



Key Observation Point 3

This photo was taken along the near the Eastgate, looking southeast. In the foreground is extremely sparse vegetation and predominant sand. Middle ground continues the pattern of the foreground. The South Avawatz Mountains can be seen in the background. The VRM class is III, with a scenic quality rating of good. The sensitivity rating is high in the background. See Figure 3.9-2 for a layout of the VRM classifications in the study area.

Figure 3.9-5: Key Observation Point 3

3.10 Recreation

The ROI for recreation for the proposed action is the West Mojave Desert. The west Mojave Desert contains lands that are suitable and used for camping, rock hounding, horseback riding, land sailing, OHV use, and sightseeing. With the exception of organized events (such as competitive events, product testing, filming, musical events, etc.), these recreational activities can be pursued without government permits. The BLM provides guidelines for OHV use on public lands within the study area, and the California Department of Fish and Game regulates hunting. The Congressionally withdrawn lands are being managed under an Interim Management Plan (IMP) to meet non-impairment conditions. Most activities can still be pursued during the period that the IMP is in place, although those activities that do not meet the non-impairment criteria (such as hunting activities and land sailing are not allowed).

Recreational activities associated with the ROI are a source of noticeable and stable economic value to desert communities. According to the BLM, camping, land sailing events, and other activities generate economic resources needed to maintain the desert and add economic value to the nearby communities.

This page intentionally left blank

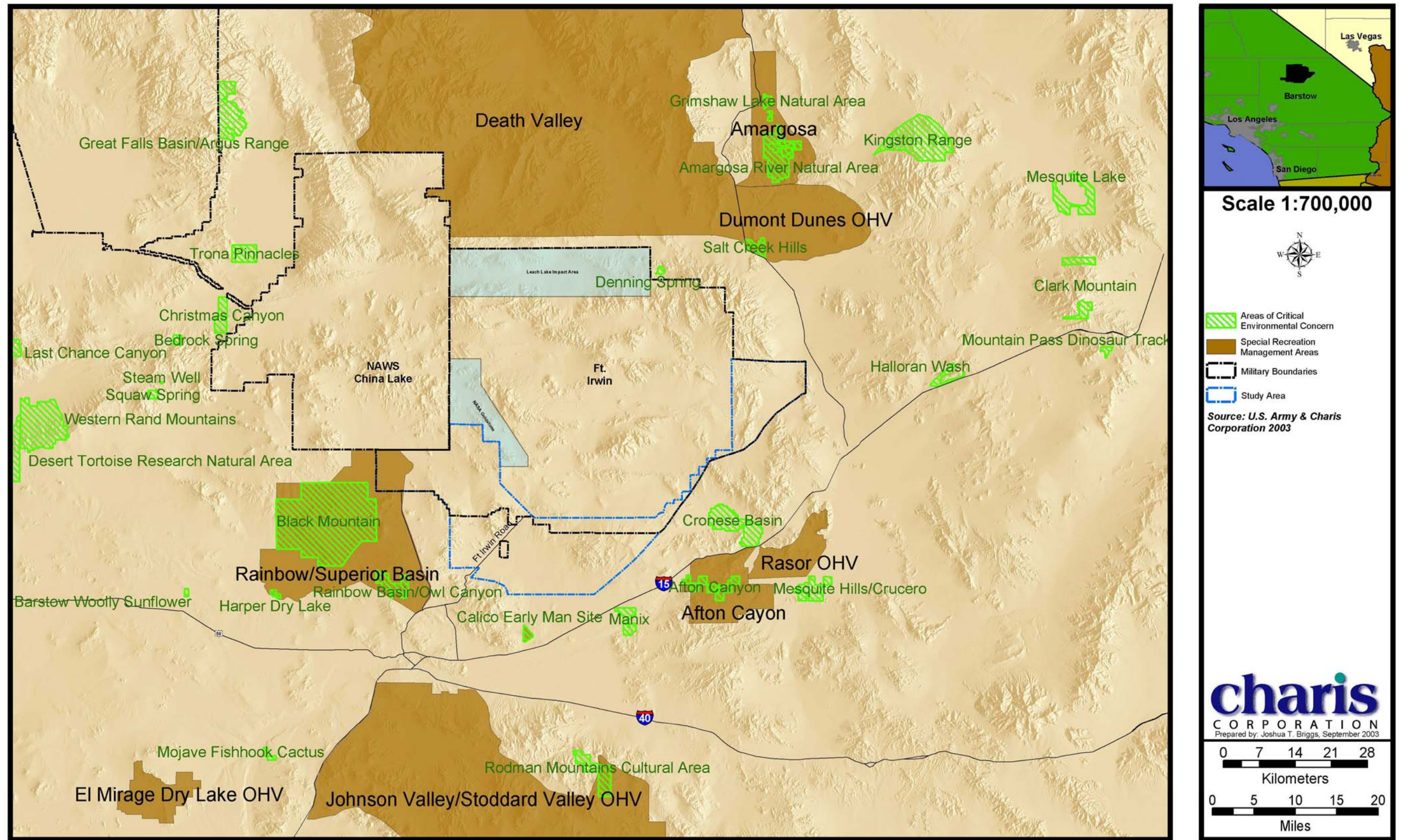


Figure 3.10-1: Barstow Extensive Recreation Management Area with Special Recreation Management Areas

California residents use the California Mojave Desert for recreation. BLM Barstow District Office manages the majority of public lands in the ROI. The study area forms a very small portion of the ROI.

The Barstow Extensive Resource Management Area contains nine Special Recreation Management Areas (SRMAs):

- ❖ Calico Early Man Site
- ❖ Dumont Dunes Off-Highway Vehicle Area
- ❖ Afton Canyon
- ❖ Amargosa
- ❖ Death Valley
- ❖ El Mirage Dry Lake Off-Highway Vehicle Area
- ❖ Razor Off-Highway Vehicle Area
- ❖ Stoddard Valley Off-Highway Vehicle Area
- ❖ Rainbow/Superior Basin
- ❖ Salt Creek Hills

Figure 3.10-1 shows the SRMAs geographically within the Barstow Extensive Resource Management Area. The Rainbow/Superior Basin SRMA falls partially within the western portion of the study area.

The BLM estimates the number of visitors and the amount of time they spend participating in recreational activities in each of its SRMAs. A visitor may participate in a number of activities during each visit. Therefore, visitors may be counted more than once if they participate in more than one activity. Estimated recreational use for some of the nine recreation areas are shown in Table 3.10-1.

3.10.1 Barstow Extensive Recreation Management Area

The study area overlaps approximately 0.1 percent the Barstow Extensive Recreation Management Area (RMA). This area contains a myriad of landforms and topographic features. Recreation in this area is dispersed and includes activities such as camping, hunting, hiking, horseback riding, rock-hounding, photography, wildlife observation, vehicle touring, target shooting, mountain biking, picnicking, and general desert enjoyment.

The Barstow Extensive RMA includes wilderness areas, ACECs, other OHV areas, and other SRMAs, which offer other types of recreation opportunities. The Calico Early Man Site, Afton Canyon, and Razor SRMAs are located south and southeast respectively from the study area. Figure 3.10-1 shows the position of the Barstow Extensive RMA and the nine SRMAs within it.

Table 3.10-1: 2001 Recreational Uses within the Barstow Resource Area

CATEGORY	RECREATION AREA					
	AFTON	DUMONT DUNES	EL MIRAGE DRY LAKE	RASOR	STODDARD/ JOHNSON	RAINBOW/ SUPERIOR
Acreage	43,362.63	77,480.95	25,282.83	24,959.30	534,072.70	171,125.97
Peak Use	May	February	May	May	May	May
Annual Visits	6,775	103,001	129,573	14,812	175,491	24,351
Most Popular Activities (Top 5)	OHV— Cars/Trucks SUVs	Camping	Camping	Camping	Camping	Camping
	Camping	OHV— ATV	Picnicking	OHV— ATV	OHV— Motorcycle	Viewing— Wildlife
	Nature Study	OHV— Dune-buggy	OHV— Motorcycle	OHV— Cars/Trucks SUVs	OHV— Cars/Trucks SUVs	OHV— Cars/Trucks SUVs
	Viewing— Wildlife	Viewing— Interpretive Exhibit	OHV— ATV	OHV— Motorcycle	Picnicking	Picnicking
	Viewing— Other	Photography	Specialized Sport/ Event (non motor)	Social Gathering	OHV— ATV	Hiking Running Walking
Area of Critical Environmental Concern (ACEC)	Afton Canyon Natural Area	Salt Creek ACEC				Rainbow Basin Natural Area Harper Dry Lake

Source: BLM Recreation Management Information System Fiscal Year 2001, Barstow Field Office, CA (Johnson 2002)

Death Valley National Park is located north of the study area and is administered by the NPS. Guided tours through the Barstow Resource Area are provided through a number of sources. If the tours cross military lands, they are arranged in advance in accordance with the military training schedule. In addition, Fort Irwin arranges tours, upon request, to accommodate research activities. Of special importance to tour guides is continued access to Inscription Canyon, which is located in the Black Mountain Range northwest of Barstow.

3.10.2 Recreation Areas in the Study Area

The Rainbow/Superior Basin SRMA encompasses approximately 171,130 acres. Of that, approximately 4,090 acres are located in the study area on the northeast corner. Rainbow

Basin contains outstanding scenery, unique geology and paleontology, and has prehistoric value. Rainbow Basin has a diverse landscape of hills, canyons, and washes. Aside from these unique features, Rainbow Basin is also used for wildlife viewing, camping, OHV use in posted areas, touring, hiking, photography, and horseback riding. Camping in Rainbow Basin is permitted only in the Owl Canyon Campground on a first-come, first-serve basis. The location of the Rainbow/Superior Basin SRMA is shown in Figure 3.10-1.

Two ACECs are located in the Rainbow/Superior Basin SRMA. Both are located in the southern portion of the SRMA. Harper Dry Lake is located 28 km (17.4 mi) from the southwestern tip of the Superior Valley portion of the study area. Rainbow Basin Natural Area is located to the east of Harper Dry Lake almost 10 km (6.2 mi) from the boundary of the study area along Fort Irwin Road.

3.10.2.1 Other Recreation Areas

Dumont Dunes SRMA

The Dumont Dunes SRMA is located approximately 20km (12 mi) north of the east gate portion of the study area and is accessible via Highway 127. It contains approximately 77,480 acres. This region is bordered by steep volcanic hills and the Amargosa River, and is recognizable from a distance because of its distinctive sand dunes. The Dumont Dunes SRMA offers lands for OHV recreation. Most visitors ride motorcycles or all-terrain vehicles (ATVs), sand rails, or tour the area in 4-wheel drive vehicles. Other recreational activities include camping, rock hounding, and photography.

The historic Tonopah and Tidewater Railroad, to the east of the Dumont Dunes, was in operation between 1905 and 1940. It remains a historic place to visit while in this SRMA. The Kingston Range Wilderness to the north and east also borders the SRMA. This area is closed to motor vehicles.

Stoddard/Johnson SRMA

The combined size of Stoddard/Johnson is approximately 534,070 acres and is 21 km (13 mi) south of the southern boundary of the study area. Both areas are used by off highway recreational users, although more ATV and motorcycle users are found in Stoddard. Both areas allow camping in duration not to exceed 14 days. Shotgun use is permitted in Johnson but not in Stoddard. Stoddard is also used extensively for competitive racing, by permit.

Rasor SRMA

The Rasor SRMA is more remote than other off highway user areas. It contains approximately 24,960 acres and is 18 km (11 mi) south of the southern boundary of the study area. The historic Mojave Road runs through Rasor. Motorcycle, ATV, 4-wheel drive vehicle use, and occasional sand rails are seen within this SRMA. Shotgun use is also permitted.

El Mirage SRMA

El Mirage consists of approximately 25,280 acres and is 66 km (41 mi) south of the southern boundary of the study area. Attractions in El Mirage include the dry lakebed, Shadow Mountains, the El Mirage Basin, and the Twin Hills. The road network allows for easy camping along most sections of the SRMA. The area also supports competitive racing and commercial filming, by permit. The flat surface of the lakebed makes it a popular destination for land sailors and other recreationists.

Afton SRMA

Afton Canyon SRMA is made up of approximately 43,360 acres and is 10 km (6.2 mi) south of the southern boundary of the study area. Afton Canyon is an area where the Mojave River flows above ground. The environmental conditions of Afton Canyon make the area prime for wildlife viewing, hiking, camping, and vehicle touring. Afton Canyon consists of private and public lands. Southern Pacific Railroad owns some of the private lands. Shotgun hunting is allowed.

3.10.2.2 Dispersed Recreational Activities

Dispersed recreational uses are not focused on any single location but occur throughout much of the ROI. Dispersed recreation activities include rock hounding, OHV use, sightseeing, camping, hunting, hiking, and horseback riding. Dispersed recreationalists use the region within the study area throughout the year and without permit constraints.

Sightseeing and Camping

Sightseeing activities occasionally occur within the study area. No developed camping facilities are within the study area due to a lack of demand and limited water availability. Some campers may use the dry lakebeds for land sailing activities or horseback riding. The only organized camping facilities near the study area and within the CDCA are at Rainbow Basin/Owl Canyon and Afton Canyon.

Dispersed or primitive camping locations outside, but near the study area, include the Fremont Peak/Cuddeback Lake area and the area near Opal Mountain at Murphy's Well. The BLM has designated multiple-use classes (Limited Use [L] and Moderate Use [M]) within the study area to allow camping without a permit within 300 feet of any roadway. There is a 14-day limit for camping at any one site. Dispersed/primitive camping vehicles are not allowed within designated wilderness areas.

Dispersed Off-Highway Vehicle Use

Although OHV use occurs within the study area, some locations are identified as dominant-use areas, most likely because of their accessibility. This includes power-line corridors that occur several miles south and east of the study area. OHV use near Superior Dry Lake is frequent and is related to rock hounding and land sailing. State Highway 127 (which runs generally north-south outside the eastern portion of the study area) and numerous unpaved access roads provide access to terrain suitable for OHVs.

Dispersed OHV use within the CDCA is a popular recreational activity pursued by riders who wish to avoid the more intensive OHV open areas. Open areas are those that permit cross-country travel contained within an open area boundary. A California "green sticker" is required for vehicles operating within the boundaries of an open area. Limited-use areas require vehicles to remain on existing designated travel routes. Vehicles are required to display a valid state license plate. Limited and Moderate Use classifications within the study area limit OHV users to designated routes, which generally include existing roads and trails on public lands. Adjacent private lands are occasionally used while driving existing roads. The Manix railway area, adjacent to the study area, is easily accessible to motorcycles and ATVs.

Another popular recreational area for off-roading is the Mud Hills area. During the spring, the majority of motorcycle use is in the Mud Hills area.

Rock Hounding

Rock hounds are typically interested in mineralogy, geology, and gemology. This activity is very limited within throughout the study area. The Alvord Mountain area has concentrated rock hounding due to vehicle accessibility and exposed mineral deposits. Specific materials include jasper, agate, calcite, chalcedony, and pyrite. Rock hounding is especially popular immediately east of Alvord Mountain on Clues Ridge and within Spanish Canyon. Other significant locations are the north slope of the Calico Mountains, Lane Mountain, and portions of the Paradise Range. Agate, pyrite, gold, jasper, petrified palm wood, and travertine are among the most common materials associated with these two areas. The Gold Prospectors Association of America (GPAA)—one of the world’s largest prospecting organizations—has claims at Coolgardie Mesa and Lane Mountain near the southwest portion of the study area. GPAA activity has been sporadic, but gold prospecting continues to be popular within and near the study area. Other locations outside the study area include Mule Canyon (located three miles north of Yermo), and Afton Canyon (located south of the study area off Afton Road).

Fossil Hunting

The Mojave Desert is well known for fossil hunting. There are two fossil hunting areas adjacent to the study area: Rainbow Basin and Manix Lakebed. Both are off limits for the hobbyist, but scientific work is permitted with a BLM permit. It is illegal to remove anything from Rainbow Basin or Manix Lakebed; however, other areas of the Barstow Formation are open to fossil hunting. Fossils include species no longer found in the Mojave Desert.

“Fossils are most easily found where the land is dry, barren, and rapidly eroding – where natural processes expose them to view and they are not likely to be broken up by root growth or obscured by soil formation and vegetation cover. The BLM-administered western lands are often just such areas”.

Lake China located on China Lake Naval Air Weapons Station contains fossil remains of Rancholabrean megafauna and such finds might be found around other Pleistocene dry lakebeds such as the Superior dry lakes and Coyote dry lake in the study area.

For more on fossils see section 3.6 Cultural Resources.

Horseback Riding and Hiking

Horseback riding near the study area includes both organized and unorganized events. Equestrian groups, such as Equestrian Trail, Inc. (ETI), use numerous locations outside the study area for organized events. ETI provides riding opportunities throughout the year, lasting from a few hours to a few days. ETI offers rides to Black Canyon, Superior Dry Lake, and shorter rides to Owl Canyon/Rainbow Basin, Calico Ghost Town, Sawtooth Canyon, Cross Ranch, and Afton Canyon. Coyote Lake and areas near Fort Irwin are rarely used by ETI for horseback riding. Events are also organized to introduce riders to the historical trails outside the study area.

Several miles of dirt trails exist within the study area. These trails—generally accessible by unpaved roads—may be used for horseback riding, mountain biking, hiking, and other trail activities. The mountains and terrain in the study area, such as the Avawatz Mountains, Silurian Hills, Alvord, Quail, and Owlshead Mountains, offer opportunities for hikers and backpackers.

The East Mojave Heritage Trail runs parallel to a small portion of the eastern portion of the study area. It offers several stops at historic points associated with the mining industry on the

Tonopah and Tidewater Railroad. This 100-mile trail—built by volunteers in conjunction with the BLM—extends west from the Valjean Valley, then south along the eastern side of the Tonopah and Tidewater Railroad, parallel to State Highway 127. The trail continues around the southern portion of the Silurian Hills, then southwest along the utility corridor (located just outside the southeastern boundary of the study area) to the city of Baker. One other historic trail crosses a small portion of the study area—the NPS Old Spanish Trail—supported trade from 1829 to 1848 between Santa Fe, New Mexico and Los Angeles, California. The route crossed the southeastern edge of Fort Irwin, continued northeast past Red Pass Lake, and along the eastern edge of the Avawatz Mountains to Salt Springs. Within Fort Irwin, the Spanish Trail passes through Bitter Springs then south through Spanish Canyon in the Alvord Mountain range.

Hunting and Shooting

Hunting in the study area is regulated by the California Department of Fish and Game. Hunters must have a valid license and are responsible for knowing all applicable hunting laws and regulations. Hunting within the study area is limited to fowl and small game, such as quail, chukar (grouse), dove, jackrabbits, and cottontail rabbits. Bird populations are dependent upon the amount of water in the area. Hunting is not allowed within a half-mile of any designated campground. Also, firearms are not allowed within 150 yards of livestock or buildings, per San Bernardino County Ordinance 22.011.

In the context of this document, shooting is defined as a recreational activity using a firearm directed toward an inanimate object (i.e., target shooting), and does not pertain to game hunting. Shooting within the study area is low-intensity recreation that usually occurs along roadsides. Legal target shooting is allowed in the areas north, northwest, or northeast of Barstow, taking into consideration any private land, posted signs, and other rules and regulations. It is illegal to shoot at trees, bottles, or other objects other than retrievable, freestanding targets. Shooting is not allowed within 150 yards of any man-made object, camp, domestic livestock, or occupied dwelling.

Land Sailing

Land sailing occurs on dry lakebeds, particularly the Superior Dry Lakes located near the western boundary of the study area. The Superior Dry Lakes offer remote accessibility (discouraging competing activities), appropriate surface conditions (generally smooth, lacking wheel ruts or excavations), and the large spatial characteristics required by the design and nature of this sport. According to the North American Land Sailing Association (NALSA), an appropriate dry lake must be at least seven to eight miles long, one mile wide, and consist of open land in its natural state because land sailing vehicles travel at fast speeds and need large amounts of space. Ideal land sailing surface conditions include a fairly firm surface with a soft upper layer, which exists after ample rain. Although Coyote Dry Lake, located south of the study area, offers the special attributes required by land sailing participants, the lake does not have the smooth surface necessary for land sailing and therefore is not used by NALSA. While land sailing occurs at the Silurian Dry Lake, part of which is located in the Silurian Valley portion of the study area, its surface is often too soft and rarely used by organizations such as NALSA.

Observation Activities

Observation activities include bird watching, photography, wildflower viewing, and scenic drives. The desert provides a wide range of habitats, with elevations from near sea level to over 6,000

ft above sea level. Many species of birds, wildflowers, and wildlife provide opportunities for photography and flora and fauna viewing.

The BLM designated Copper City Road to Superior Valley as a wildflower drive route. Along this route there are Joshua Trees, desert candle, blazing star, fiddleneck, purple mat, and gilia. Razor Mountain, in the eastern part of the Mojave, is a BLM-designated wildflower hike area. In years with warm winter temperatures and some rainfall, wild onion, blue dicks, desert lily, sand verbena, and desert candle may be found along the Razor Mountain wildflower hike route.

There are over 240 species of birds found in the Barstow Resource Area. Some of the species include hawks, ducks, loons, and sandpipers. The BLM has formed partnerships to protect birds and their habitat. One such partnership is the Partners in Flight, which focuses on protecting the neotropical birds. The BLM has also begun implementing the Nongame Migratory Bird Habitat Conservation Strategy Plan. Migratory birds are protected by federal law under the Migratory Bird Treaty Act of 1972.

Barstow BLM has designated Afton Canyon, Amargosa Canyon, and Harper Dry Lake as “Watchable Wildlife Viewing Areas” in the Barstow Resource area. These areas are prime bird watching, wildflower viewing, and/or wildlife viewing areas. All three areas fall well outside the study area.

3.11 Mining

The study area includes approximately 249,650 acres of federal, state, and private lands. Approximately 62,540 acres of the study area are federal lands managed by the BLM, which allows the exploration and development of mineral resources on multiple-use lands under its jurisdiction. The management framework for mineral resources on BLM land in the Fort Irwin area is provided by the *Geology, Energy, and Mineral Resources Element* of the CDCA Plan, 1980 as amended.

Approximately 2,020 acres of the land in the study area are state lands and are managed by the SLC, which administers a leasing program that encourages mineral exploration and development of many state-owned lands. Approximately 56,370 acres in the study area are privately owned. The largest private landowner, the Catellus Development Corporation (Catellus), permits third-party mineral exploration and development on many of its holdings using right-of-entry and leases.

3.11.1 Mineral Deposits

Under federal laws and regulations, mineral deposits located on federally administered land are classified into three groups: locatable, leasable, and salable. Locatable minerals include metallic minerals (e.g. gold, silver, lead) and nonmetallic minerals (e.g. fluorspar, asbestos, mica). Under the General Mining Law of 1872 (as amended), U.S. citizens are given the opportunity to explore for, discover, and purchase certain valuable mineral deposits on unreserved public domain land. Locatable deposits are those mineral deposits that are authorized to be claimed under the General Mining Law of 1872 (as amended). Locatable minerals, including gold, silver, iron, tungsten, zeolite, and cement grade limestone, have one or more various locations in the study area with a high potential for accumulation. Gold and copper have one or more locations in the study area with a moderate potential for mineral deposit accumulation, as shown in Figure 3.11-1.