3.10 Recreation

3.10.1 Introduction

A recreation technical report was completed for the Project (USDA Forest Service 2012; Appendix J). This report identifies recreation values and potential direct and indirect effects to the recreation setting on Forest lands within a two mile radius of the Project area. The area of analysis has been defined in this manner to fully evaluate effects on the surrounding recreation setting and to ensure recreation values are identified. Recreation values are closely linked to public access, the natural soundscape, and scenic quality. Scenic quality is analyzed in Section 3.11. The following sections summarize the recreation technical report.

3.10.2 Applicable Laws, Regulations, and Standards

3.10.2.1 Federal

San Bernardino National Forest

The SBNF LMP includes the following management direction:

- REC1 – Recreation Opportunity
- Manage national forest land to achieve Recreation Opportunity Spectrum (ROS) classes (LMP Part 2, p. 144)

Recreation Opportunity Spectrum

Recreation opportunities can be expressed in terms of three main components: activities, setting, and experience. Combinations of these three components have been organized in a classification framework called the recreation opportunity spectrum (ROS). To ensure that there is a diversity of recreational settings for visitors to enjoy, the ROS is divided into six classes which characterize the types of outdoor recreation opportunities available. These are:

1. Primitive;
2. Semi-Primitive/Non-Motorized;
3. Semi-Primitive/Motorized;
4. Roaded/Natural;
5. Rural; and

3.10.2.2 State

There are no applicable State laws, regulations, or standards pertaining to recreation.
3.10.2.3 Local

**County of San Bernardino General Plan**

The County of San Bernardino General Plan establishes the following goals related to recreation:

*Goal OS 3 – The County will develop multi-purpose regional open spaces and advocate multi-use access to public lands including national parks, national forests, state parks, and U.S. Bureau of Land Management areas.*

*Goal OS 7 – The County will minimize land use conflict between open spaces and surrounding land uses.*

*Goal M/OS 1 – Ensure the preservation and proper management of National Forest lands within the Mountain Region to maintain the alpine character of the region.*

3.10.3 Affected Environment

The SBNF LMP divides the Forest into a series of geographical units called Places. Each Place has its own unique landscape character and management directives. Landscape character refers to the overall visual and cultural impression of its landscape attributes. It includes the landscape’s physical appearance and the cultural context that gives the location a special identity and a unique sense of place.

The Project area is located within the Desert Rim Place. The Desert Rim Place is a remote and rugged high desert landscape formed by complex geological faulting. This is the location where the north slope of the San Bernardino Mountains links up with the Mojave Desert. Primitive and semi-primitive recreation experiences are found here. Popular activities include driving for pleasure, wildlife viewing, off-highway vehicle use, hiking, backpacking, and hunting. No developed recreation sites are located within this Place. The Burnt Flat area, located 0.5 mile south of the Project area, is a dispersed camping location. Mining is part of the cultural history of this area. In the 1800s small amounts of gold, silver, and lead were extracted here. Today, the majority of the land is valued for the presence of large quantities of limestone mineral deposits used in the production of pharmaceuticals and cement.

The analysis area also extends into the Big Bear Backcountry Place. This Place is known for its colorful mining history, prehistoric habitations, and scenic character. It is extremely biologically diverse with important high desert, mountain meadow, and conifer forest ecosystems. This Place offers a wide variety of dispersed recreation opportunities. The Pacific Crest Trail traverses almost its entire length, offering popular hiking and equestrian opportunities. Holcomb Valley was the location of southern California’s largest gold rush and is now a popular mountain biking area. Other activities include wildlife viewing, driving for pleasure, rock climbing, cycling, and cross country skiing.

The prescribed recreation settings are primarily divided between an ROS class of semi-primitive/ non-motorized and semi-primitive/ motorized, excluding State Highway 18 which has a class of roaded/ natural. No developed recreation areas are located within the area of analysis.

3.10.3.1 Existing Condition

The area of analysis typically accommodates low levels of public recreation activity. Backcountry activity along the Burnt Flat area and hunting activity by local residents range from...
low to moderate levels. The area generally contains natural-appearing recreation settings with low levels of traffic, few social encounters and visitor impacts, and minimal site management. Industrial intrusions such as the sights and sounds of mining activity intermittently reduce the area’s naturalness, solitude and feeling of remoteness. These recreation setting conditions are consistent with the Project area’s Recreational Opportunity thresholds as established by the LMP.

**Desired Condition**

The LMP states the following desired conditions:

*The Desert Rim Place is maintained as a modified natural-appearing landscape that functions as a sanctuary for a large number of federally listed native plants and a highly valued area for limestone production. The values attributes to be preserved over time are the Jeffrey pine, white fir and incense cedar in the shaded aspects of ridges and canyons (LMP Part 2, p.64).*

*The Big Bear Backcountry Place is maintained as a historic and natural appearing landscape that functions as a recreation setting for backcountry rustic road-touring recreation experiences... The valued landscape attributes to be preserved over time are the stands of Joshua trees and Pinyon juniper, the large montane meadow system and the open high-desert undeveloped character... A wide variety of recreation uses are to be promoted where appropriate and environmentally sustainable (LMP Part 2, p.56).*

3.10.4 Environmental Consequences

3.10.4.1 Impact Analysis Approach

**CEQA Significance Criteria**

Appendix G of the State CEQA Guidelines suggest that lead agencies evaluate the potential significance of recreation impacts of a project by considering whether the project would:

- 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; or
- Include recreation facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

The Project does not include recreational facilities or require the construction or expansion of recreational facilities; therefore, the second threshold is not analyzed further in this document (see Appendix A-2 for additional information).

**NEPA Analysis Approach**

The NEPA analysis determines whether direct or indirect effects to recreation would result from the Proposed Action and provides a comparison of effects by alternative. As defined by the Council on Environmental Quality, significance of an effect is determined by the context and intensity of the resulting change relative to the existing environment (40 CFR 1508.27). As applicable, impacts are discussed in terms of spatial extent, duration and intensity. For this analysis, direct and indirect effects of dust from mining operations, restrictions on public access,
and/or noise from mining operations on the use of SBNF recreation opportunities were examined.

### 3.10.4.2 Alternative 1 – Proposed Action

**Direct and Indirect Impacts**

The purpose of Alternative 1 – Proposed Action is to provide high-grade limestone for mixing at the existing Cushenbury Cement Plant. Alternative 1 – Proposed Action would not increase the amount of cement being produced at the plant. Of the eleven employees that would work the South Quarry, eight would be transferred from the existing workforce at the East and West Pits, and three would be new workers. These new workers can be accommodated through the existing local workforce. Alternative 1 – Proposed Action would not increase the local population; therefore there would be no impacts from the increase in the use of neighborhood and regional parks. However, Alternative 1 – Proposed Action could result in some direct and indirect effects on recreational resources, including the following:

- Dust from mining operations;
- Restricted public access and the resulting effects of displacement on surrounding sites; and
- Noise produced from active mining.

It is possible that restricted access or dust or noise could cause recreationists to use other areas of the SBNF, resulting in increased use of those areas. The potential for this impact is described below.

**Dust**

The Project is located in the jurisdiction of the MDAQMD. The Project is subject to specific MDAQMD regulations related to dust control, listed below.

- Rule 401 – Visible Emissions
- Rule 402 – Nuisance
- Rule 403 – Fugitive Dust
- Rule 403.2 – Fugitive Dust Control, Mojave Desert Planning Area

Because of these requirements, direct and indirect effects from dust are expected to be minimal, and are not expected to negatively affect the recreation setting or recreational uses in the analysis area in the short or long term.

**Restricted Public Access**

Safety requirements of implementing Alternative 1 – Proposed Action would result in the direct effect of removing approximately 154 acres from public access. A 25 foot-wide safety berm is proposed to be built along the south perimeter of the new quarry, restricting all public access to the Project area. Potential indirect recreation effects include the displacement of recreation activities from the Project area. However, visitor displacement is not expected to result in noticeable changes to the surrounding recreation setting because of the lack of developed
recreational facilities, existing and expected low levels of recreation traffic, the minimal extent of visitor impacts, and because alternative settings are readily available nearby. Interaction between users at the nearest recreation area, Burnt Flat, is expected to remain at a low level, keeping the setting consistent with a semi-primitive ROS class. Users in the remainder of the Desert Rim Place and Big Bear Backcountry Place are also not expected to be adversely affected. Recreational values, settings and activities associated with the Pacific Crest Trail (solitude, low levels of managerial control, evidence of humans, distance from roads, etc.) would not be affected due to its distance (greater than two miles) from the Project area.

**Noise**

Blasting would occur with Alternative 1 – Proposed Action. Blasting would be limited to the hours of 10:00 am to 6:00 pm, Monday through Saturday. Blasting would occur approximately twice per week, although more frequent, smaller blasts would occur during the initial construction of the haul road. Other noise sources would include haul trucks, water trucks, and other heavy equipment. The quarry would be operated 250 days per year for 10 hours per day.

Alternative 1 – Proposed Action would have the direct effect of increasing industrial noise in the soundscape of the area of analysis. This includes drilling, blasting and noise associated with dozers, loaders and haul trucks. A noise analysis was prepared for the Project (Kunzman Associates 2012) and is discussed in detail in Section 3.9, Noise. The intensity this impact would have on the larger recreation setting is analyzed by location below. Locations referenced in the analysis below are shown on Figure 3.9-1, in Section 3.9.

**Location M1 (Holcomb Valley Road and FR 3N02):** Ambient sound was measured to average 41.9 dB including the sound generated from a passing truck (74.8 dB) and the sound of birds and wind (49.4 dB). Ambient sound averaged significantly higher that the modeled existing and proposed worst case scenario noise levels from active mining (35.5 dB and 36.5 dB, respectively). Therefore, Alternative 1 – Proposed Action would have a neutral impact on the existing soundscape at this distance from the Project site (11,000 feet).

**Location M2 (Intersection of FR 3N02 and FR 3N10):** Ambient sound was measured to average 39.9 dB with the most dominant source of noise caused by wind. Again, ambient sound is expected to average higher that the modeled existing noise from blasting and mining activity (39.2 dB). Ambient sound (39.9 dB) is 1 dB lower that the modeled noise from Alternative 1 – Proposed Action (40.9 dB). Noise begins to have a negative effect on the soundscape when it exceed ambient levels by more than 5 dB, therefore, Alternative 1 – Proposed Action would have a neutral impact on the soundscape at this distance from the Project site (6,000 feet).

**Location M3 (Burnt Flat – Gate on FR 3N02):** Forest Road 3N02 (the old Mohawk Mine Road) officially ends at a locked SBNF gate approximately 0.25 mile south of the Project site, which indicates the end of public access. The Burnt Flat area is popular dispersed recreation area that has a natural-appearing setting, occasionally punctuated by noise from industrial mining activity. Although this intermittently reduces the area’s naturalness, solitude and feeling of remoteness, it remains consistent with a semi-primitive ROS setting. Noise measurements taken from the Burnt Flat area registered an average ambient sound level of 32.5 dB. However, during existing operations’ loudest activities (e.g. blasting), noise levels were modeled at 43.3 dB. Modeling for the worst case scenario of Alternative 1 – Proposed Action shows sound levels averaging 46.1 dB, which is an increase of 2.8 dB from the loudest existing decibel levels. Because the average person does not perceive changes less than 3 dB, the loudest noise produced by the Proposed Action is expected to sound about the same as the loudest existing mining activity.
During the initial construction of the haul road, more numerous (up to once per day), but smaller blasts are expected to occur. The temporary increased rate of smaller blasts may create a short-term, localized impact to the natural soundscape of the Burnt Flat area. However, due to the existing level of mining noise, the low level of recreational use, and because visitors’ expectations are consistent with the area’s long cultural history of mining, construction of the haul road would have an overall minor impact on the soundscape.

**Location M4 (South Quarry Property Line):** The average ambient sound level on the proposed South Quarry property line is 42.4 dB, and the modeled existing operational level is 46.5 dB. Modeled noise levels for the worst case scenario of Alternative 1 – Proposed Action would be 66.6 dB, higher than existing operations. The soundscape at this location would be dominated by noise from industrial mining activity. This is to be expected because this area would be as close as 100 feet from the noise sources. Although a major, long-term, adverse impact to the natural soundscape would occur at this location, the impact would be localized to the area closest to the property line where public access would necessarily be restricted for safety reasons. Alternative 1 – Proposed Action includes the construction of a steep berm that would tie into steeper slopes on the east and southwest to restrict public access to the south quarry. Restricted access would discourage recreation activity close to the property line and therefore would result in displacement rather than an effect from noise. The effects from displacement are addressed above and in the cumulative effects analysis section below. A less than significant impact is anticipated.

**Location M10 (Cactus Flats ORV Area):** Although this location falls outside the area of analysis, noise measurements were taken from this location and are included for reference. Ambient sound was averaged at 45 dB including the sound generated from traffic on State Route 18. Ambient sound averaged higher than the expected worst case scenario noise from Alternative 1 - Proposed Action (36.0 dB) and, therefore, Alternative 1 – Proposed Action would have no impact on the existing soundscape at this distance (14,700 feet).

The modeled decibel levels only take into account the spherical spreading loss of sound calculated uniformly in a direct line of sight from the source travelling over soft terrain. Blasting charges used to loosen rock are strategically placed to focus the energy released into the earth, where sound is absorbed, and not along the surface where sound travels outward. The decibel levels of the proposed active mining noise are expected to be further reduced due to natural topography and constructed obstructions, including the proposed constructed berm surrounding the Project area.

No blasting or mining activities would take place between 6:00 p.m. and 10:00 a.m., when sound levels are naturally at their lowest. In addition, the perception of noise associated with blasting is expected to be dampened because the peak level of sounds, such as explosives, has an extremely short duration (usually one millionth to one hundredth of a second) so it is not perceived as loud as a modeled decibel estimate would indicate.

Therefore it is reasonable to conclude that the modeled worst case scenario (blasting noise) from implementation of Alternative 1 – Proposed Action would have a neutral to minor effect on the soundscape in areas within 0.25 mile from the Project boundary, and would diminish as the distance increases. The areas with adverse changes to the soundscape would be restricted from public use for safety reasons. Changes to the natural soundscape would be minimally noticeable above existing operational sound levels from dispersed recreation sites within the Desert Rim Place and would not be noticeable from the Big Bear Backcountry Place.
Cumulative Impacts

The cumulative effects analysis includes a land area encompassing the whole of the Desert Rim Place. The area of cumulative effects analysis was bounded in this manner to ensure that the intended diversity of ROS recreation settings within the Desert Rim Place is maintained.

The Desert Rim Place consists of 30,666 acres managed for dispersed recreation, of which 17,517 acres are classified as semi-primitive/non-motorized. Alternative 1 – Proposed Action would remove 154 acres from public access. Past, present, and reasonably foreseeable future actions include the nearby Omya Butterfield 3 Quarry expansion project, which is expected to remove an additional 28.8 acres, bringing the cumulative total to 182.8 acres of semi-primitive/non-motorized land from public access within the Desert Rim Place (Table 3.10-1).

### Table 3.10-1

<table>
<thead>
<tr>
<th>ROS Class</th>
<th>Total Acres</th>
<th>Acres Removed from Public Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive</td>
<td>11,914</td>
<td>0</td>
</tr>
<tr>
<td>Semi-Primitive/ Non-Motorized</td>
<td>17,517</td>
<td>154</td>
</tr>
<tr>
<td>Semi-Primitive/Motorized</td>
<td>1,070</td>
<td>0</td>
</tr>
<tr>
<td>Roaded Natural</td>
<td>161</td>
<td>0</td>
</tr>
</tbody>
</table>

This amounts to a total one percent reduction in land designated with a ROS class of semi-primitive/non-motorized from within the Desert Rim Place. Ninety-nine percent of the area would continue to contain natural-appearing recreation settings with low levels of traffic, few social encounters and visitor impacts, and minimal site management. Industrial intrusions such as sights and sounds of mining activity may continue to intermittently reduce the area’s naturalness, solitude and feeling of remoteness. However, these recreation conditions would continue to be consistent with the Recreational Opportunity Setting thresholds as established by the LMP, resulting in a neutral overall effect on the recreation setting.

Cumulative impacts from noise include the foreseeable future expansion of the Omya Butterfield 3 mine expansion. Decibels are measured on a logarithmic scale; therefore noise levels from more than one source cannot simply be added. Noise levels from combined sources are primarily perceived at the decibel level of the dominant source. Dominant noise sources resulting from Alternative 1 - Proposed Action have already been analyzed above under Direct and Indirect Effects. Any cumulative noise impacts to the soundscape would be secondary and would not be readily perceived by the listener. Thus, there would be no adverse cumulative noise impacts to the soundscape associated with the Proposed Action that would affect recreational users.

**Mitigation Measures**

Impacts would be less than significant therefore mitigation measures are not required.

**Residual Impacts after Mitigation**

Less than significant impacts would occur.
3.10.4.3 Alternative 2 – Partial Implementation

This alternative was developed in response to public comments requesting an alternative with a shorter duration and/or smaller footprint. The footprint of the quarry would be approximately 20 acres smaller and would not be as deep as with Alternative 1 – Proposed Action. Mining in the quarry would last 40 years rather than 120 years. As a result, reclamation and revegetation at the South Quarry site would be completed nearly 80 years sooner. Localized impacts related to mining, such as fugitive dust and noise, would also end earlier at this site. With this alternative, a higher grade limestone would still be required for blending at the existing Cushenbury cement plant and would be trucked to the plant after Phase 2 is completed, from approximately year 40 through year 120.

**Direct and Indirect Impacts**

Direct and indirect effects of this alternative on the recreation setting would be similar to those of Alternative 1 – Proposed Action, but would be shorter in duration. Because of this shorter duration, effects would be reduced from those described under Alternative 1 – Proposed Action. Displacement effects due to the removal of the Project site from public use would be similar to Alternative 1 – Proposed Action during mine operation. The adverse effects of noise on the natural soundscape adjacent to the property line would also be similar to Alternative 1 – Proposed Action during mine operation, but would also cease 80 years earlier than with implementation of the Proposed Action.

Two sites in California and one site in Nevada have been identified as potential off-site sources for high-grade limestone. The effects of trucking in limestone after Phase 2 (years 40 to 120) would have a neutral effect on the recreation setting.

**Cumulative Impacts**

The cumulative effects analysis for this alternative would be the same as those described for Alternative 1 – Proposed Action. Impacts would be less than significant.

**Mitigation Measures**

Impacts would be less than significant therefore mitigation measures are not required.

**Residual Impacts after Mitigation**

Less than significant impacts would occur.

3.10.4.4 Alternative 3 – No Action/No Project

**Direct and Indirect Impacts**

If Alternative 3 – No Action/No Project is implemented and the South Quarry is not developed under this Plan of Operations, there would be no direct or indirect adverse effect on recreation. Recreation opportunities, activities and setting would continue to be very similar to existing conditions. Two sites in California and one site in Nevada have been identified as potential off-site sources for high-grade limestone. The effects of trucking in limestone would have a neutral effect on the recreation setting.
Cumulative Impacts
No cumulative impacts to the ROS setting, recreational areas or activities would occur with implementation of the No Action Alternative.

Mitigation Measures
No impacts would occur therefore mitigation measure would not be required.

Residual Impacts after Mitigation
No impacts would occur.