

1 **3.11 MINERAL RESOURCES**

<b>MINERAL RESOURCES – Would the Project:</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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"/>

2 **3.11.1 Environmental Setting**

3 According to the State of California Department of Conservation Mineral Land  
 4 Classification Map, portions of Needles is located within a study area for Mineral  
 5 Resources Zone (MRZ) – 2a (California Department of Conservation Division of Mines  
 6 and Geology 1985) (California Department of Conservation 2015c). The following major  
 7 findings within Needles study area for minerals include:

- 8 • Hydrothermal mineralization within the Cherokee Mine Area, a 0.4 square mile  
 9 mineralized zone located south of Monumental Pass;
- 10 • Magnesite deposits located just west of Eagle Peak, which is considered the  
 11 most significant area containing industrial minerals in Needles; and
- 12 • Small magnesite occurrences, called the Captain deposit , east of the Needles  
 13 magnesite deposit

14 Portions of the Project area are within a MRZ-3a containing montmorillonite clay beds  
 15 located within 9 square miles along the west side of the River. This zone is described as  
 16 an area that has a moderate potential for the discovery of economic mineral deposits.  
 17 However, the Project area is currently planned and zoned as a regional park and no  
 18 current mining activities are present in or directly adjacent to the Project area.

19 The Project area is located where soil characteristics are Salothids and Indio-Silt.  
 20 Although the Project area has been highly modified, conditions have normalized to a  
 21 degree that routine wetland delineation is appropriate. The 2015 Wetlands Delineation  
 22 Report (Appendix O) identified soil textures generally ranged from clay to sand  
 23 depending on their position in the landscape. The Project area contains large areas that  
 24 are covered with a salt crust and the soils that commonly contain salt concentrations.  
 25 Currently, this area consists of 146.5 acres of land within a Reclamation dredge spoil  
 26 area created as a result of past dredging operations. Sand is considered a mineral  
 27 resource in the State of California.

28 During Phase 2, the creation of the open backwater channel would be conducted  
 29 through the excavation of soil material in the Project area. Once excavated, the soil  
 30 material would be placed in the staging area to the east directly adjacent to the Project  
 31 area (Figure 2.4-1); thus, the excavated material would not leave the Project area and

1 would remain on California lands. In addition, riprap material used to prevent scour in  
 2 the new backwater channel would be obtained from an existing Reclamation stockpile  
 3 along the River (Figure 2.4-2).

4 Phase 4 would include a monitoring plan that indicates future maintenance that may be  
 5 needed to maintain channel depths and ideal conditions/water levels for the LCR MSCP  
 6 targeted fish species. This may be conducted by dredging sediment from the channel  
 7 and moving dredge spoils to a spoil area used by Reclamation’s Dredging Operations  
 8 Program directly across the River located along the Arizona bankline (Figure 2.4-5). If  
 9 this maintenance activity is conducted, the quantity of the dredge material would be  
 10 dependent on the amount of sediment accumulated in the open backwater. Dredge  
 11 spoils have no value and are not sold by Reclamation.

12 **3.11.2 Regulatory Setting**

13 The following Federal and State laws and regulations pertaining to this issue area and  
 14 relevant to the Project are identified in Table 3.11-1.

15 **Table 3.11-1. Laws, Regulations, and Policies (Mineral Resources)**

<p>CA</p>	<p>Surface Mining and Reclamation Act (SMARA) (Pub. Resources, §§ 2710-2796)</p>	<p>In accordance with SMARA, the California Geological Survey classifies the regional significance of mineral resources and assists in the designation of lands containing significant aggregate resources. Mineral Resource Zones (MRZs) have been designated to indicate the significance of mineral deposits. The MRZ categories are:</p> <ul style="list-style-type: none"> <li>• MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.</li> <li>• MRZ-2: Areas where adequate information indicates significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.</li> <li>• MRZ-3: Areas containing mineral deposits the significance of which cannot be evaluated from available data.</li> <li>• MRZ-4: Areas where available information is inadequate for assignment to any other MRZ.</li> </ul>
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16 The following goals and policies related to minerals are from the San Bernardino County  
 17 2007 General Plan, Chapter VI. Open Space Element – Section B.6:

- 18 • **Goal CO 7. Minerals.** Current and future extraction of mineral resources that are  
 19 important to the County’s economy while minimizing impacts of this use on the  
 20 public and the environment would be protected by:
  - 21 ○ **CO 7.1.** In areas containing valuable mineral resources, establish and  
 22 implement conditions, criteria, and standards that are designed to protect  
 23 the access to, and economic use of, these resources, provided that the  
 24 mineral extraction does not result in significant adverse environmental  
 25 effects and that open space uses have been considered for the area once  
 26 mining operations cease;
  - 27 ○ **CO 7.2.** Implement the state Mineral Resource Zone (MRZ)  
 28 designations to establish a system that identifies mineral potential and  
 29 economically viable reserves.

1 **3.11.3 Impact Analysis (CEQA)**

2 **a) Result in the loss of availability of a known mineral resource that would be**  
3 **of value to the region and the residents of the state?**

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

7 **No Impact.** The Project Area is currently being used as a regional Park and  
8 mining activities presently do not take place within the Project area. Although  
9 sand is considered a mineral resource, the excavation of the soil material  
10 (composed of clay and sand respective to the specific location) within the Project  
11 area, the soil material would remain within the Project area to the east, directly  
12 adjacent to the Project area (Figure 2.4-1). Therefore, development of the Project  
13 will not result in the loss of availability of a known mineral resource or the loss of  
14 a site delineated as a mineral resource recovery area.

15 **3.11.4 Environmental Consequences (NEPA)**

16 **No Action Alternative**

17 The No Action Alternative would have no impacts related to Mineral Resources. The  
18 Project would not be implemented and the Project area would be managed as a  
19 Regional Park as described in Section 3.11.1.

20 **Proposed Action (Project)**

21 The Project is not anticipated to impact Mineral Resources within the Project area.  
22 Although the Project area is within Mineral Resource Zone MRZ-3a, the area is used as  
23 a regional Park and no mining activities are present. Although sand is considered a  
24 mineral resource, the excavation of the soil material (composed of clay and sand  
25 respective to the specific location) within the Project area, the soil material would remain  
26 within the Project area to the east, directly adjacent to the Project area (Figure 2.4-1).

27 **Cumulative Impacts**

28 The analysis area for potential cumulative impacts related to Mineral Resources was  
29 defined as the Project area because no potential impacts are anticipated outside the  
30 Project area. No cumulative impacts are anticipated because the Project area is used  
31 as a regional Park and no mining activities are present.

32 **3.11.5 Mitigation Summary (CEQA Only)**

33 The Project would not result in significant impacts to Mineral Resources. Therefore, no  
34 mitigation is required.