I-3, RV-1, and RV-I-1, are located within Conservation Planning Linkages, which are habitat connectivity linkages mapped in the California Essential Habitat Connectivity map that represent the best connections between core natural areas to maintain habitat connectivity. These linkage areas occur throughout the Project Area (Spencer et al. 2010). The Project sites and vicinity are expected to support wildlife movement due to their location in undeveloped desert areas and proximity to mountain ranges and desert washes, which are known movement corridors. The Project sites are undeveloped and do not contain structures that would prevent or deter wildlife. However, the Project sites encompass a small percentage of total land within the movement linkages and lack valuable habitat features such as water sources or shelter. The Project sites' contributions to the overall function of the habitat linkages are expected to be minor. Implementation of reclamation activities under the proposed Project (i.e., the removal of deleterious materials and debris, recontouring project site slopes and floors to ensure slopes do not exceed a 2H:1V angle, installation of stormwater BMPs to control erosion, and revegetating reclaimed areas with a native plant hydroseed mix) would restore currently disturbed and unvegetated areas to native habitat areas and would not involve placement of permanent structures. Upon completion of reclamation activities, wildlife would be able to move more freely through the Project sites because the restored habitat would provide cover for foraging, refuge, and movement. Therefore, implementation of the Project would not substantially alter existing wildlife movement patterns, and impacts would be less than significant.

- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**Less Than Significant.** No, the proposed Project would not conflict with any local policies or ordinances protecting biological resources.

The County of Riverside Ordinance No. 559 regulates native trees that occur on parcels or properties greater than 0.5 acre in size in unincorporated areas above an elevation of 5,000 feet above mean sea level. All portions of the Project sites are located below 5,000 feet above mean sea

level, and the proposed Project does not involve tree removal. Therefore, this ordinance does not apply to the proposed Project.

The County of San Bernardino Desert Native Plant Protection ordinance protects certain desert native plants and does not allow removal of the following plants with stems two inches or greater in diameter or six feet or greater in height: smoketree (*Dalea spinosa*), all species of the genus *Prosopis*, all species of the family Agavaceae, creosote rings 10 feet or greater in diameter, and Joshua tree (*Yucca brevifolia*). In addition, any part of any of the following species, whether living or dead, may not be removed: desert ironwood (*Olneya tesota*), all species of the genus *Prosopis*, and all species of the genus *Cercidium*. None of the species protected under the County of San Bernardino Desert Native Plant Protection ordinance were observed within the Project sites, and no trees are proposed for removal during proposed Project activities.

While no current conflict exists with local ordinances, policies may change or protected species could become established in new areas, and reclamation activities at the Project sites to be reclaimed between 2027 and 2122 could conflict with future local policies. However, as part of Metropolitan Standard Practice, an Environmental Assessment would be conducted prior to reclamation at these sites to ensure Project reclamation activities do not conflict with approved local, regional, or state policies related to biological resources. Therefore, impacts associated with reclamation of these sites would be less than significant.

After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, no operational impacts related to local policies and ordinances protecting biological resources would occur.

*f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?*

**Less Than Significant.** No, the proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP. The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) overlies a portion of the Project Area. The overall goal of the CVMSHCP is to maintain and enhance biological diversity and ecosystem processes within the region while allowing for future economic growth. Only RV-I-3 is located within the CVMSHCP. None of the 27 covered species or 27 natural communities protected by the CVMSHCP have potential to occur at RV-I-3, and Metropolitan is not seeking coverage under the CVMSHCP for the proposed Project.

While no current conflict exists with an HCP, policies may change, and reclamation activities at the Project sites to be reclaimed between 2027 and 2122 could be subject to future adopted HCPs, NCCPs, or other approved local, regional, or state HCPs. However, the proposed Project would restore habitat and native plant communities on the Project sites, and chronic disturbance of the sites would cease upon completion of proposed reclamation activities. Additionally, as part of Metropolitan Standard Practice, an Environmental Assessment would be conducted prior to start of work to determine site conditions and ensure compliance with all applicable federal, state, and local laws, policies, and plans. Therefore, proposed Project activities (i.e., reclamation) at these

sites would not conflict with future HCPs, NCCPs, or other approved local, regional, or state HCPs, and impacts would be less than significant.

After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, no operational impacts related to HCPs, NCCPs, or other approved local, regional, or state HCPs would occur.

### 3.5 Cultural Resources

#### CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### CULTURAL RESOURCES OVERVIEW

This section provides an analysis of proposed Project impacts on cultural resources, including historical and archaeological resources as well as human remains, and is based on the Cultural Resource Assessment attached as Appendix E.<sup>14</sup>

#### REGULATORY FRAMEWORK

CEQA requires a Lead Agency determine whether a project may have a significant effect on historical resources (PRC Section 21084.1), archaeological resources, or human remains. A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a Lead Agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]). Resources listed on the National Register of Historic Places (NRHP) are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys. In addition, pursuant to PRC Section 5024.1(c), a resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. 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
4. Has yielded, or may be likely to yield, information important in prehistory or history.

If it can be demonstrated that a project would cause damage to a unique archaeological resource, the CEQA Lead Agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources

<sup>14</sup> The Cultural Resources Technical Report prepared in support of this IS-MND utilized a different site numbering convention than that used herein. To facilitate comparison of the information contained in this report with the information contained in this IS-MND, refer to Appendix B for a comparison matrix of the borrow site numbering convention.

cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

### **METHODOLOGY**

A search of the California Historical Resources Information System (CHRIS) was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies within the Project Area and a 0.25-mile radius surrounding it. The CHRIS records are maintained by nine Information Centers located across California and organized by county. Because portions of the Project Area are located in both Riverside and San Bernardino counties, record searches at two Information Centers were required. On August 24, 2020 and February 23, 2021, staff from the South Central Coastal Information Center (SCCIC) at California State University, Fullerton conducted searches that encompassed the portion of the Project Area located in San Bernardino County. On September 15, 2020, staff from the Eastern Information Center (EIC) located at University of California, Riverside conducted a search that encompassed the portion of the Project Area located in Riverside County. The searches included a review of previous cultural resource studies and recorded resources. In addition, Rincon completed a review of the NRHP, the CRHR, and the Historic Resources Inventory.

The SCCIC and EIC records searches identified a total of nine previously conducted cultural resources studies within a 0.25-mile radius of the Project Area. None of these studies included the Project Area. The cultural resources records search identified nine previously recorded cultural resources within a 0.25-mile radius of the Project Area, including one prehistoric and five historic-period archaeological sites as well as three built-environment historic-period resources. No cultural resources have been previously recorded within the Project Area.

A Sacred Lands File (SLF) search was completed by the Native American Heritage Commission (NAHC) with positive results for the Project Area, and the NAHC recommended contacting the Chemehuevi Indian Tribe for additional details. The SLF results do not provide specific details on the nature or precise location of Sacred Lands or whether they are related to any cultural resources recorded by the CHRIS at the SCCIC and EIC; thus, additional details cannot be provided. As the CEQA Lead Agency, Metropolitan conducted outreach all persons on the NAHC-provided contact list and detailed letters were sent describing the Project with maps, and requested a reply for any questions or concerns.

Metropolitan archaeologist Michelle Morrison, MA, RPA performed a Phase I pedestrian field survey of 18 Project sites (SB-1 and SB-3 through SB-7, SB-I-1 through SB-I-3, RV-1 through RV-7, and RV-I-1 through RV-I-3) in June 2020. Rincon Archaeologist Mark Strother, MA, RPA performed an additional Phase I pedestrian field survey in January 2021 to cover Project boundary additions made to the Project Area after the initial survey. Mr. Strother surveyed 11 Project sites

(SB-2, SB-3, SB-4, SB-5, SB-6, SB-I-2, SB-I-3, RV-2, RV-3, RV-5, and RV-I-1) in their entirety. Collectively, Ms. Morrison's June 2020 survey and Mr. Strother's January 2021 survey covered all of the 20 Project sites in the Project Area.

One newly identified historic-period archeological site, Rincon-S-1, was identified within SB-2. This site is comprised of four remnant features likely associated with the construction and/or maintenance of the CRA. Research completed as part of the Cultural Resources Assessment (Appendix E) concluded the features do not possess significant architectural or historical associations and are not eligible for listing in the NRHP or CRHR. As such, the background research and field survey concluded there are no known prehistoric archaeological resources or built environmental resources within the Project Area.

## **METROPOLITAN STANDARD PRACTICE**

### **Unanticipated Discovery**

In the event unanticipated archaeological resources are discovered during Project reclamation, all work would cease within 50 feet of the discovery to protect the area until a qualified archaeologist can evaluate the discovery and recommend additional measures for the proper handling and treatment.

#### *Discussion. Would the Project:*

- a. *Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

**No Impact.** No, the proposed Project would not cause a substantial adverse change in the significance of a historical resource. No historical resources were identified by the cultural resources record searches of the CHRIS conducted at the EIC and SCCIC. In addition, the intensive pedestrian archaeological surveys of the Project Area were negative for historical resources. Although the Project Area is almost entirely adjacent to the CRA (historical resource CA-RIV-6726H and CA-SBR-10521), the resource does not extend onto any of the Project sites. The integrity and significance of the CRA as an eligible historical resource would remain unchanged by the Project. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations. Therefore, the proposed Project would not cause a substantial adverse change in the significance of CA-RIV-6726H/CA-SBR-10521 or any other historical resources, and no impact would occur.

- b. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Less Than Significant.** No, the proposed Project would not cause a substantial adverse change in the significance of an archaeological resource. The cultural resources record searches and pedestrian surveys did not identify any prehistoric archaeological resources within the Project Area. One historic-period archaeological site, Rincon-S-1, was identified within SB-2 during the survey. This site consists of four remnant features likely associated with the construction of the CRA. However, research completed under the Cultural Resources Assessment (Appendix E) concluded the features do not possess significant architectural or historical associations and are not

eligible for listing in the NRHP or the CRHR. As such, demolition and removal of these features would not result in a substantial adverse impact under CEQA.

The Project Area is highly disturbed due to the immense scale of excavation and construction associated with the original installation of the CRA in the 1930s, the parallel expansion of the CRA in the 1950s, the continuous use of the Project sites for operations and maintenance activities, and access road maintenance and grading by Metropolitan that has occurred for over 75 years. The possibility that previously undiscovered buried archaeological resources could be encountered during ground-disturbing activities is low. Furthermore, Metropolitan Standard Practices require that, in the event unanticipated archaeological resources are discovered during Project reclamation, all work would cease within 50 feet of the discovery to protect the area until a qualified archaeologist can evaluate the discovery and recommend additional measures for proper handling and treatment. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations. Therefore, impacts to archaeological resources would be less than significant.

*c. Disturb any human remains, including those interred outside of formal cemeteries?*

**Less Than Significant.** No, the proposed Project would not disturb any human remains, including those interred outside of dedicated cemeteries. Background archival research and the intensive pedestrian field survey failed to find any potential for human remains (e.g., the existence of formal cemeteries). As discussed above, the Project Area is highly disturbed. Although it is highly unlikely, there is the possibility that previously undiscovered remains could be uncovered during ground-disturbing activities. Should human remains be encountered, Metropolitan would comply with the State of California's Health and Safety Code Section 7050.5, which states that no further disturbance would occur until the appropriate county coroner has made a determination of origin and disposition of the remains pursuant to PRC Section 5097.98. Adherence to State of California's Health and Safety Code Section 7050.5 would result in the proper handling and treatment of unexpected human remains. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations. Therefore, impacts to human remains would be less than significant.

### 3.6 Energy

Energy		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:					
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### **OVERVIEW OF ENERGY CONSUMPTION**

As a state, California is one of the lowest per capita energy users in the United States, ranked 48<sup>th</sup> in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes, in addition to being consumed by alternative fuel vehicles. Most of California’s electricity is generated in-state with approximately 28 percent imported from the Northwest and Southwest in 2019; however, the state relies on out-of-state natural gas imports for nearly 90 percent of its supply (California Energy Commission [CEC] 2021a and 2021b).

Approximately 32 percent of California’s electricity supply comes from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill (SB) 100 accelerated the state’s Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes. Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 15.4 billion gallons sold in 2019 (CEC 2021c). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019 (CEC 2021c).

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the Project’s energy consumption are discussed in detail in Section 3.3 (Air Quality) and Section 3.8 (Greenhouse Gas Emissions), respectively.

#### **METHODOLOGY**

Energy consumption associated with proposed reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) and restoration monitoring activities (i.e., periodic site visits by a monitoring biologist) was estimated using Project-specific details and fuel consumption factors published by the USEPA and United States Department of Transportation.

The Project’s energy consumption for the proposed reclamation construction activities and the proposed restoration monitoring activities was estimated separately. All proposed reclamation and restoration monitoring activities were assumed to use equipment and vehicles that consume

gasoline or diesel fuel with present-day fuel efficiencies. This approach is considered conservative because activities occurring in future years would be expected to consume fewer nonrenewable energy resources due to increasingly stringent fuel efficiency standards, such as future iterations of the federal construction equipment emissions standards, Corporate Average Fuel Economy standards, and cleaner mobile equipment engine models that would phase in over time. In addition, some or all passenger vehicle trips for reclamation of individual Project sites may be made in hybrid or all-electric vehicles, depending on the availability and use of such vehicles in future years

Energy consumption estimated for the proposed reclamation construction activities include energy consumed by heavy equipment used on site and energy consumed by vehicle trips, such as worker, water truck, and dump truck trips. The schedule, list of heavy equipment, and number of vehicle trips used in CalEEMod were based on information contained in Section 1 (Project Description). As stated therein, it was assumed each Project site would require one month to reclaim with workers on site four days each week. Assumptions for the type and number of equipment and support vehicles to be used during reclamation of each Project site is listed in Table 3.6-1. It was also assumed three Metropolitan employees would be on site during reclamation activities and would travel from the Iron Mountain Pumping Plant to each Project site, which is an average distance of 26.4 miles, as shown in Table 3.6-2. In addition, it was assumed one water truck and one dump truck would travel to and from the Project site each day with a one-way trip distance of approximately 6.9 miles for the water truck and a one-way trip distance of approximately 20 miles for the dump truck, based on CalEEMod default trip distances for the MDAQMD region.

**Table 3.6-1. Representative Off-Road Vehicle List – Reclamation Construction**

<b>Equipment</b>	<b>Make and Model</b>	<b>Quantity</b>	<b>Average Horsepower</b>	<b>Average Hours/Day</b>
Water Truck	Freightliner – 4,000-gallon	1	300	4
Dozer	Caterpillar D-6	1	215	8
Excavator	Caterpillar 330	1	273	8
Loaders	Caterpillar 966	1	276	8
Grader	Caterpillar 140M, 160M, or 14M Motor	1	187	4
Dump Truck	Freightliner 114SD	1	16	4
Hydroseed Spreader	Freightliner – 1,000-gallon	1	172	8

**Table 3.6-2. Driving Distance Between Iron Mountain Pumping Plant and Project Sites**

Project Site	Driving Distance from Iron Mountain Pumping Plant (miles)	Total Vehicle Miles Traveled for Three Years of Monitoring (12 Visits per Project Site)
RV-1	15.0	360
RV-2	6.3	151
RV-3	16.7	401
RV-4	27.1	650
RV-5	49.7	1193
RV-6	45.8	1099
RV-7	57.0	1368
RV-I-1	10.9	262
RV-I-2	14.8	355
RV-I-3	65.1	1562
SB-1	77.6	1862
SB-2	48.1	1154
SB-3	30.1	722
SB-4	18.3	439
SB-5	5.1	122
SB-6	2.6	62
SB-7	1.4	34
SB-I-1	16.6	398
SB-I-2	5.3	127
SB-I-3	14.8	355
<b>Average Driving Distance</b>	<b>26.4</b>	<b>-</b>
<b>Total Vehicle Miles Traveled</b>	<b>-</b>	<b>12,679</b>

Energy consumption estimates for the proposed restoration monitoring activities include energy consumed by periodic vehicle trips by the biologist to each Project site. As stated in Section 1 (Project Description), it was assumed a monitoring biologist would visit each Project site four times per year for up to three years. The total vehicle miles traveled by the biologist to complete quarterly site visits to each Project site for a period of three years is summarized in Table 3.6-2. It was assumed staff vehicle trips would be made in a light-duty truck with a gross vehicle weight rating of less than 6,000 pounds and an equivalent test weight between 3,751 and 5,750 pounds (e.g., a small pickup truck similar to a Toyota Tacoma).

*Discussion. Would the Project:*

- a. *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?*

**No Impact.** No, the proposed Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) or restoration monitoring activities (i.e., periodic site visits by a monitoring biologist).

Energy use associated with the proposed Project would be primarily in the form of fuel consumption to operate heavy equipment, worker vehicles, water trucks, and dump trucks during reclamation construction activities and staff vehicles during restoration monitoring activities. Table 3.6-3 summarizes the anticipated energy consumption from proposed reclamation construction and restoration monitoring activities. As shown therein, the proposed Project would consume a total of approximately 5,495 gallons of gasoline fuel and approximately 51,765 gallons of diesel fuel for reclamation of all 20 sites. This equates to an average of approximately 275 gallons of gasoline fuel and approximately 2,588 gallons of diesel fuel for each Project site, which would be consumed during the one-month reclamation construction period and the 12 quarterly site visits for restoration monitoring over the three-year monitoring period. These estimates of fuel consumption are very conservative given that 1) some or all passenger vehicle trips for reclamation of individual Project sites may be made in hybrid or all-electric vehicles, depending on the availability and use of such vehicles in future years, and 2) increasingly stringent fuel efficiency standards, such as future iterations of the federal construction equipment emissions standards, Corporate Average Fuel Economy standards, and cleaner mobile equipment engine models would phase in over time.

**Table 3.6-3. Total Estimated Fuel Consumption for Reclamation of All Project Sites (gallons)**

	Gasoline	Diesel
Reclamation Construction Activities - Heavy Equipment and Water Truck and Dump Truck Trips	-	51,765
Reclamation Construction Activities - Worker Vehicle Trips <sup>1</sup>	4,786	-
Restoration Monitoring Activities – Biologist Vehicle Trips <sup>1,2</sup>	709	-
<b>Total Fuel Consumption for Reclamation of All Project Sites</b>	<b>5,495</b>	<b>51,765</b>

<sup>1</sup> Conservatively assumes all passenger vehicle trips are made in gasoline-powered vehicles. However, some or all passenger vehicle trips for reclamation of individual Project sites may be made in hybrid or all-electric vehicles, depending on the availability and use of such vehicles in future years.

<sup>2</sup> Conservatively assumes each reclaimed Project site is monitored for three years.

Source: Appendix F

Energy use during proposed reclamation construction and restoration monitoring activities would be temporary in nature and would comply with the provisions of 13 California Code of Regulations Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, which would minimize unnecessary fuel consumption. Heavy equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard (40 Code of Federal Regulations Parts 1039, 1065, and 1068), which would minimize inefficient fuel consumption. Furthermore, in the interest of cost efficiency, contractors and Metropolitan staff would not utilize fuel in a manner that is wasteful or unnecessary. Vehicles used by workers and staff during proposed reclamation construction and restoration monitoring activities would be subject to increasingly stringent federal and state fuel efficiency standards, which would minimize the potential for inefficient fuel usage. During restoration monitoring activities, the Project sites would only be visited on a periodic basis, as needed, to achieve restoration success. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to

energy consumption. As a result, the proposed Project would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and no impact would occur.

*b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

**No Impact.** No, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. None of the energy efficiency and conservation measures outlined in Metropolitan’s Climate Action Plan (CAP) are applicable to the proposed Project (Metropolitan 2022a). In addition, Metropolitan is not subject to the *County of Riverside Climate Action Plan Update* (2019) or the *County of San Bernardino Greenhouse Gas Emissions Reduction Plan* (2011), and the entire Project Area is within Metropolitan fee property. Indirectly, on-road vehicles used during proposed reclamation construction and restoration monitoring activities would be required to meet the ongoing federal and state fuel efficiency requirements. Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and no impact would occur.

### 3.7 Geology and Soils

#### GEOLOGY AND SOILS

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic groundshaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on geologic units or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2010), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

- a. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
  - i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

**Less than Significant Impact.** No, the proposed Project would not significantly cause a substantial adverse impact, either directly or indirectly, involving the rupture of an earthquake fault mapped as part of an Alquist-Priolo Earthquake Fault Zone (APEFZ). Per maps published by the Department of Conservation (California Department of Conservation 2021a) as well as maps within the current San Bernardino and Riverside County General Plans (County of San Bernardino 2020b; County of Riverside 2018), none of the Project sites are within or in the immediate vicinity of a mapped APEFZ. Furthermore, based on the California Governor’s Office of Emergency Services (2021) hazards mapping tool, areas of high earthquake risk were not identified in the vicinity of the Project sites. The nearest mapped APEFZ earthquake fault to the Project sites is the

Hidden Spring Fault, located about seven miles southwest of RV-I-3. The California Geological Survey Fault Evaluation Report FER-252 (Bryant 2012) identifies the Hidden Spring Fault as potentially active, and it is included within an APEFZ map prepared in 1974. Past seismic events have had magnitudes ranging from M1 to M3.9 (Bryant 2012). According to the California Department of Conservation (2021a) Fault Activity Map, the Hidden Spring Fault is mapped as exhibiting displacement over the past 700,000 years. However, because the Hidden Spring Fault is located approximately seven miles away from RV-I-3 and the reported seismic events have been of low magnitudes, the potential for a substantial adverse ground rupture to occur at the Project sites in connection with this fault is considered low. Additionally, the Project sites are not currently occupied by people, and no permanent or temporary structures that would be occupied by people would be constructed and/or operated as part of the proposed Project. Therefore, the Project would not directly or indirectly cause adverse effects, including the risk of loss, injury or death, as a result of fault rupture and would therefore have a less-than-significant impact.

ii) Strong seismic groundshaking?

**Less than Significant Impact.** No, the Project would not cause a substantial adverse impact, either directly or indirectly, from strong seismic ground shaking. Proposed Project reclamation activities would involve recontouring the sites to ensure no slopes exceed a 2H:1V performance standard unless Metropolitan completes a site-specific geologic and engineering analysis demonstrating that proposed final reclaimed slopes maintain a minimum slope stability factor of safety, thereby minimizing the potential for slope instability. This slope design would conform to the prescriptive performance standard for slope stability, pursuant to Section 3704(d) of SMARA, which is considered to reflect an appropriate factor of safety under static and pseudo-static (seismic) conditions. Final reclaimed slopes would be suitable for the proposed end use of the Project sites as revegetated open space. As discussed under item (a)(i), the only Project site that is located in the vicinity of a mapped APEFZ earthquake fault (Hidden Spring Fault) is RV-I-3, and the presence of this fault would not result in significant potential direct or indirect risks, such as loss, injury or death, due to strong seismic ground shaking because the Project sites are not currently occupied by people, and no permanent or temporary structures that would be occupied by people would be constructed and/or operated as part of the proposed Project. Therefore, due to the location of the nearest faults in relation to the Project sites, the required slope design under SMARA, and lack of structures, impacts related to strong seismic ground shaking resulting in a risk of loss, injury, or death would be less than significant.

iii) *Seismic-related ground failure, including liquefaction?*

**Less than Significant Impact.** No, the Project would not cause a substantial adverse impact, directly or indirectly, from seismic-related ground failure, including liquefaction. The types of ground failure associated with a seismic event can include lateral spreads and liquefaction as well as landslides. Soil liquefaction is the process in which saturated soil experiences a temporary loss of strength due to the buildup of excess pore water pressure resulting from earthquake ground motions. The soils at the Project sites are generally well-graded Quaternary alluvial deposits that include a wide range of grain sizes, ranging from clay to larger boulders. As discussed in MRP Section 1.3 (Appendix A), the final pit floor elevation for the individual Project sites would be above the groundwater table; thus, the material would not be subject to saturation. Because the Project slopes to be reclaimed would not be saturated by groundwater and the soil characteristics are not conducive to shear strength loss by shaking, liquefaction potential associated with the

Project would not be a safety risk. Furthermore, based on the California Office of Emergency Services (2021) hazards mapping tool, areas of high earthquake risk were not identified in the vicinity of the Project sites.

As the Project sites undergo proposed reclamation, on-site activities would involve removing deleterious materials, grading and final slope contouring, maintaining stormwater BMPs, revegetating by hydroseeding, and monitoring. Moreover, the Project sites are not currently occupied by people, and no permanent or temporary structures that would be occupied by people would be constructed and/or operated during proposed reclamation activities or following completion of reclamation. Accordingly, there would be no significant risk of loss, injury or death from ground failure, and impacts would be less than significant.

iv) *Landslides?*

**No Impact.** No, the Project would not directly or indirectly cause a potential substantial adverse impact involving landslides. Landslides represent the mass movement of rock, soil, and earthen debris down a slope. Triggering mechanisms for landslides include undercutting of slopes by natural processes, such as streams, rivers, or differential weathering (such as the freeze/thaw cycle), human activities such as excavation, and seismic shaking or other intense vibration. In addition, historical dormant landslides may be reactivated by these triggering mechanisms. According to the California Department of Conservation (2021b) landslide inventory database, there are no active or dormant landslides within or near the Project sites. Moreover, the Project would involve recontouring the Project sites to ensure no slopes exceed a 2H:1V performance standard unless Metropolitan completes a site-specific geologic and engineering analysis demonstrating that proposed final reclaimed slopes maintain a minimum slope stability factor of safety, which would minimize the potential for slope instability.

As the Project Area is reclaimed, on-site activities would involve removing deleterious materials, grading and final slope contouring, maintaining stormwater BMPs for erosion control, revegetating by hydroseeding, and monitoring. Additionally, the Project sites are not currently occupied by people, and no permanent or temporary structures that would be occupied by people would be constructed and/or operated as part of the proposed Project. Therefore, the Project would not be susceptible to landslide formation during a seismic event, and there would be no significant risk of loss, injury or death related to landslides.

b. *Result in substantial soil erosion or the loss of topsoil?*

**Less than Significant Impact.** No, the Project would not result in substantial soil erosion or the loss of topsoil. The Project would involve removing deleterious materials, grading and final slope contouring, revegetating by hydroseeding, and monitoring of the Project sites. Topsoil and subsoil would be preserved as feasible in perimeter berms prior to implementation of the Project, and the Project would not remove or otherwise result in a substantial loss of topsoil. Rather, as part of the Project, the topsoil and subsoil recovered and stored in berms during previous mining would be pushed back onto the adjoining final slope wall to support revegetation. Additionally, through the use of stabilization measures and revegetation during reclamation, substantial erosion due to wind and/or storm events would not occur. Thus, no topsoil or subsoil loss would result.

Various stormwater BMPs for sediment entrainment and erosion control would be implemented during Project activities. Specific BMPs may include construction/maintenance of a perimeter berm along certain boundary segments at each Project site, grading to direct stormwater away from

low-lying areas where off-site discharge could occur, and installation/maintenance of silt fencing and/or waddles as warranted. As a result, with implementation of site-specific BMPs, impacts related to soil erosion and loss of topsoil would be less than significant.

- c. Be located on geologic units or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

**Less than Significant Impact.** No, the Project would not be located on or result in unstable geologic deposits or soils such that on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would potentially occur. The Project sites are located principally on alluvial basin fill deposits with a few areas containing intermixed eolian sands. The Natural Resources Conservation Service maps for the Project sites indicate soils in the area are generally gravelly sands and sandy loams with some clayey and silty deposits (United States Department of Agriculture 2021). The soil types mapped are typically described as well drained with relatively low water capacities. These properties are consistent with relatively stable soil conditions because these soils tend to be non-expansive and retain minimal moisture (University of Wisconsin-Madison 2020). Additionally, in portions of SB-1 and SB-I-3, the material consists of weakly indurated crystalline rock. During inspection of the Project sites, these geologic rock types were observed by geologists and engineers to exhibit stable surface features in the exposed pit walls.

The California Department of Conservation (2021b) landslide inventory database does not list active or dormant landslides within the Project sites. Therefore, there are no known landslides at the Project sites that could be reactivated as a result of Project implementation. Furthermore, based on the California Department of Conservation's (2021b) landslide susceptibility map, the Project sites are located in areas indicative of low to moderate deep seated landslide susceptibility. Project reclamation activities would further increase stabilization of the Project site slopes through final contouring and revegetation; therefore, the Project would not have an adverse effect on existing or future landslide susceptibility.

As discussed under item (a)(iii), there is minimal potential for lateral spreading, subsidence, collapse, or liquefaction in the Project Area. In addition, because the Project entails reclamation of existing borrow sites, no adverse ground conditions would be created that would contribute to these types of ground failures. Moreover, there are no identified liquefaction zones mapped at or near the Project sites (California Department of Conservation 2021c). Given that the Project would not be situated in areas known to have unstable ground conditions and would not otherwise create such conditions, impacts related to unstable geologic units and soil would be less than significant.

- d. Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2010), creating substantial direct or indirect risks to life or property?*

**No Impact.** No, the Project would not be located on expansive soil as defined in Section 1803.5.3 of the California Building Code (2010), creating substantial direct or indirect risks to life or property. According to Section 1803.5.3 of the California Building Code, soils are considered expansive if exhibiting the following characteristics:

1. Plasticity index (PI) of 15 or greater;
2. More than 10 percent of the soil particles pass a No. 200 sieve (75 micrometers);

3. More than 10 percent of the soil particles are less than 5 micrometers in size; and
4. Expansion index greater than 20.

According to the Swelling Clays Map of the Coterminous United States (Olive, et al. 1989), soils in San Bernardino and Riverside counties contain little to no swelling clay. In addition, the Project sites are not currently occupied by people, and no permanent or temporary structures that would be occupied by people would be constructed and/or operated as part of the proposed Project. Therefore, no impact related to expansive soils would occur.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**No Impact.** No, the Project does not require the use or installation of septic tanks or alternative wastewater disposal systems. Project reclamation activities would involve removing deleterious materials and debris, recontouring Project site slopes and floors to ensure slopes do not exceed a 2H:1V angle, installing stormwater BMPs for erosion control, and revegetating reclaimed areas with a native plant hydroseed mix. These activities would be temporary, lasting only approximately one month at each Project site. Portable toilet systems for staff would continue to be provided on site by a vendor approved by Metropolitan, and no permanent septic or wastewater disposal systems would be installed. Therefore, the Project would have no impact related to septic tanks and alternative wastewater disposal systems.

- f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**No Impact.** No, the Project would not directly or indirectly destroy a unique paleontological resource or unique geologic features. Project reclamation activities would involve removing deleterious materials and debris, recontouring Project site slopes and floors to ensure slopes do not exceed a 2H:1V angle, installing stormwater BMPs for erosion control, and revegetating reclaimed areas with a native plant hydroseed mix. Project reclamation activities would not involve excavation into previously undisturbed soils. (See Section 3.5 [Cultural Resources] for additional detail.) Therefore, because no additional excavation would be required during reclamation, no impact to paleontological resources would occur.

### 3.8 Greenhouse Gas Emissions

#### GREENHOUSE GAS EMISSIONS

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### OVERVIEW OF CLIMATE CHANGE AND GREENHOUSE GASES

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the “greenhouse effect,” a natural occurrence that takes place in Earth’s atmosphere and helps regulate the temperature of the planet. GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials. The global warming potential of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as “carbon dioxide equivalent” (CO<sub>2</sub>e), which is the amount of GHG emitted multiplied by its global warming potential. Carbon dioxide has a 100-year global warming potential of one. By contrast, methane has a global warming potential of 28, meaning its global warming effect is 28 times greater than CO<sub>2</sub> on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2014).<sup>15</sup>

Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since the late 1700s, estimated concentrations of CO<sub>2</sub>, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021h). Emissions resulting from human activities are thereby contributing to an average increase in Earth’s temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

#### REGULATORY FRAMEWORK

In response to climate change, California implemented AB 32, the “California Global Warming Solutions Act of 2006.” AB 32 required the reduction of statewide GHG emissions to 1990

<sup>15</sup> The IPCC’s (2014) *Fifth Assessment Report* determined that methane has a GWP of 28. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the IPCC’s (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (accelerated the Renewables Portfolio Standard to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045). As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO<sub>2</sub>e by 2030 and two MT of CO<sub>2</sub>e by 2050 (CARB 2017).

In May 2022, Metropolitan adopted a CAP and certified the associated Program EIR to analyze and mitigate GHG emissions associated with its activities. This plan meets the requirements of CEQA Guidelines Section 15183.5(b)(1) for a qualified GHG emissions reduction plan (Metropolitan 2022a).

## **METHODOLOGY**

Similar to the air pollutant emissions modeling, GHG emissions associated with proposed reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) and restoration monitoring activities (i.e., periodic site visits by a monitoring biologist) were estimated using CalEEMod version 2020.4.0. CalEEMod uses Project-specific information, including the Project's land uses and location, to estimate a Project's emissions (Refer to Appendix D for the air quality and greenhouse gas emissions modeling). The Project's emissions were estimated separately for the proposed reclamation construction activities and the proposed restoration monitoring activities because these activities would not occur simultaneously and would involve substantially different emissions characteristics (e.g., emission sources, frequency and duration of emissions, temporary versus periodically recurring).

### ***Reclamation Construction Activities***

As discussed in Section 3.3 (Air Quality), proposed reclamation construction activities were modeled to occur consecutively in year 2022. This approach is considered conservative because activities occurring in future years would be expected to generate fewer emissions due to increasingly stringent fuel efficiency standards, such as future iterations of the federal construction equipment emissions standards, Corporate Average Fuel Economy standards, and cleaner mobile equipment engine models that would phase in over time.

To provide a conservative estimate of Project impacts, GHG emissions generated by reclamation construction activities for the largest individual Project site (RV-1) were modeled and compared to the most stringent GHG threshold recommended by SCAQMD and MDAQMD. Only one Project site is anticipated to be reclaimed at a time with up to 12 sites reclaimed in any given year (reclamation activities would require one month at each Project site). To provide flexibility,

emissions generated by reclamation construction activities at RV-1 were multiplied to determine the maximum number of Project sites that could undergo reclamation construction activities in the same year without exceeding the most stringent GHG emission threshold.<sup>16</sup>

Emissions modeled for the proposed reclamation construction activities at RV-1 include emissions generated by heavy equipment used on site and emissions generated by vehicle trips, such as worker, water truck, and dump truck trips. The schedule, list of heavy equipment, and number of vehicle trips used in CalEEMod were based on information contained in Section 1 (Project Description). As stated therein, it was assumed each Project site would require one month to reclaim with workers on site four days each week.<sup>17</sup> Assumptions for the type and number of equipment and support vehicles to be used during reclamation of each Project site is listed in Table 3.8-1. It was also assumed three Metropolitan employees would be on site during reclamation construction activities and would travel from the Iron Mountain Pumping Plant to the Project site (a one-way trip distance of approximately 15 miles for RV-1). In addition, it was assumed one water truck and one dump truck would travel to and from the Project site each day with a one-way trip distance of approximately 6.9 miles for the water truck and a one-way trip distance of approximately 20 miles for the dump truck, based on CalEEMod default trip distances for the MDAQMD region.

**Table 3.8-1. Representative Off-Road Vehicle List – Reclamation Construction Activities**

<b>Equipment</b>	<b>Make and Model</b>	<b>Quantity</b>	<b>Average Horsepower</b>	<b>Average Hours/Day</b>
Water Truck	Freightliner – 4,000-gallon	1	300	4
Dozer	Caterpillar D-6	1	215	8
Excavator	Caterpillar 330	1	273	8
Loaders	Caterpillar 966	1	276	8
Grader	Caterpillar 140M, 160M, or 14M Motor	1	187	4
Dump Truck	Freightliner 114SD	1	16	4
Hydroseed Spreader	Freightliner – 1,000-gallon	1	172	8

***Restoration Monitoring Activities***

Restoration monitoring activities would occur following the completion of reclamation construction activities at each Project site. Proposed restoration monitoring activities were modeled to occur in year 2022, which is a conservative approach as explained above in the prior subsection. To provide a conservative estimate of Project impacts, GHG emissions generated by restoration monitoring activities at the furthest individual Project site from the Iron Mountain Pumping Plant (SB-1) were modeled and compared to the most stringent GHG emission threshold recommended by SCAQMD and MDAQMD.

<sup>16</sup> The evaluation of GHG emissions from reclamation construction activities occurring at all 20 Project sites in the same year is very conservative given that 14 Project sites are estimated to be reclaimed between 2027 and 2122, as described in Section 1.1 (Introduction).

<sup>17</sup> CalEEMod does not include an option for a four-day work week; therefore, the modeling conservatively assumes a five-day work week.

Modeling for the proposed restoration monitoring activities at SB-1 includes emissions generated by periodic vehicle trips by the biologist to each Project site. As stated in Section 1 (Project Description), it was assumed a monitoring biologist would visit each Project site four times per year for up to three years. To provide a conservative estimate of Project impacts, it was assumed the one-way trip distance for each biologist visit would be approximately 77.6 miles, which is the distance between the Iron Mountain Pumping Plant and the furthest Project site (SB-1). It was also assumed staff vehicle trips would be made in a light-duty truck with a gross vehicle weight rating of less than 6,000 pounds and an equivalent test weight between 3,751 and 5,750 pounds (e.g., a small pickup truck similar to a Toyota Tacoma).

Only one Project site is anticipated to be reclaimed at a time. However, to provide flexibility, emissions generated by restoration monitoring activities at SB-1 were multiplied to determine the maximum number of Project sites that could undergo restoration monitoring activities in the same year without exceeding the most stringent GHG emission threshold.<sup>18</sup>

### **GHG EMISSION THRESHOLDS**

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

To evaluate whether a project may generate a quantity of GHG emissions with the potential to have a significant impact on the environment, local air districts developed a number of bright-line significance thresholds. Bright-line significance thresholds are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. If project emissions are equal to or below the significance threshold, with or without mitigation, the project's GHG emissions would be less than significant.

As mentioned in the Regulatory Framework section above, in May 2022, Metropolitan adopted a CAP and certified an associated Program EIR to analyze and mitigate GHG emissions associated with its activities. However, the CAP was not yet completed at the time this Project's GHG emissions analysis was conducted. Therefore, this Project continues the practice of referring to guidance from other agencies, namely local air districts, when evaluating the significance of GHG emissions. Because proposed reclamation activities could occur over such a broad timeframe and the exact date for reclamation is not known, GHG emission calculations have been conservatively estimated for analysis purposes; however, should reclamation occur between 2022 and 2122, the actual Project-related emissions associated with this activity would be quantified and reported in the CAP annual progress report.

As summarized in Table 3.3-1 in Section 3.3 (Air Quality), the Project sites are located in both the MDAQMD and SCAQMD jurisdictional boundaries. SCAQMD considered a tiered approach to determine the significance of projects based on guidance provided by the

---

<sup>18</sup> The evaluation of GHG emissions from restoration monitoring activities occurring at all 20 Project sites in the same year is very conservative given that 14 Project sites are estimated to be reclaimed between 2027 and 2122, as described in Section 1.1 (Introduction).

SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010. The draft tiered approach is outlined in meeting minutes dated September 29, 2010 (SCAQMD 2010):

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Section 15064(h)(3), 15125(d) or 15152(a). Under this tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 10,000 MT of CO<sub>2</sub>e per year for industrial projects where SCAQMD is the CEQA Lead Agency and 3,000 MT of CO<sub>2</sub>e per year for non-industrial projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO<sub>2</sub>e per person per year for land use projects.

The Project would not be statutory or categorically exempt; therefore, Tier 1 would not apply. Metropolitan has adopted a local, qualified GHG reduction plan; however, the GHG reduction plan was not adopted at the time of this Project analysis; thus, Tier 2 would not apply. Tier 4 would also not apply because the Project would not generate a service population (defined as residents or employees). Accordingly, the Tier 3 threshold is considered by Metropolitan to be the most appropriate threshold to determine the significance of GHG emission impacts for the Project pursuant to CEQA Guidelines Section 15064. The threshold of 3,000 MT of CO<sub>2</sub>e per year is also consistent with the thresholds adopted by the Counties of Riverside and San Bernardino for determining whether a project is a "small project" deemed to have a less-than-significant individual and cumulative impact for GHG emissions (County of San Bernardino 2011; County of Riverside 2019). In addition, the threshold of 3,000 MT of CO<sub>2</sub>e per year is more stringent than the MDAQMD threshold of 100,000 tons (or 90,718 MT) of CO<sub>2</sub>e per year (MDAQMD 2016) and therefore provides a more conservative evaluation of Project impacts.

*Discussion. Would the Project:*

- a. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

**Less than Significant Impact.** No, the proposed Project would not directly or indirectly generate GHG emissions that may have a significant impact on the environment.

***Reclamation Construction Activities***

Proposed Project reclamation construction activities would involve removing deleterious materials and debris, recontouring Project site slopes and floors, installing stormwater BMPs for erosion

control, and revegetating reclaimed areas with a native plant hydroseed mix. Proposed reclamation construction activities would generate GHG emissions through the use of heavy equipment and vehicle trips by workers and contractors. GHG emissions modeling assumptions are outlined above under *Methodology*. Table 3.8-2 summarizes annual GHG emissions generated by proposed construction reclamation activities at the largest Project site (RV-1). As shown therein, reclamation construction activities at RV-1 would generate approximately 50 MT of CO<sub>2</sub>e over a 30-day period, which would not exceed the threshold of 3,000 MT of CO<sub>2</sub>e per year. Reclamation construction activities at the remaining Project sites would generate similar or fewer GHG emissions because they are smaller in size than RV-1; therefore, GHG emissions generated at these Project sites would also not exceed the significance threshold. Furthermore, conservatively assuming that reclamation construction activities at each Project site would generate the same level of GHG emissions as those at RV-1, all 20 Project sites could undergo reclamation construction activities in the same year, and annual GHG emissions still would not exceed the GHG emission significance threshold of 3,000 MT of CO<sub>2</sub>e per year (50 MT x 20 Project sites = 1,000 MT of CO<sub>2</sub>e per year).<sup>19</sup> As a result, proposed reclamation construction activities would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

**Table 3.8-2. Representative Greenhouse Gas Emissions – Proposed Reclamation Construction Activities at RV-1 (Largest Project Site)**

	Annual GHG Emissions (MT of CO <sub>2</sub> e per year)
RV-1	50
<b>GHG Emissions Significance Threshold<sup>1</sup></b>	<b>3,000</b>
<i>Significant (Exceeds Thresholds)?</i>	NO

Source: Appendix D

Note: MT of CO<sub>2</sub>e (metric ton of carbon dioxide equivalent), GHG (greenhouse gas), SCAQMD (South Coast Air Quality Management District).

<sup>1</sup> Based on SCAQMD’s GHG working group threshold for “non-industrial” projects (2010), the threshold set forth in the *County of Riverside Climate Action Plan Update* (2019), and the threshold set forth in the *County of San Bernardino Greenhouse Gas Reduction Plan* (2011).

### ***Restoration Monitoring Activities***

Proposed restoration monitoring activities involve quarterly monitoring for a period of three years at each Project site. Restoration monitoring would generate GHG emissions associated with vehicle trips for periodic site visits. GHG emissions modeling assumptions are outlined above under *Methodology*. Table 3.8-3 summarizes annual GHG emissions generated by restoration monitoring activities for the individual Project site located the furthest driving distance from Iron Mountain Pumping Plant (i.e., SB-1) because this is the site for which restoration monitoring activities would generate the highest GHG emissions. As shown therein, restoration monitoring activities at SB-1 would generate approximately 13 MT of CO<sub>2</sub>e per year for the three-year monitoring period, which would not exceed the threshold of 3,000 MT of CO<sub>2</sub>e per year. Restoration monitoring activities at the remaining Project sites would generate similar or fewer GHG emissions because they would be closer in distance to Iron Mountain Pumping Plant;

<sup>19</sup> The evaluation of GHG emissions from reclamation construction activities occurring at all 20 Project sites in the same year is very conservative given 14 Project sites are estimated to be reclaimed between 2027 and 2122, as described in Section 1.1 (Introduction).

therefore, GHG emissions generated at these Project sites would also not exceed the significance threshold. Furthermore, conservatively assuming that restoration monitoring activities at each Project site would generate the same level of GHG emissions as those at SB-1, all 20 Project sites could undergo restoration monitoring activities in the same year, and annual GHG emissions still would not exceed the GHG emission significance threshold of 3,000 MT of CO<sub>2</sub>e per year (13 MT x 20 Project sites = 260 MT of CO<sub>2</sub>e per year).<sup>20</sup> As a result, restoration monitoring activities would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

**Table 3.8-3. Representative Greenhouse Gas Emissions – Restoration Monitoring Activities at SB-1 (Furthest Driving Distance from Iron Mountain Pumping Plant)**

	Annual GHG Emissions (MT of CO <sub>2</sub> e per year)
SB-1	13
<b>GHG Emissions Significance Threshold<sup>1</sup></b>	<b>3,000</b>
<i>Significant (Exceeds Thresholds)?</i>	<i>NO</i>

Source: Appendix D

Note: MT of CO<sub>2</sub>e (metric ton of carbon dioxide equivalents), GHG (greenhouse gas), SCAQMD (South Coast Air Quality Management District).

<sup>1</sup> Based on SCAQMD’s GHG working group threshold for “non-industrial” projects (2010), the threshold set forth in the *County of Riverside Climate Action Plan Update* (2019), and the threshold set forth in the *County of San Bernardino Greenhouse Gas Reduction Plan* (2011).

***Post-Reclamation Uses***

After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to GHG emissions.

- b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

**No Impact.** No, the proposed Project would not conflict with an applicable plan, policy or regulation of an agency adopted for the purposes of reducing GHG emissions (County of Riverside 2019; County of San Bernardino 2011). Metropolitan is not subject to the *County of Riverside Climate Action Plan Update* (2019) or the *County of San Bernardino Greenhouse Gas Emissions Reduction Plan* (2011) because these plans do not address GHG emissions generated by Metropolitan’s operational activities. As shown in Tables 3.8-1 and 3.8-2, the proposed Project would temporarily generate a small amount of GHG emissions and would not conflict with the GHG emissions reduction measures listed in the CARB (2017) Climate Change Scoping Plan. Therefore, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs, and no impact would occur.

<sup>20</sup> The evaluation of GHG emissions from restoration monitoring activities occurring at all 20 Project sites in the same year is very conservative given that 14 Project sites are estimated to be reclaimed between 2027 and 2122, as described in Section 1.1 (Introduction).

### 3.9 Hazards and Hazardous Materials

#### HAZARDS AND HAZARDOUS MATERIALS

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

- a. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Less than Significant Impact.** No, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. There would be no permanent storage of hazardous materials (e.g., fuel, lubricants, etc.) on the Project sites. The only hazardous materials present on site would be fuels and oils stored “in use” within mobile equipment (e.g., scrapers, excavators, dozers, loaders, etc.) operating during reclamation activities. Minor maintenance (lubing and greasing) and/or re-fueling of mobile equipment and maintenance trucks via a mobile fuel truck may occur on site; however, equipment would generally be returned to Metropolitan’s fleet shop located at the Iron Mountain Pumping Plant for refueling, repairs, and maintenance.

The Project would employ spill prevention and cleanup measures to contain stormwater and prevent contamination of stormwater discharges. Specifically, handling and transfer of fuel and lubricating oils would follow best practices, as well as applicable health and safety regulations and/or local ordinances. Metropolitan staff would adhere to standard fueling procedures and safety protocols if conducting on-site refueling activities and/or routine equipment maintenance during

the Project. Emergency spill response materials would be available in an employee support vehicle in the unlikely event of a spill. Metropolitan employees are appropriately trained in spill response, and any potentially hazardous materials would be properly removed and transported to an approved facility.

The Project sites are generally located in remote and isolated areas and are not easily accessible by the public. There are few nearby cities, communities, or other developments with the exception of Metropolitan's existing employee communities adjacent to the Gene, Iron Mountain, Eagle Mountain, and Julian Hinds pumping plants. Site RV-7 scheduled to be reclaimed by 2122, is the only Project site located within 0.25 mile of residences. The closest residences to RV-7 are those at the Julian Hinds Pumping Plant, which are leased by Metropolitan employees and located approximately 1,000 feet to the west of RV-7. At this distance, the transport, use, and disposal of hazardous materials at this Project site would not create a significant hazard to members of the public. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; thus, there would be no operational impacts related to hazardous materials usage. Therefore, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Less than Significant Impact.** No, the Project would not create a significant hazard to the public through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Only minimal amounts of hazardous materials would be used; therefore, the potential for an accidental release of significant quantities of hazardous materials that could affect the surrounding environment is low. Furthermore, although certain hazardous materials (i.e., oils, lubricants, fuels) would be found within vehicles and equipment operating on site, Metropolitan employees are trained to properly recognize, contain, and cleanup such releases. The Project sites would also be designed and graded (e.g., perimeter berms) to contain accidentally-released materials and stormwater that may be contaminated as a result of equipment leaks. Moreover, stormwater BMPs, cleanup requirements, and other procedures would be implemented on site to ensure stormwater is properly contained and kept free of contaminants, which would include but would not be limited to:

- Spill prevention, control, and cleanup;
- Vehicle and equipment fueling, cleaning, and repair;
- Waste handling and disposal;
- Perimeter berms; and
- Use of silt fencing, fiber rolls or similar perimeter controls, as needed.

As discussed above, the Project sites are generally located in remote and isolated areas and are not easily accessible by the public. There are few nearby cities, communities, or other developments with the exception of Metropolitan's existing employee communities adjacent to the Gene, Iron

Mountain, Eagle Mountain, and Julian Hinds pumping plants. Site RV-7, scheduled to be reclaimed by 2122, is the only Project site located within 0.25 mile of residences. The closest residences to RV-7 are those at the Julian Hinds Pumping Plant, which are leased by Metropolitan employees and located approximately 1,000 feet to the west of RV-7. At this distance, reclamation activities at the Project sites would not create a significant hazard to members of the public. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to the creation of a significant hazard. For these reasons, accident conditions leading to the release of hazardous materials that could cause a significant hazard to the public or surrounding environment is unlikely. Therefore, impacts would be less than significant.

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**No Impact.** No, the Project would not emit hazardous emissions, materials, substances, or waste within 0.25 mile of an existing or proposed school. The Project sites are located in open desert entirely within Metropolitan fee property. The nearest school is the Parker Dam Elementary School, located in the town of Parker, Arizona over five miles away from the nearest Project site (SB-1). Therefore, no impact related to emitting or handling hazardous materials within 0.25 mile of an existing or proposed school would occur.

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

**No Impact.** No, the Project would not be located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The State Water Resources Control Board (2021) GeoTracker and the Department of Toxic Substances Control (2021) EnviroStor databases were reviewed to determine whether the Project sites are listed hazardous material/waste sites or are located near a known contaminated site. None of the Project sites are on or near hazardous materials sites identified on a list compiled pursuant to Government Code Section 65962.5. Therefore, the Project would not create a significant hazard to the public or the environment related to hazardous materials sites, and no impact would occur.

- e. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?*

**No Impact.** No, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project Area due to proximity to a public airport or public use airport. No Project sites are located within two miles of a public airport or public use airport. The public use airport nearest to the Project sites is the Chiriaco Summit Airport, located approximately 5.4 miles southwest of the nearest Project site (RV-7). Therefore, no impact would occur.

*f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** No, the Project would not impair implementation of or physically interfere with an adopted emergency plan or evacuation plan. The Project sites are all located on Metropolitan fee property and cannot be accessed by the general public via a public road. The Project sites are accessed via Metropolitan’s private access road system, and proposed reclamation of these sites would not result in alterations to any roadways. The Project would not result in an increased number of vehicles on the nearest public roadways. Additionally, there are no public facilities or structures in the vicinity of the Project sites. As discussed previously, it is estimated that a maximum of three Metropolitan employees would conduct Project reclamation activities and be present on site at any given time at each Project site. In the unlikely event of an emergency that would require on-site evacuation, existing private access roads have sufficient capacity to safely evacuate this small number of on-site employees. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to emergency response plans and emergency evacuation plans. Therefore, the Project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan, and no impact would occur.

*g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

**Less than Significant Impact.** No, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. The Project sites are all located in areas surrounded by desert landscape and are accessed via private roads within Metropolitan right-of-way. According to the current Fire Hazard Severity Zone Maps published by the California Department of Forestry and Fire Protection (CAL FIRE; 2007a, 2007b, and 2008), none of the Project sites are located within designated “Very High”, “High” or “Moderate” Fire Hazard Severity Zones within State or Local Responsibility Areas. According to Figure S-11 of the County of Riverside General Plan and Policy Map HZ-5 of the County of San Bernardino County Policy Plan, the Project sites are designated as having only a “moderate” wildfire hazard potential (County of Riverside 2018; County of San Bernardino 2020).

During Project reclamation activities, a water truck, excavator, dozer, grader, and dump truck would be utilized. All vehicles would contain fire extinguishers, and staff are trained in fire suppression in accordance with Metropolitan’s standard protocols. Additionally, no permanent structures are currently located on site, and none are proposed. The Project sites would be generally void of vegetation during the majority of reclamation activities until hydroseeding occurs. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; thus, there would be no operational impacts related to wildland fires. Therefore, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, and impacts would be less than significant.

### 3.10 Hydrology and Water Quality

#### HYDROLOGY AND WATER QUALITY

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate Regional Water Quality Control Board water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

- a. *Violate Regional Water Quality Control Board water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

**Less Than Significant.** No, the proposed Project would not violate RWQCB water quality standards or waste discharge requirements (WDRs) or otherwise substantially degrade surface or ground water quality. The Project would neither involve work within waterbodies (ephemeral washes) nor create a waste that would be subject to regulation under a WDR. Project activities involve removing deleterious materials, grading and final slope contouring, installing stormwater BMPs for erosion control, revegetating by hydroseeding, and monitoring. Surface flows are generally not present in the desert environment, and the Project is not expected to permanently impact jurisdictional waters because Project work at each site is temporary (30 days) and no permanent structures, direct removal, or filling is proposed at the sites.

Proposed Project activities would be conducted using applicable sediment entrainment and erosion control measures. Specific BMPs would include construction/maintenance of a perimeter berm along certain boundary segments at each Project site, grading to direct stormwater away from low-lying areas where off-site discharge could occur, and installation of silt fencing and/or waddles as warranted. As a result, reclamation of the Project sites would not discharge materials that would

adversely impact surface water quality. Furthermore, as discussed in Section 3.7 (Geology and Soils), the design pit depths for the individual Project sites would be above the groundwater table (see MRP Section 1.3 [Appendix A]), and the Project would not involve activities that would otherwise impact groundwater quality. Additionally, no waste would be discharged during Project activities, so there would be no potential to adversely affect or violate RWQCB water quality standards or WDRs. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to RWQCB water quality standards and WDRs. Therefore, impacts would be less than significant.

- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?*

**No Impact.** No, the proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. A project may result in a significant impact on groundwater supplies if it causes a demonstrable and sustained reduction of groundwater recharge capacity or changes the water levels such that it reduces the ability of a water utility to use the groundwater basin for public water supplies or storage of imported water, or if a project reduces the yields of adjacent wells or well fields or adversely changes the rate or direction of groundwater flow. Additionally, an impact may result if a project were to reduce groundwater levels within a groundwater-dependent ecosystem and/or reduce groundwater to levels that would result in land subsidence.

During proposed Project activities, water would be used for dust control, batching the hydroseed mix, and irrigation of hydroseeded areas using a mobile hydroseed truck and water truck. No groundwater would be used to implement reclamation activities because the water would be sourced directly from the CRA, which Metropolitan manages and maintains rights to draw from. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to groundwater supplies. Because the Project would not require use of groundwater supplies, the groundwater basin would not be affected, and the Project would not conflict with its sustainable management. Therefore, no impact related to groundwater supplies would occur.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
  - i) Result in substantial erosion or siltation on or off site?*

**Less than Significant Impact.** No, the proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion on or off site. As discussed in Section 3.4 (Biological Resources), potential drainages were identified within SB-I-2, SB-I-3, and RV-I-2 and adjacent to SB-1, SB-2, SB-3, SB-6, SB-7, RV-1, RV-3, RV-4, RV-5, RV-6, and RV-I-3. The Project involves removing deleterious materials, grading and final

slope contouring, installing stormwater BMPs for erosion control, revegetating by hydroseeding, and monitoring. Specific BMPs may include, but are not limited to, construction/maintenance of a perimeter berm along certain boundary segments at each Project site, grading to direct stormwater away from low-lying areas where off-site discharge could occur, and installation of silt fencing and/or waddles, as warranted. As deemed necessary by Metropolitan staff, BMPs would be installed or existing BMPs maintained as needed during Project activities to minimize sediment entrainment and erosion. Additionally, these BMPs may remain post-reclamation, if needed, to prevent off-site runoff and control erosion. The Project would not include the addition of impervious surfaces on the Project sites and would not permanently impact drainages, if present, because no permanent structures, direct removal, or filling is proposed in these areas. Given that the reclaimed topography would direct drainage into the Project sites and that erosion and siltation would be controlled through the implementation of the aforementioned erosion control BMPs, impacts related to erosion and siltation as a result of altered drainage patterns would be less than significant.

*ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

**Less than Significant Impact.** No, the proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site. As discussed in Section 3.4 (Biological Resources), potential drainages were identified within SB-I-2, SB-I-3, and RV-I-2 and adjacent to SB-1, SB-2, SB-3, SB-6, SB-7, RV-1, RV-3, RV-4, RV-5, RV-6, and RV-I-3. The Project entails reclamation of sites that were mined for earthen material, sand and gravel, or stone. When reclamation commences, the Project sites would be graded and contoured so that the final topography would convey stormwater inward to the pit floors where it would be captured and detained until it either evaporates or seeps into the underlying soil. The Project would not include the addition of impervious surfaces on the Project sites and would not permanently impact drainages, if present, because no permanent structures, direct removal, or filling is proposed in these areas. Therefore, the proposed Project would not result in flooding on or off site, and impacts would be less than significant.

*iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

**Less than Significant Impact.** No, the proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff water. As discussed in Section 3.4 (Biological Resources), potential drainages were identified within SB-I-2, SB-I-3, and RV-I-2 and adjacent to SB-1, SB-2, SB-3, SB-6, SB-7, RV-1, RV-3, RV-4, RV-5, RV-6, and RV-I-3. The Project sites are located in remote desert regions, and there are no existing or planned stormwater drainage systems within the vicinity of the Project. Furthermore, proposed reclamation of the Project sites involves removing deleterious materials, grading and final slope contouring, installing stormwater BMPs for erosion control, revegetating by hydroseeding, and monitoring. The Project would not include the addition of impervious surfaces on the Project sites and would not permanently impact drainages, if present, because no permanent structures, direct removal, or filling is proposed in these areas.

Grading and contouring of the pre-existing pit slope walls and floors would create a final landform design directing stormwater to be captured and detained within the pits. Surface grading and slope preparation would be performed using conventional earth-moving equipment, such as dozers, graders, loaders and excavators. Once the pit floors and walls are finished, revegetation would be initiated using a mobile hydroseed truck, which applies a seed mix and tackifier. Minor maintenance (lubing and greasing) and/or re-fueling of mobile equipment and maintenance trucks via a mobile fuel truck may occur on site; however, equipment would generally be returned to Metropolitan's fleet shop located at the Iron Mountain Pumping Plant for refueling, repairs, and maintenance. Hazardous materials would not be stored on site, and those materials used for equipment maintenance would be kept separately from non-hazardous materials on a surface that prevents spills from permeating the ground surface and in an area secure from unauthorized entry at all times. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; thus, there would be no operational impacts related to polluted runoff. Therefore, the proposed Project would not create or contribute substantial amounts of runoff or provide substantial additional sources of polluted runoff. Impacts would be less than significant.

*iv) Impede or redirect flood flows?*

**No Impact.** No, the proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would impede or redirect flood flows. As discussed in Section 3.4 (Biological Resources), potential drainages were identified within SB-I-2, SB-I-3, and RV-I-2 and adjacent to SB-1, SB-2, SB-3, SB-6, SB-7, RV-1, RV-3, RV-4, RV-5, RV-6, and RV-I-3. The proposed Project involves reclamation activities including removing deleterious materials, grading and final slope contouring, installing stormwater BMPs for erosion control, revegetating by hydroseeding, and monitoring. The Project would not include the addition of impervious surfaces on the Project sites and would not permanently impact drainages, if present, because no permanent structures, direct removal, or filling is proposed in these areas. Reclamation activities would be performed within the previously excavated areas and would not involve grading or changes to natural landform topography associated with existing drainages outside of the Project Areas. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to impeding or redirecting flood flows. Therefore, the proposed Project would not create a new impediment to surface flow or change flood flow patterns. Thus, the Project would have no impact related to flood flows.

*d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?*

**Less than Significant Impact.** No, the proposed Project would not be located in designated flood hazard, tsunami, or seiche zones and would not result in the potential for pollutants to be released to the environment by inundation. The Project sites are all located in the Mojave Desert region, which is approximately 100 miles from the Pacific Ocean and tsunami zones. None of the Project sites occur within a mapped tsunami or seiche hazard area as defined under the state Seismic Hazards Mapping Act and related seismic hazard maps (California Department of Conservation 2021c).

During reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation), there would be nominal quantities of fuels and oils stored within mobile equipment. Any equipment stored on site during the one-month reclamation construction period for each Project site would be maintained in good working condition, and spill prevention measures would be utilized (e.g., drip pans, berms, etc.) to ensure fuels and lubricating oils are properly contained in accordance with Metropolitan's standard operating procedures. As a result, even if flooding were to occur during reclamation construction activities, given the remote proximity of the Project sites to surface waters, the depths to groundwater, and the lack of potential pollutant sources on site, the Project would not risk release of pollutants due to Project inundation during reclamation construction activities. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to the release of pollutants due to Project inundation. Impacts would be less than significant.

*e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

**No Impact.** No, the proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Project reclamation activities include removing deleterious materials, grading and final slope contouring, installing/maintaining stormwater BMPs, revegetating by hydroseeding, and monitoring. These activities would not result in waste streams or discharges that would be subject to regulation under an applicable water quality control plan. Moreover, the Project would not require the use of groundwater; consequently, the Project would not conflict with or obstruct a sustainable groundwater management plan. Therefore, no impact would occur.

### 3.11 Land Use and Planning

#### LAND USE PLANNING

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

*a. Physically divide an established community?*

**No Impact.** No, the proposed Project would not physically divide an established community. The Project Area is located in open desert entirely within Metropolitan fee property. The Project Area is not located within an established community and does not serve as a means of moving through or connecting a community or neighborhood. There are no established communities in the immediate vicinity of the Project Area. For these reasons, the proposed Project would not physically divide an existing community, and no impact would occur.

*b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

**No Impact.** No, the Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The Project Area is located on Metropolitan fee property in unincorporated Riverside and San Bernardino counties. In Riverside County, the Project sites are located in both the Eastern Coachella Valley and Desert Center Area Plan areas and are designated Conservation Habitat and Open Space Rural (County of Riverside 2021). The majority of the Riverside County Project sites currently have a zoning designation of N-A (Non-Area Plan) with the exception of RV-5 and RV-I-3. RV-5 has a zoning designation of M-R-A (Mineral Resources & Related Manufacturing) and RV-I-3 has a zoning designation of W-2-10 (Controlled Development Areas). In San Bernardino County, the Project sites are designated/zoned Resource/Land Management (County of San Bernardino 2020a).

The majority of Metropolitan’s CRA fee property was granted to Metropolitan by the federal government pursuant to a 1932 act of Congress for the construction and operation of the CRA. The Project does not require any modifications to the existing Metropolitan ROW, and Metropolitan is not mitigating an environmental effect. Additionally, the Project does not require changes to an existing zoning or General Plan designation in San Bernardino or Riverside counties. Project activities would be consistent with the zoning designations for each county. Furthermore, the proposed reclamation activities would restore the Project sites to a more natural, less disturbed, passive state consistent with the surrounding environment and the underlying land use designations of the Project sites for open space, conservation habitat, and resource/land management. Therefore, the proposed Project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and no impact would occur.

### 3.12 Mineral Resources

#### MINERAL RESOURCES

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

- a. *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?*

**No Impact.** No, there would be no loss of availability of a known mineral resource that would be of value to the region and the residents of the State. SMARA requires the State Geologist to classify mineral lands to help identify and protect mineral resources in California. Mineral lands are mapped and assigned Mineral Resource Zones (MRZ) using the State’s mineral land classification system. Based on a review of State mineral land classification reports and designations, the Project sites are located outside recognized areas of regional or statewide significance, and none of the Project sites have an MRZ overlay. Accordingly, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State, and no impact would occur.

- b. *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

**No Impact.** No, the Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Based on the General Plans for Riverside and San Bernardino counties, none of the Project sites are covered by an MRZ. Accordingly, the Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, and no impact would occur.

### 3.13 Noise

#### NOISE

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### **OVERVIEW OF NOISE AND VIBRATION**

##### *Noise*

Sound is a vibratory disturbance created by a moving or vibrating source that is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

##### *Vibration*

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas sound is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) for buildings and Root Mean Square (RMS) vibration velocity for people and are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal (Caltrans 2020). RMS is generally the equivalent to 71 percent of the PPV. Thus, evaluating human annoyance to vibration usually results in a more restrictive vibration limit than structural damage limits. Table 3.13-1 summarizes the vibration limits recommended by the American Association of State Highway and Transportation Officials to avoid structural damage to buildings.

**Table 3.13-1. Maximum Vibration Levels for Preventing Building Damage**

Type of Situation	Vibration Level (in/sec PPV)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Notes: in/sec (inches per second), PPV (peak particle velocity).

Source: Caltrans 2020

The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 3.13-2.

**Table 3.13-2. Vibration Annoyance Potential Criteria for Humans (in/sec PPV)**

Human Response	Transient Sources	Continuous/Frequent Intermittent Sources
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

Notes: in/sec (inches per second), PPV (peak particle velocity).

Source: Caltrans 2020

## **REGULATORY FRAMEWORK**

### ***Riverside County***

#### **Riverside County Code of Ordinances**

Chapter 9.52 of the Riverside County Code regulates noise in the unincorporated areas of Riverside County and notes that no person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth by the County. Section 9.52.020(A-C) exempts facilities owned or operated by or for a governmental agency, capital improvement projects of a governmental agency, and the maintenance or repair of public properties from compliance with Chapter 9.52.

### ***San Bernardino County***

#### **San Bernardino County Code of Ordinances**

San Bernardino County Code Sections 83.01.080 and 83.01.090 establish noise level limits and vibration standards, respectively, for sources in unincorporated San Bernardino County. However, Sections 83.01.080(g)(3) and 83.01.090(c)(2) exempt noise and vibration, respectively, generated during temporary construction, maintenance, repair, and demolition activities between 7:00 a.m. and 7:00 p.m., except those activities occurring on Sundays and federal holidays, from compliance with these noise level limits and vibration standards.

## **METHODOLOGY**

### ***Reclamation Construction Activities***

Temporary noise levels during reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) would be generated primarily by the use of heavy equipment, including a dozer, excavator, loader, grader, pump, and hydroseed spreader. For the purposes of this noise assessment, heavy equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (Federal Transit Administration [FTA] 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts from mobile equipment are assessed from the center of the equipment activity area (e.g., Project site). Noise generated by reclamation activities was estimated using the Federal Highway Administration's Roadway Construction Noise Model (RCNM). Only one Project site, RV-9, is located near sensitive receivers, which are Metropolitan employee residences at the Julian Hinds Pumping Plant that are leased by Metropolitan employees. RV-9 would be reclaimed between 2027 and 2122 but is discussed here for current analysis purposes. Heavy equipment would travel throughout the RV-7 site at an average distance of 1,400 feet from the nearest sensitive noise-receivers (i.e., the distance between the nearest sensitive receivers and the center of RV-7); therefore, equipment noise levels were estimated at this distance.

#### ***Discussion. Would the Project result in:***

- a. *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

**Less than Significant Impact.** No, the proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of applicable standards.

Pursuant to Riverside County Code Section 9.52.020(A-C), Metropolitan's facilities, capital improvement projects, and maintenance and repair of public properties is exempt from compliance with the sound level standards in the County's noise ordinance because Metropolitan is a governmental agency. Pursuant to San Bernardino County noise and vibration regulations under San Bernardino County Code Sections 83.01.080(g)(3) and 83.01.090(c)(2), noise and vibrations generated from temporary construction between the hours of 7:00 am and 7:00 pm, Monday through Saturday are exempt. Nevertheless, noise impacts are further analyzed herein for the purposes of CEQA.

The most prevalent sources of noise in the vicinity of the Project Area are vehicular traffic on I-10, SR-62, SR-95, and SR-177 as well as operations at the Julian Hinds Pumping Plant (near RV-9). The Project Area is located in an area surrounded by desert landscape within Metropolitan fee property. RV-7 is the only Project site located within 0.25 mile of noise-sensitive receivers, which are residences at the Julian Hinds Pumping Plant that are leased by Metropolitan employees.

### ***Reclamation Construction Activities***

The proposed Project involves temporary reclamation construction activities within Metropolitan fee property, and no permanent noise sources are proposed. Proposed Project reclamation construction activities involve the use of mobile equipment to remove deleterious materials and debris, recontour Project site slopes and floors, installing/maintain stormwater BMPs for erosion control, and revegetating reclaimed areas with a native plant hydroseed mix. Temporary noise levels during reclamation construction activities would occur between the hours of 7:00 a.m. to 3:00 p.m., Monday through Thursday, and would be generated primarily by the use of heavy equipment, including a dozer, excavator, loader, grader, pump, and hydroseed spreader. It is estimated that a maximum of three Metropolitan employees would conduct reclamation activities and would be on site at any given time during reclamation of each Project site. Equipment noise levels were modeled in accordance with the assumptions outlined under *Methodology* and compared to reasonable criteria for assessing mobile equipment noise impacts based on the potential for adverse community reaction, as published in the FTA *Transit Noise and Vibration Impact Assessment Manual* (2018). For residential uses, the daytime noise threshold is 80 dBA  $L_{eq}$  for an 8-hour period (FTA 2018). This threshold is set at a reasonable level at which a substantial noise level increase as compared to ambient noise levels would occur.

Assuming conservatively that all reclamation equipment is operating simultaneously, the average hourly noise level at the nearest noise-sensitive receivers (i.e., Metropolitan employee residences located at the Julian Hinds Pumping Plant) would be approximately 57 dBA  $L_{eq}$ , which would not exceed the threshold of 80 dBA  $L_{eq}$  (see Appendix G for RCNM results). Furthermore, current material extraction operations at RV-7 and operations at the Julian Hinds Pumping Plant already generate elevated noise levels at these receivers. Given the low number of employees proposed to work at each Project site during reclamation, short duration of work per site (approximately 30 days), and above analysis demonstrating that Project activities would generate an average noise level below the applicable threshold, noise levels generated by reclamation construction activities would not exceed standards established in a local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant.

### ***Restoration Monitoring Activities and Post-Reclamation Uses***

Restoration monitoring activities would consist of quarterly site visits to each Project site for a period of three years by a monitoring biologist, as needed. These periodic visual site inspections and vehicle trips would not generate substantial noise. Furthermore, after restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional reclamation activities or operations. Therefore, there would be no noise impacts associated with restoration monitoring activities and post-reclamation uses because these activities would not generate noise levels in excess of standards established in a local general plan or noise ordinance, or applicable standards of other agencies.

*b. Generation of excessive groundborne vibration or groundborne noise levels?*

**Less than Significant Impact.** No, the proposed Project would not generate excessive groundborne vibration or noise levels.

### ***Reclamation Construction Activities***

Under *Overview of Noise and Vibration*, Table 3.13-1 presents the vibration impact criteria for buildings, and Table 3.13-2 presents the vibration impact criteria for humans. Groundborne noise is the sound emitted by vibrating structures and objects. Reclamation construction activities would involve the use of heavy equipment, which would generate some groundborne vibration. Although heavy equipment used during reclamation construction activities at RV-7 would primarily operate at least 1,000 feet away from these residences (a distance at which vibration would be imperceptible), loaded trucks may travel along Hayfield Road approximately 90 feet from the nearest residence. At this distance, vibration levels from a loaded truck would be approximately 0.02 in/sec PPV, which is below the distinctly perceptible level of 0.04 in/sec PPV for human annoyance from transient vibration sources and 1.5 in/sec PPV for structural damage to buildings (Caltrans 2020; see Appendix G for vibration modeling results). Furthermore, heavy trucks already utilize this road to access RV-7 for material extraction operations and to access the Julian Hinds Pumping Plant. No excessive groundborne noise is anticipated to occur during Project reclamation construction activities. Therefore, groundborne noise impacts during reclamation construction activities would be less than significant.

### ***Restoration Monitoring Activities and Post-Reclamation Uses***

Restoration monitoring activities would not involve the use of groundborne noise- or vibration-generating equipment or vehicles. Furthermore, after restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no groundborne noise or vibration impacts associated with restoration monitoring activities and post-reclamation uses. Therefore, no groundborne vibration or noise impacts would occur during restoration monitoring activities and post-reclamation uses.

- c. For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels?*

**No Impact.** No, the proposed Project is not within the vicinity of an airport land use plan. The Project Area is over two miles from a public airport or public use airport. The nearest public use airport to the Project Area is Chiriaco Summit Airport, located approximately 5.4 miles southwest of the nearest Project site (RV-7). In addition, four of Metropolitan's five desert pumping plants have private airstrips. The closest Metropolitan airstrip to a Project site is located at the Julian Hinds Pumping Plant approximately 1,000 feet from RV-7. While RV-7 is located in the vicinity of Metropolitan's own private airstrip, Project activities and the final reclamation of RV-7 by 2122 to revegetated open space would not expose people residing or working in the Project area to excessive noise levels given the infrequent use of this airstrip and the limited, short-term (approximately 30 days) presence of workers at this Project site. Therefore, no impact would occur.

### 3.14 Population and Housing

#### POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

- a. *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**No Impact.** No, the proposed Project would not induce substantial unplanned growth in an area. The proposed Project would not include residences and would not require additional employees beyond those already employed by Metropolitan. In addition, no new water supply facilities or infrastructure are proposed; therefore, the Project would not increase water supply to the area or otherwise indirectly induce population growth in the area. Accordingly, the proposed Project would not induce substantial unplanned population growth in an area, either directly or indirectly, and no impact would occur.

- b. *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

**No Impact.** No, the proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The Project Area is located entirely within the Metropolitan ROW. The Project Area does not contain existing dwelling units, and the proposed Project would not displace any persons or housing. The Project would not change the existing land use in the Project Area. Therefore, no additional construction of replacement housing elsewhere would be required. As such, the proposed Project would not displace a substantial number of existing people or housing, and no impact would occur.

### 3.15 Public Services

#### PUBLIC SERVICES

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

*a. Fire protection?*

**No Impact.** No, the proposed Project would not result in substantial adverse physical impacts to any fire protection services. The Project Area is within Metropolitan ROW and is accessed via Metropolitan’s private access road system. The San Bernardino County Fire Department and Riverside County Fire Department fire stations nearest to a Project site are Riverside County Fire Station 49, located approximately nine miles (driving distance) east of RV-6, and San Bernardino County Fire Station 44, located approximately 49 miles (driving distance) west of SB-I-3. The proposed Project does not include new housing and would not require employees beyond those already employed by Metropolitan. In addition, the Project would not increase water supply to the area or otherwise directly or indirectly induce population growth in the area that would increase demand for fire protection services. Therefore, the proposed Project would not have an effect upon or result in a need for new or physically altered fire protection services to maintain acceptable service ratios, response times, or other performance objectives, and no impact would occur.

*b. Police protection?*

**No Impact.** No, the proposed Project would not result in substantial adverse physical impacts to any police protection services. The Project Area is within Metropolitan ROW and is accessed via Metropolitan’s private access road system. The San Bernardino County Sheriff’s Department and Riverside County Sheriff stations nearest to the Project Area are the Riverside County Sheriff’s Thermal Patrol Station, located approximately 32 miles (driving distance) southwest of RV-I-3, and the San Bernardino County Sheriff’s Department Colorado River Patrol Station, located approximately 58 miles (driving distance) north of SB-3. The proposed Project does not include new housing and would not require employees beyond those already employed by Metropolitan. In addition, the Project would not increase water supply to the area or otherwise directly or indirectly

induce population growth in the area that would increase demand for police protection services. Therefore, the proposed Project would not have an effect upon or result in a need for new or physically altered police protection services to maintain acceptable service ratios, response times, or other performance objectives, and no impact would occur.

*c. Schools?*

**No Impact.** No, the proposed Project would not result in substantial adverse physical impacts to any schools. The Project Area is within Metropolitan ROW. The nearest school districts in San Bernardino County to the Project Area are the Morongo Unified School District and Needles Unified School District, located approximately 44 miles northwest of SB-I-3 and approximately 44 miles north of SB-1, respectively. The nearest school district in Riverside County to the Project Area is Coachella Valley Unified School District, approximately seven miles southwest of RV-I-3. The proposed Project does not include new housing and would not require employees beyond those already employed by Metropolitan. In addition, the Project would not increase water supply to the area or otherwise directly or indirectly induce population growth in the area that would increase demand for schools. Therefore, the proposed Project would not have an effect upon or result in a need for new or physically altered schools to maintain acceptable service ratios or other performance objectives, and no impact would occur.

*d. Parks?*

**No Impact.** No, the proposed Project would not result in substantial adverse physical impacts to any parks. The Project Area is within Metropolitan ROW and is accessed via Metropolitan's private access road system. The nearest parks to the Project Area in San Bernardino and Riverside counties are Joshua Tree National Park, located approximately 560 feet north of RV-I-3, and Duke Watkins Park, located approximately 43 miles north of SB-1. The proposed Project does not include new housing and would not require employees beyond those already employed by Metropolitan. In addition, the Project would not increase water supply to the area or otherwise directly or indirectly induce population growth in the area that would increase demand for parks. Therefore, the proposed Project would not have an effect upon or result in a need for new or physically altered parks to maintain acceptable service ratios or other performance objectives, and no impact would occur.

*e. Other public facilities?*

**No Impact.** No, the proposed Project would not result in substantial adverse physical impacts to any other public facilities. The Project Area is within Metropolitan ROW and is accessed via Metropolitan's private access road system. The nearest libraries in San Bernardino and Riverside counties to the Project Area are Lake Tamarisk Library, located approximately five miles east of RV-6, and Needles Branch Library, located approximately 43 miles north of SB-1. The proposed Project does not include new housing and would not require employees beyond those already employed by Metropolitan. In addition, the Project would not increase water supply to the area or otherwise directly or indirectly induce population growth in the area that would increase demand for other public facilities, such as libraries. Therefore, the proposed Project would not have an effect upon or result in a need for other new or physically altered public facilities, such as libraries, to maintain acceptable service ratios, response times, or other performance objectives, and no impact would occur.

### 3.16 Recreation

#### RECREATION

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion.*

- a. *Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**No Impact.** No, the proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. The proposed Project sites are located entirely within Metropolitan ROW and are accessed via Metropolitan’s private access road system. The nearest parks to the Project Area in San Bernardino and Riverside counties are Joshua Tree National Park, located approximately 560 feet north of RV-I-3, and Duke Watkins Park, located approximately 43 miles north of SB-1. The proposed Project does not include new housing and would not require employees beyond those already employed by Metropolitan. In addition, the Project would not increase water supply to the area or otherwise directly or indirectly induce population growth in the area that would increase the use of existing neighborhood and regional parks or other recreational facilities. Therefore, the proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and no impact would occur.

- b. *Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?*

**No Impact.** No, the proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities. The Project sites are located entirely within Metropolitan ROW and are accessed via Metropolitan’s private access road system. The Project involves removing deleterious materials, grading and final slope contouring, installing stormwater BMPs, revegetating by hydroseeding, and monitoring. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to recreational facilities. The proposed Project does not include new housing and would not require employees beyond those already employed by Metropolitan. In addition, the Project would not increase water supply to the area or otherwise directly or indirectly induce population growth in the area that would require the construction or expansion of recreational facilities. Therefore, the proposed Project

would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impact would occur.

### 3.17 Transportation

#### TRANSPORTATION

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (5.g., sharp curves or dangerous intersections) or incompatible uses (5.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### OVERVIEW OF TRANSPORTATION

##### *San Bernardino County*

The County of San Bernardino (2020b) County Policy Plan Transportation and Mobility Element identifies goals and policies related to the transportation system, including roadway capacity, road design standards, and vehicle miles traveled (VMT). Goal TM-1 identifies minimum levels of service (LOS) standards for various regions within the county. The LOS standard for the North and East Desert Regions, in which the San Bernardino County Project sites are located, is LOS C (County of San Bernardino 2020b). The San Bernardino County Transportation Authority is the designated Congestion Management Agency responsible for the development and implementation of the Congestion Management Program (CMP) in San Bernardino County. According to the current CMP, none of the roadways in the vicinity of the Project sites in San Bernardino County operate below the County’s LOS standard of LOS C for the North and East Desert Regions (San Bernardino Associated Governments 2016).

##### *Riverside County*

The Riverside County General Plan along with the Desert Center Area Plan and Eastern Coachella Valley Area Plan identify goals and policies for the circulation system in the vicinity of the Project sites in Riverside County. The minimum LOS standard within these areas is LOS C (County of Riverside 2020). The Riverside County Transportation Commission is responsible for preparing and updating the CMP to meet federal Congestion Management Process guidelines. According to the current CMP, none of the roadways in the vicinity of the Project sites in Riverside County are considered to be deficient (Riverside County Transportation Commission 2011).

##### *Discussion. Would the Project:*

- a. *Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

**No Impact.** No, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The Project Area is within Metropolitan ROW and is accessed via Metropolitan’s private access road system. Proposed Project activities would require the use of heavy equipment and would require

minimal vehicle trips by reclamation contractors and Metropolitan staff on local and regional roadways. In addition, restoration monitoring activities would involve quarterly site visits to each Project site by a monitoring biologist for approximately three years, which would be a *de minimis* addition to existing traffic volumes on local and regional roadways. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to the circulation system. In addition, the Project would not change the existing land uses in the Project Area and would not result in any changes to transit, roadways, bicycle systems, or pedestrian facilities. As a result, the Project would not impact any County program, plan, ordinance, or policy related to transit, roadway, bicycle, or pedestrian facilities in the vicinity of the Project Area, and no impact would occur.

b. *Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

**Less than Significant Impact.** No, the proposed Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b). The Governor’s Office of Planning and Research (2018) *Technical Advisory on Evaluating Transportation Impacts in CEQA* states, “Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant VMT impact.” The Project would involve approximately six daily one-way trips to and from each Project site during reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) and approximately two daily one-way trips to and from each Project site during restoration monitoring activities (i.e., periodic site visits by a monitoring biologist). If all six inactive Project sites were reclaimed simultaneously by the end of 2027, total daily trips would be approximately 30 daily trips during reclamation activities (one month in duration) and ten daily trips during restoration monitoring activities (once a quarter). If all 14 active Project sites expected to be reclaimed between 2027 and 2122 were reclaimed at once, total daily trips would be approximately 90 trips during reclamation activities (one month in duration) and 30 daily trips during restoration monitoring activities (once a quarter). After restoration is complete, none of the Project sites would require additional vehicle trips. Therefore, the Project would generate fewer than 110 trips per day and would result in less-than-significant impacts related to VMT with respect to CEQA Guidelines Section 15064.3(b)(3).

c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

**No Impact.** No, the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible uses. The Project Area is accessed via Metropolitan’s private access road system, and reclamation of the Project sites would not result in alterations to these roadways, installation of driveways or geometric design features, or creation of incompatible uses along these roadways. Therefore, no impact would occur.

d. *Result in inadequate emergency access?*

**No Impact.** No, the proposed Project would not result in inadequate emergency access. The Project Area is accessed via Metropolitan’s private access road system on which traffic is limited to Metropolitan staff and contractor vehicles completing work for Metropolitan. Reclamation of the Project sites would not result in alterations to these roadways. Project-related vehicles and equipment would be parked off of public roads and would not block emergency access routes, and

no road closures are proposed. As a result, the proposed Project would not impede existing emergency access in the Project vicinity, and no impact would occur.

### 3.18 Tribal Cultural Resources

#### TRIBAL CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in 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:				
i. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Discussion. Would the Project:*

- a. *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in 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:*
  - i) *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)?*
  - ii) *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?*

**No Impact.** No, the proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource. Tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the CRHR. A formal consultation process with California Native American tribes regarding tribal cultural resources must commence prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project.

On March 17, 2021, Metropolitan sent letters via certified mail to four Native American tribes that had previously requested to be informed through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with those tribes. Metropolitan

did not receive any formal requests for tribal cultural resource consultation from any of the four tribes contacted. Additionally, Metropolitan's cultural resource and archaeological resource identification efforts did not identify the presence of any prehistoric archaeological resources or resources eligible for or listed on the CRHR or local register within the Project Area. Because no tribal cultural resources have been identified on or near the Project Area, the Project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined, and no impact would occur.

### 3.19 Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS				
Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion. Would the Project:*

- a. *Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects?*

**No Impact.** No, the proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities. Water used during reclamation would primarily be utilized for controlling dust, batching the hydroseed mix that would be applied using a mobile hydroseed truck, and irrigating revegetated areas, as needed, within the Project Area. Water for dust suppression and landscape establishment and irrigation would be transported to the site via a mobile water truck. Water would primarily be obtained at various locations along the CRA. During reclamation activities, portable toilets would be placed at the Project sites; no wastewater would be generated by the Project. Furthermore, no electrical or natural gas connections would be required for the proposed Project, and as discussed in Section 3.10 (Hydrology and Water Quality), the Project would not impact stormwater drainage systems. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment. There would be no additional activities or operations; therefore, there would be no operational impacts related to utility infrastructure. Therefore, no impact would occur.

- b. *Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

**Less than Significant Impact.** Yes, there would be sufficient water supplies available to serve the Project. Water used during reclamation would primarily be utilized for controlling dust, batching

hydroseed mix, and irrigating revegetated areas, as needed, within the Project Area. Water for dust suppression and landscape irrigation would be transported to the site via a mobile water truck. Water would primarily be obtained at various locations along the CRA, which is administered and controlled by Metropolitan, by pumping water directly into the water truck, with the exception of RV-7 where water would be obtained from an existing water hydrant at the Julian Hinds Pumping Plant. Water usage would be temporary and would be distributed over a number of years as Project sites are reclaimed individually. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment, and there would be no additional activities or operations. Therefore, there would be sufficient water supplies available to serve the Project, and impacts to water supplies would be less than significant.

- c. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?*

**No Impact.** No, the proposed Project would not result in a determination by a wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project. During reclamation activities, portable toilets would be placed at the Project sites, and no wastewater would be generated by the Project. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment, and there would be no additional activities or operations. No new demand on an existing wastewater treatment provider would occur as a result of the proposed Project; therefore, no impact would occur.

- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

**No Impact.** No, the proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The proposed Project entails reclamation of Project sites via grading, contouring, revegetation and monitoring. After restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment, and there would be no additional activities or operations. Solid waste would not be generated by the proposed Project. Therefore, no impact would occur related to generating substantial amounts of solid waste or meeting solid waste reduction goals.

- e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**No Impact.** Yes, the proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Solid waste would not be generated by the proposed Project. Therefore, no impact would occur.

### 3.20 Wildfire

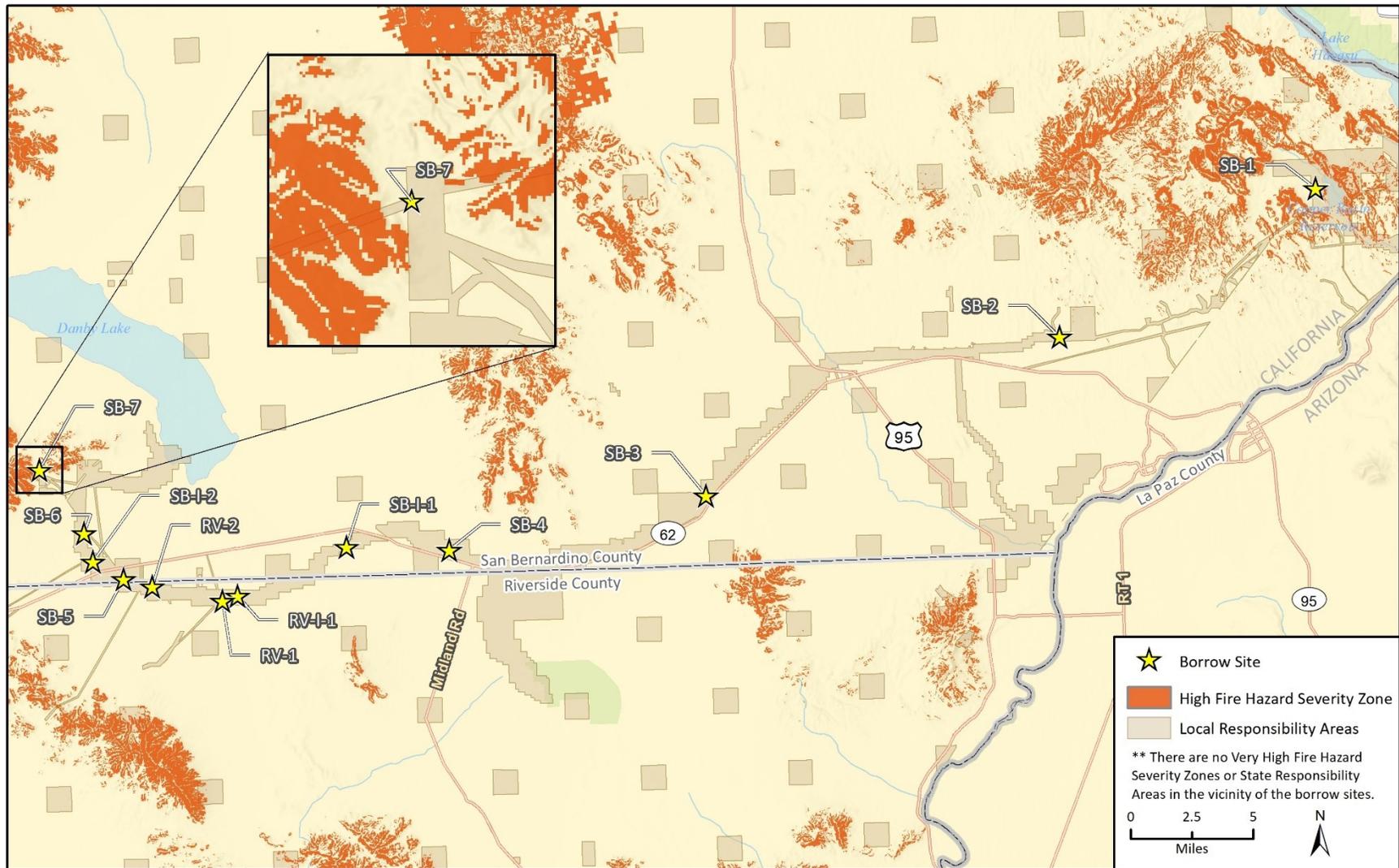
#### Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### **OVERVIEW OF WILDFIRE**

According to the CAL FIRE Very High Fire Hazard Severity Zone (VHFHSZ) maps, the Project sites in San Bernardino County are located within a “non-VHFHSZ,” meaning the sites have little or no potential for high fire hazard at either the State or Local Responsibility Area (LRA) level (CAL FIRE 2008). The Project sites in Riverside County are located either within an “LRA Moderate” or “Other Moderate” Severity Zones, meaning that sites have no potential for high fire hazard at the LRA level (CAL FIRE 2007a). Currently, Eastern Riverside County does not have a State Responsibility Area VHFHSZ map. The closest VHFHSZ to Project sites in San Bernardino County is approximately 66 miles to the west of SB-I-3. The closest VHFHSZ to Project sites in Riverside County is approximately 23 miles southwest of RV-I-3 (CAL FIRE 2007b). None of the Project sites are located in or near a State Responsibility Area or VHFHSZ. See Figure 3.20-1 and Figure 3.20-2 for maps of the Project Area in relation to the nearest High Fire Hazard Severity Zones.

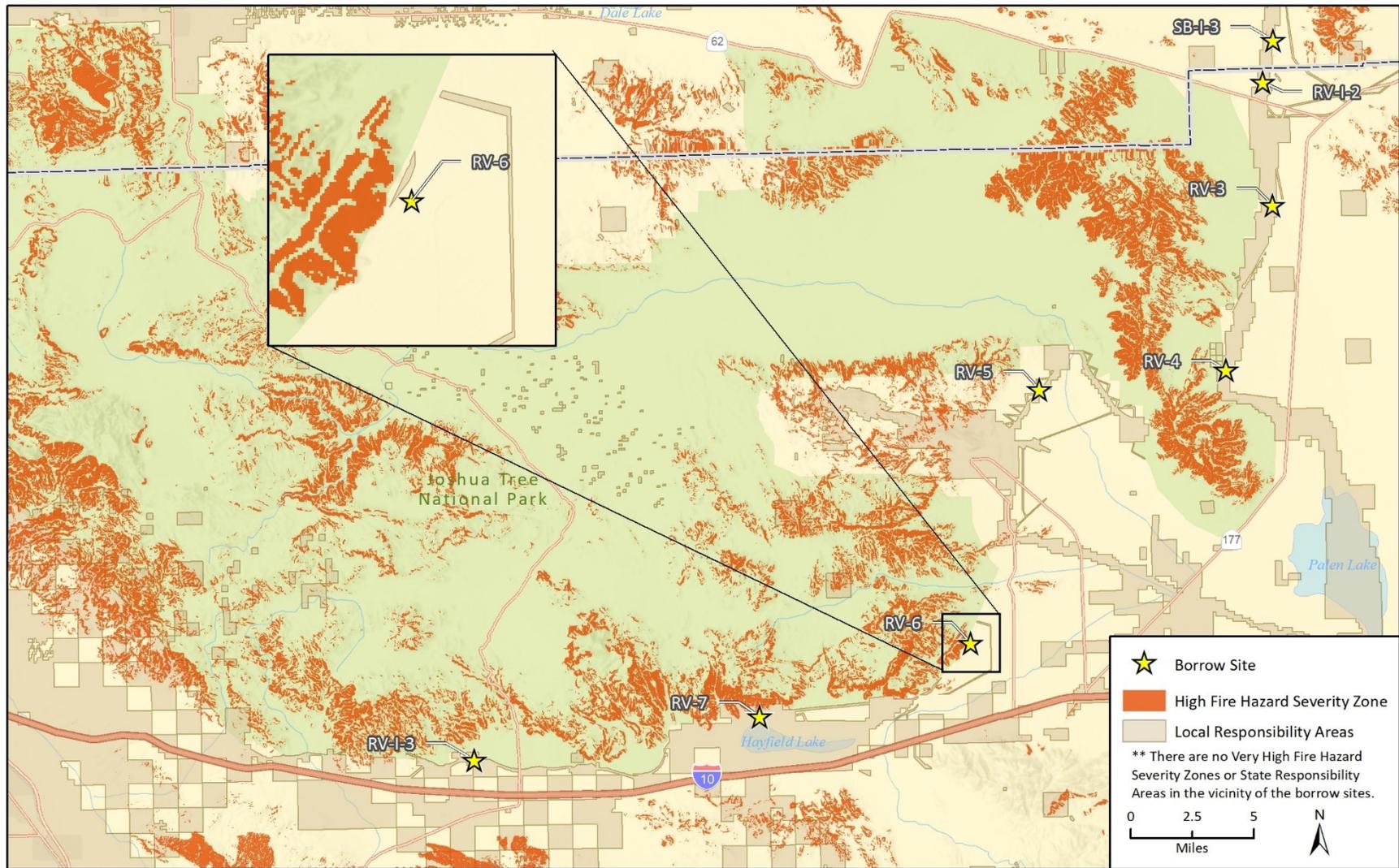
Figure 3.20-1. High Fire Hazard Severity Zones – SB-1 through SB-7, SB-I-1, SB-I-2, RV-1, RV-2, and RV-I-1



Imagery provided by Microsoft Bing and its licensors © 2022.

Fig X Fire Hazard Severity Zones\_Pg1

Figure 3.20-2. High Fire Hazard Severity Zones – SB-I-3, RV-3 through RV-7, RV-I-2, and RV-I-3



Imagery provided by Microsoft Bing and its licensors © 2022.

Fig X Fire Hazard Severity Zones\_Pg2

*Discussion. If located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones, would the Project:*

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

**No Impact.** No, the proposed Project would not be located in or near State Responsibility Areas or lands classified as VHFHSZ and would not substantially impair an adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. None of the Project sites are located in or near a State Responsibility Area or VHFHSZ. The Project sites do not contain occupied structures, and none are proposed. In addition, as stated in Section 1.7.10, *Hazardous Materials/Hazardous Waste*, all vehicles would contain fire extinguishers, and staff are trained in fire suppression. Therefore, no impact related to wildfire in or near State Responsibility Areas or lands classified as VHFHSZ would occur.

### 3.21 Mandatory Findings of Significance

MANDATORY FINDINGS OF SIGNIFICANCE				
Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ( <i>Cumulatively considerable</i> 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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the Project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

*Discussion:*

- a. *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, or eliminate important examples of the major periods of California history or prehistory?*

**Less than Significant with Mitigation Incorporated.** No, the Project would not 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, or eliminate important examples of the major periods of California history or prehistory. Based on the analysis provided in Section 3.4 (Biological Resources) and Appendix C (Biological Resources Technical Report), potential impacts to threatened, endangered, candidate, or special status species would be mitigated to a less-than-significant level with implementation of Mitigation Measures BIO-1 through BIO-5. Therefore, with mitigation incorporated, the proposed Project would not have the potential to substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Section 3.5 (Cultural Resources), the Project would not have the potential to substantially adversely affect previously unidentified archaeological resources or eliminate important examples of the major periods of California history or prehistory.

- b. *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.)*

**Less than Significant Impact.** No, the Project does not have impacts that are individually limited, but cumulatively considerable. Based on the analysis contained in this Initial Study, the proposed Project would not result in any significant and unmitigable impacts in any environmental category. In all cases, impacts associated with the Project would be limited to the Project Area or are of such a negligible degree that they would not result in a significant contribution to any cumulative impacts. This is largely due to the fact that Project reclamation construction activities (i.e., regrading slopes, backfilling, and revegetation) would be temporary, and after restoration and monitoring are completed, the final end use of the Project sites would be revegetated open space consistent with the surrounding environment with no additional activities or operations.

Cumulative impacts could occur if the construction of other projects occurs at the same time as the proposed Project and in the same geographic scope, such that the effects of similar impacts of multiple projects combine to create greater levels of impact than would occur at the project level. For example, if the construction of other projects in the area occurs at the same time as reclamation activities associated with the proposed Project, combined noise and transportation impacts may be greater than at the project level. However, the Project Area is in a remote, isolated area surrounded by desert landscape within Metropolitan fee property with no cumulative projects expected in the vicinity, other than ongoing minor Metropolitan operations and maintenance activities pertaining to the CRA. Given that the Project sites are located more than 1,000 feet from the nearest residences and communities, the Project's impacts during reclamation construction and restoration monitoring activities would not combine with the impacts of other Metropolitan projects to create cumulative activity-related impacts in areas such as air quality, noise, and transportation. Furthermore, upon completion, the Project would have no operational impacts that could combine with the impacts of other projects to create cumulative impacts. For these reasons, the incremental effects of the proposed Project would not be considerable when viewed in connection with the effects of past projects, current projects, or probable future projects, and cumulative impacts would be less than significant.

- c. *Does the Project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?*

**Less than Significant Impact.** Based on the analysis contained in this Initial Study, the proposed Project does not exceed any significance thresholds or result in significant impacts in the environmental categories typically associated with indirect or direct effects to human beings, such as aesthetics, air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services, or transportation. As discussed in Sections 3.1 (Aesthetics), 3.3 (Air Quality), 3.7 (Geology and Soils), 3.9 (Hazards and Hazardous Materials), 3.10 (Hydrology and Water Quality), 3.13 (Noise), 3.15 (Public Services), and 3.17 (Transportation) of this document, the proposed Project would not expose persons to the hazards of toxic air emissions, chemical or explosive materials, groundshaking, flooding, noise, or transportation. For these reasons, the proposed Project does not have a Mandatory Finding of Significance due to environmental effects that could cause substantial adverse effects on humans.

## **4. List of Preparers**

### **4.1 The Metropolitan Water District of Southern California**

Diane Doesserich, Team Manager

Michelle Morrison, Senior Environmental Specialist

### **4.2 Rincon Consultants**

Jennifer Haddow, PhD, Principal Environmental Scientist

Annaliese Miller, Senior Environmental Planner

Melissa Whittemore, Senior Environmental Planner

Amanda Antonelli, Senior Environmental Planner

Daphne Virlar-Knight, Associate Environmental Planner

Steven Hongola, Principal Ecologist

Christina Shushnar, Supervising Biologist

Andrea Maben, Senior Biologist

Breana Campbell-King, MA, RPA, Senior Archaeologist

Mark Strother, MA, RPA, Archaeologist

Tracy Popiel, GIS Analyst

Debra-Jane Seltzer, Publishing Specialist

Dario Campos, Publishing Specialist

## 5. List of Acronyms

°F	degrees Fahrenheit
2H:1V	two horizontal to one vertical
AB	Assembly Bill
APEFZ	Alquist-Priolo Earthquake Fault Zone
AQMP	Air Quality Management Plan
bgs	below ground surface
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CHRIS	California Historical Resources Information System
CMP	Congestion Management Program
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CRA	Colorado River Aqueduct
CRHR	California Register of Historical Resources
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
EIC	Eastern Information Center
EIR	Environmental Impact Report
FESA	Federal Endangered Species Act
FTA	Federal Transit Administration
GHG	greenhouse gas

HCP	Habitat Conservation Plan
I-10	Interstate 10
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IS-MND	Initial Study and Mitigated Negative Declaration
lbs	pounds
Leq	equivalent noise level
LOS	level of service
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
Metropolitan	The Metropolitan Water District of Southern California
MRP	Master Reclamation Plan
MRZ	Mineral Resource Zone
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NRHP	National Register of Historic Places
PM <sub>10</sub>	Particulate matter less than or equal to 10 microns in diameter
PM <sub>2.5</sub>	Particulate matter less than or equal to 2.5 microns in diameter
PPV	peak particle velocity
PRC	California Public Resources Code
RCNM	Roadway Construction Noise Model
Rincon	Rincon Consultants, Inc.
RMS	root mean squared
ROG	reactive organic gas
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SMARA	Surface Mining and Reclamation Act
SLF	Sacred Lands File
SO <sub>x</sub>	sulfur oxides

SR	State Route
SSAB	Salton Sea Air Basin
State Board	State of California Mining and Geology Board
TAC	toxic air contaminant
USACE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	waste discharge requirement
WEAP	Worker Environmental Awareness Protections Training

## 6. References

- American Society of Civil Engineers. 2021. Colorado River Aqueduct..
- Bryant, W. A., 2012. San Andreas, Hidden Spring, Skeleton Canyon, Mecca Hills and Related Faults, Riverside and Imperial Counties, California, Fault Evaluation Report FER-252.
- California Air Resources Board (CARB). 2016. “Ambient Air Quality Standards.” May 4, 2016. <https://ww2.arb.ca.gov/resources/documents/ambient-air-quality-standards-0> (accessed October 2021).
- \_\_\_\_\_. 2017. California’s 2017 Climate Change Scoping Plan. November 2017. [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf) (accessed October 2021).
- \_\_\_\_\_. 2019a. “Chronology of State Ozone Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/ozone.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019b. “Chronology of State Carbon Monoxide Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/co.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019c. “Chronology of State Nitrogen Dioxide Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/no2.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019d. “Chronology of State Sulfur Dioxide Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/so2.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019e. “Chronology of State Lead Designations.” July 2019. October 2018. <https://ww3.arb.ca.gov/desig/changes/pb.pdf> (accessed October 2021)
- \_\_\_\_\_. 2019f. “Chronology of State PM<sub>10</sub> Designations.” July 2019. October 2018. <https://ww3.arb.ca.gov/desig/changes/pm10.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019g. “Chronology of State PM<sub>2.5</sub> Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/pm25.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019h. “Chronology of State Visibility Reducing Particles Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/vrp.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019i. “Chronology of State Sulfate Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/so4.pdf> (accessed October 2021).
- \_\_\_\_\_. 2019j. “Chronology of State Hydrogen Sulfide Designations.” July 2019. <https://ww3.arb.ca.gov/desig/changes/h2s.pdf> (accessed October 2021).
- California Department of Conservation. 2016. California Important Farmland Finder. <https://maps.conservation.ca.gov/dlrp/ciff/app/> (accessed February 2021).
- \_\_\_\_\_. 2021a. “EQ Zapp: California Earthquake Hazards Zone Application.” <https://www.conservation.ca.gov/cgs/geohazards/eq-zapp> (accessed April 2021).
- \_\_\_\_\_. 2021b. “CGS Information Warehouse: Landslides.” Sacramento, CA. <https://maps.conservation.ca.gov/cgs/informationwarehouse/landslides/> (accessed April 2021).
- \_\_\_\_\_. 2021c. “Seismic Hazard Zone Maps.” <https://www.conservation.ca.gov/cgs/shma> (accessed April 2021).

- California Department of Forestry and Fire Protection (CalFire). 2007a. Eastern Riverside County – Draft Fire Hazard Severity Zones in LRA. [https://osfm.fire.ca.gov/media/6749/fhszl06\\_1\\_map61.pdf](https://osfm.fire.ca.gov/media/6749/fhszl06_1_map61.pdf) (accessed March 2021).
- \_\_\_\_\_. 2007b. Western Riverside County – Fire Hazard Severity Zones in SRA. [https://osfm.fire.ca.gov/media/6752/fhszs\\_map60.pdf](https://osfm.fire.ca.gov/media/6752/fhszs_map60.pdf) (accessed February 2021).
- \_\_\_\_\_. 2008. SE San Bernardino County. [https://osfm.fire.ca.gov/media/7281/fhszl\\_map63.pdf](https://osfm.fire.ca.gov/media/7281/fhszl_map63.pdf) (accessed March 2021).
- California Department of Toxic Substances. 2021. “EnviroStor.” <https://www.envirostor.dtsc.ca.gov/public/> (accessed October 2021).
- California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf> (accessed October 2021).
- \_\_\_\_\_. 2020. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-20-365.01.01). April. <https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals> (accessed October 2021).
- \_\_\_\_\_. 2021. California State Scenic Highway System Map. <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca> (accessed October 2021).
- California Energy Commission (CEC). 2021a. Total System Electric Generation. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2019-total-system-electric-generation> (accessed October 2021).
- \_\_\_\_\_. 2021b. “Supply and Demand of Natural Gas in California.” <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california> (accessed October 2021).
- \_\_\_\_\_. 2021c. “California Retail Fuel Outlet Annual Reporting (CEC-A15) Results.” <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting> (accessed October 2021).
- California Governor’s Office of Emergency Services. 2021. “MyHazards Internet Mapping Tool.” <https://myhazards.caloes.ca.gov/> (accessed April 2021).
- California Governor’s Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. [http://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf) (accessed October 2021).
- California State Water Resources Control Board. 2021. “GeoTracker.” <https://geotracker.waterboards.ca.gov/> (accessed October 2021).
- Coachella Valley Association of Governments. 2007. Coachella Valley Multiple Species Habitat Conservation Plan. <http://www.cvmshcp.org/> (accessed October 2021).
- Crocker, Malcolm J. Crocker (Editor). 2007. Handbook of Noise and Vibration Control Book, ISBN: 978-0-471-39599-7, Wiley-VCH, October.

- Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf) (accessed October 2021).
- Intergovernmental Panel on Climate Change. 2007. Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- \_\_\_\_\_. 2014. Climate Change 2014 Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland.
- Metropolitan Water District of Southern California, The. 2022a. *Climate Action Plan*. March 2022.
- \_\_\_\_\_. 2022b. Metropolitan Climate Action Plan Final Program Environmental Impact Report. May 2022.
- Mojave Desert Air Quality Management District (MDAQMD). 2016. *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*. August 2016. <https://www.mdaqmd.ca.gov/home/showdocument?id=192> (accessed October 2021).
- \_\_\_\_\_. 2017. *Federal 75 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area)*. February 27, 2017. [https://ww3.arb.ca.gov/planning/sip/planarea/wmdaqmp/2016sip\\_mdplan.pdf](https://ww3.arb.ca.gov/planning/sip/planarea/wmdaqmp/2016sip_mdplan.pdf) (accessed October 2021).
- Olive, W.W., Chleborad, A. F., Frahme, C. W., Schlocker, J., Schneider, R. R., and Shuster; R. L., 1989. Swelling Clays Map of The Conterminous United States, Numbered Series 1940. United States Geological Survey. <http://www.cselandscapearchitect.com/2012/02/11/where-to-find-expansive-soils-in-california> (accessed October 2021).
- PRISM Climate Group / Oregon State University. 2021, Köppen Climate Types of California. Corvallis, Oregon. <https://prism.oregonstate.edu/> (accessed April 2021).
- Psomas. 2018. Biological Resources Assessment Report for the Colorado River Aqueduct Reliability Program, Eagle Mountain Pumping Plant, Riverside County, California.
- Riverside, County of. 2015. *County of Riverside General Plan Noise Element*. December 8, 2015. [https://planning.rctlma.org/Portals/14/genplan/general\\_Plan\\_2017/elements/OCT17/Ch07\\_Noise\\_120815.pdf?ver=2017-10-11-102104-080](https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch07_Noise_120815.pdf?ver=2017-10-11-102104-080) (accessed October 2021).
- \_\_\_\_\_. 2018. *County of Riverside General Plan Land Use Element*. December 2018. [https://planning.rctlma.org/Portals/0/genplan/general\\_plan\\_2013/1%20General%20Plan/C\\_hapter%203-Land%20Use%20Element%20Adopted-Final%20Clean.pdf](https://planning.rctlma.org/Portals/0/genplan/general_plan_2013/1%20General%20Plan/C_hapter%203-Land%20Use%20Element%20Adopted-Final%20Clean.pdf) (accessed October 2021).
- \_\_\_\_\_. 2019. *County of Riverside Climate Action Plan Update*. November 2019. [https://planning.rctlma.org/Portals/14/CAP/2019/2019\\_CAP\\_Update\\_Full.pdf](https://planning.rctlma.org/Portals/14/CAP/2019/2019_CAP_Update_Full.pdf) (accessed October 2021).

- \_\_\_\_\_. 2020. *County of Riverside General Plan Circulation Element*. July 7, 2020.  
[https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch04\\_Circulation\\_072720v2.pdf](https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch04_Circulation_072720v2.pdf) (accessed October 2021).
- \_\_\_\_\_. 2021. Map My County.  
[https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC\\_Public](https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public) (accessed October 2021).
- Riverside County Transportation Commission. 2011. Riverside County Congestion Management Program. <https://www.yumpu.com/en/document/read/28233722/congestion-management-program-riverside-county-> (accessed October 2021).
- San Bernardino Associated Governments. 2016. Congestion Management Program. Updated June 2016. <https://www.gosbcta.com/wp-content/uploads/2019/10/2016-Congestion-Management-Plan-.pdf> (accessed October 2021).
- San Bernardino, County of. 2011. *County of San Bernardino Greenhouse Gas Emissions Reduction Plan*. September 2011.  
<http://www.sbcounty.gov/Uploads/lus/GreenhouseGas/FinalGHGFull.pdf> (accessed October 2021).
- \_\_\_\_\_. 2020a. Land Use Map. October 2020.  
<https://www.arcgis.com/apps/webappviewer/index.html?id=f23f04b0f7ac42e987099444b2f46bc2> (accessed March 2021).
- \_\_\_\_\_. 2020b. *County Policy Plan*. October 2020. [http://countywideplan.com/wp-content/uploads/2020/12/CWP\\_PolicyPlan\\_20201027\\_adopted.pdf](http://countywideplan.com/wp-content/uploads/2020/12/CWP_PolicyPlan_20201027_adopted.pdf) (accessed October 2021).
- \_\_\_\_\_. 2020c. *Final Program Environmental Impact Report for the San Bernardino Countywide Plan*. August 2020. <http://countywideplan.com/eir/> (accessed October 2021).
- South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook. April 1993.
- \_\_\_\_\_. 2010. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15.  
[http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf) (accessed October 2021).
- \_\_\_\_\_. 2017. *Final 2016 Air Quality Management Plan (AQMP)*. March 3, 2017  
<https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp> (accessed October 2021).
- \_\_\_\_\_. 2019. SCAQMD Air Quality Significance Thresholds. Last modified: April 2019.  
<http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf> (accessed October 2021).
- Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways

- Administration. <https://www.wildlife.ca.gov/conservation/planning/connectivity/CEHC> (accessed October 2021).
- State of California. 2018. California’s Fourth Climate Change Assessment Statewide Summary Report. August 27, 2018. <http://www.climateassessment.ca.gov/state/> (accessed October 2021).
- United States Department of Agriculture – Natural Resources Conservation Service. 2007. 2007 NRI Summary Report. [https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/nri/results/?cid=nrcs143\\_013646](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/nri/results/?cid=nrcs143_013646) (accessed July 2021).
- \_\_\_\_\_. 2021. “Web Soil Survey.” <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> (accessed April 2021).
- United States Energy Information Administration. 2021. California State Profile and Energy Estimates. February 18, 2021. <https://www.eia.gov/state/?sid=CA> (accessed October 2021).
- United States Environmental Protection Agency (USEPA). 2021a. “8-Hour Ozone (2015) Designated Area/State Information.” Last modified: September 30, 2021. <https://www3.epa.gov/airquality/greenbook/jbtc.html> (accessed October 2021).
- \_\_\_\_\_. 2021b. “Carbon Monoxide (1971) Designated Area/State Information.” Last modified: September 30, 2021. <https://www3.epa.gov/airquality/greenbook/cbtc.html> (accessed October 2021).
- \_\_\_\_\_. 2021c. “Nitrogen Dioxide (1971) Designated Area/State Information.” Last modified: September 30, 2021. <https://www3.epa.gov/airquality/greenbook/nbtc.html> (accessed October 2021).
- \_\_\_\_\_. 2021d. “Sulfur Dioxide (2010) Designated Area/State Information.” Last modified: September 30, 2021. <https://www3.epa.gov/airquality/greenbook/tbtc.html> (accessed October 2021).
- \_\_\_\_\_. 2021e. “Lead (2008) Designated Area/State Information.” Last modified: September 30, 2021. <https://www3.epa.gov/airquality/greenbook/mbtc.html> (accessed October 2021).
- \_\_\_\_\_. 2021f. “PM-10 (1987) Designated Area/State Information.” Last modified: September 30, 2021. <https://www3.epa.gov/airquality/greenbook/pbtc.html> (accessed October 2021).
- \_\_\_\_\_. 2021g. “PM-2.5 (2012) Designated Area/State Information.” Last modified: September 30, 2021. <https://www3.epa.gov/airquality/greenbook/kbtc.html> (accessed October 2021).
- \_\_\_\_\_. 2021h. “Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gases.” Last modified: July 21, 2021. [epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases](https://epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases) (accessed October 2021).
- United States Fish and Wildlife Service. 2009. *Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii)*. December 2009. [https://www.fws.gov/nevada/desert\\_tortoise/documents/field\\_manual/Desert-Tortoise-Field-Manual.pdf](https://www.fws.gov/nevada/desert_tortoise/documents/field_manual/Desert-Tortoise-Field-Manual.pdf) (accessed October 2021).
- University of Wisconsin-Madison. 2020. Rockd Application. Madison, WI. <https://rockd.org/> (accessed April 2021).

Webber & Webber Mining Consultants. 2013. Revegetation Plan for the Sigma Clay Mine.

Western Regional Climate Center. 1893-2016. Iron Mountain, CA (044297) / Parker 6 NE, CA (026250) / Parker Reservoir, CA (046699) - Climate Data Summaries. <https://wrcc.dri.edu/> (accessed April 2021).