### 3.7 Aesthetic Resources

This section of the Final Environmental Impact Report describes the potential impacts of the proposed Eagle Mountain Pumped Storage Project (Project) on aesthetics and visual resources. The primary focus of the analysis is on scenic areas and scenic views from the Project location and from adjacent properties. The impact analysis is based upon field reconnaissance and review of pertinent documents.

### 3.7.1 Regulatory Setting

The following federal, state, and local laws and policies apply to the protection of visual resources. The proposed Project will be constructed and operated in conformance with all applicable federal, state, and local laws, ordinances, regulations, and standards (LORS).

Portions of the Project site are located on private lands which are not subject to federal or state land management requirements. Other portions of the Project site are located on federal land which is managed by the Bureau of Land Management (BLM) and is therefore subject to the visual resource LORS of that agency.

#### 3.7.1.1 Federal

Short segments of the water pipeline and transmission line are located on county lands; the Project would be designed to adhere to Riverside County Ordinance 655 (Regulating Light Pollution).

Bureau of Land Management Visual Resource Management System is based on a three-step process that involves an assessment of (1) scenic quality; (2) visual sensitivity; and (3) viewing distance zones. Under this system, Key Observation Points (KOPs) are established and the visual sensitivity of an area determined based on defined landscape character types and scenic quality ratings. Results of these three assessment categories are grouped into established VRM Classes, which are used by the BLM to evaluate the significance of visual impacts from proposed projects.

BLM's VRM classes help establish management objectives and provide a framework for characterizing the relative value of the visual resource and degree of acceptable change in visual character. The four VRM classifications are described briefly below:

**VRM Class I.** The objective is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

**VRM Class II.** The objective is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic

elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

**VRM Class III.** The objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate or low. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

**VRM Class IV.** The objective is to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

**Federal Aviation Administration** may require the Project to file a notice for construction or alteration for any structure more than 200 ft. above ground level (AGL). [Title 14: Aeronautics and Space, Part 77—Safe, Efficient Use, And Preservation Of The Navigable Airspace § 77.9 Construction Or Alteration Requiring Notice].

Two small airports exist in the vicinity. A single private landing strip is located to the south of the Eagle Mountain townsite and west of Kaiser Road. This airstrip is infrequently used and does not appear on the Airport/Facility Directory. The Project's proposed 500kV transmission line will route within 2 miles of this private landing strip. The Desert Center Airport is a privately owned property located southeast of State Route 177 (Desert Center-Rice Road) and north of I-10 in the Desert Center community, in unincorporated Riverside County. The Desert Center Airport is no longer used as an aviation facility.

As required by the FAA, the Project would be designed to adhere to all mandatory construction and operational noticing procedures.

#### 3.7.1.2 Local

**Riverside County Ordinance 655** identifies lighting standards for outdoor light fixtures. The Project would be designed to adhere to Riverside County Ordinance 655 (Regulating Light Pollution).

### 3.7.2 Existing Conditions

Visual resources were identified and analyzed primarily within a 3 mile limit of the principal Project components, which include (a) the pumped storage facility site, (b) the transmission line and related interconnection site, and (c) the pipeline. The Project components traverse an area that is visually characterized by broad, flat desert valleys bordered by highly eroded mountain ranges. The proposed Project facilities will be located within a formerly mined site in a desert mountain range known as the Eagle Mountains. A regional landfill proposed by Kaiser Ventures,

LLC (Kaiser) would also occupy portions of the formerly mined lands. The transmission and pipeline routes cross mostly flat, desert valley land known as the Chuckwalla Valley.

### 3.7.2.1 Regional Landscape Setting

The proposed Project lies within a geographic area known as the Basin and Range Province (Fenneman, 1931). This area is characterized by a combination of arid and semi-arid landscapes set at the base of rugged mountain ranges including the San Jacinto, San Bernardino, Little San Bernardino, and Santa Rosa mountains. These contrasting landforms with their varied colors and dappled vegetation patterns result in exceptional scenic quality and dramatic long views from key viewpoints. Elevations range from a high of 11,502 feet mean sea level (msl) at Mt. San Gorgonio Peak 100 miles west of the Eagle Mountain site, to a low of -228 feet below msl at the Salton Sea about 50 miles to the south.

The lower elevations include numerous alluvial fans, which are washes that form at the mouth of many of the canyons draining the mountains. These areas create a visually interesting transition between the mountains and the valley floor. The valley floor is comprised of a mix of sand dunes and sand fields that are enhanced by the presence of mesquite hummocks that provide a vivid contrast of green against the lighter sand color. In the spring, particularly after an above average precipitation event, the dunes and sand fields are covered with a profusion of annual plants that create a mosaic of color (CVMSHCP, 2007).

The mountainous portions of the Project area include the Eagle Mountains, Coxcomb Mountains, Palen Mountains, and Chuckwalla Mountains. These ranges give way to the Lower Chuckwalla Valley and the small communities of Desert Center and Lake Tamarisk. Interstate 10 (I-10), a major east-west travel route, crosses the Chuckwalla Valley in the southern section of the Project area. The relatively flat landscape and sparse vegetation creates a strong visual contrast to the rugged desert mountains, which rise abruptly from the valley floor.

### 3.7.2.2 Scenic Quality of the Study Area

The visual character of the study area was documented using scenic quality classes and guidelines from the VRM system. According to this system, scenery is rated Class A (unique), Class B (above average), or Class C (common) based on scenic quality rating criteria including landform, vegetation, color, architectural/cultural modifications, water, and adjacent scenery influence. Scenic quality classes and landscapes within the Project vicinity are summarized below.

<u>Class A</u>: Class A landscapes encompass unique natural features and landscapes with high ratings in a variety of the assessment parameters. Class A landscapes within the Project study area include the Coxcomb Mountains, located approximately 5 miles to the east of the Project site (Figure 3.7-1).

<u>Class B</u>: Class B landscapes in the study area encompass landforms/areas that exhibit above average ratings based on scenic quality assessment parameters. Class B landscapes include most

of the Eagle Mountains surrounding the Project site, and the Chuckwalla Mountains (Figure 3.7-2).

<u>Class C</u>: Class C landscapes are represented by areas and features that exhibit relatively low ratings in several of the scenic quality assessment parameters, or exhibit discordant visual values due to man-made modifications or intrusions. Class C landscapes within the study area include the Chuckwalla Valley and the Eagle Mountain Mine and townsite (Figures 3.7-3 through 3.7-6).

### 3.7.2.3 Central Project Area Scenic Character Assessment

The reservoirs and powerhouse for the Project are proposed within a former large-scale iron ore mine complex that is located along the eastern edge of the Eagle Mountains. Mined areas within the Project area represent highly disturbed, human-modified landscapes consisting of large open pits, tailing piles and ponds, the skeletons of ore processing facilities, and mining equipment areas. The Eagle Mountain Mine extends into the mountain slopes and presents a distinctly different visual character from the surrounding undisturbed portions of the mountains. The disturbed slopes exhibit regular, curved terraces extending into the open pits. Tailing piles are smooth-sloped and contrast in both texture and color with the natural topography. Some vegetation has invaded the idle mine areas, including both the open pits and the slopes of tailing piles.

Remnants of the ore processing facilities can be seen inside the fence that controls entry to the mine. Outside the fence, the town of Eagle Mountain is largely comprised of deserted homes and vacant buildings. A few of the homes are still used to house Kaiser employees.

Though the mined area provides significant visual variety to the area, the landscape modifications are not visually compatible with the adjacent form, line, color, and texture of the surrounding mountains. The overall scenic quality of this area is low (Figures 3.7-4 and 3.7-5).

While the mine area itself is a highly disturbed, human-modified environment with common (low) scenic quality, the surrounding mountains, with their rugged, rocky and steep grades, sparse vegetation, and variety of colors create a very scenic backdrop. The nearby Coxcomb Mountains to the east, rise higher, are more rugged, and exhibit a variety of colors from grays, to mauve to tan and brown. These mountains are more visually diverse and their scenic quality is high (Class A). The landscape character of the Eagle and Chuckwalla mountains are more typical of the regional landscape setting, and therefore, their scenic quality is moderate (Class B).

Chuckwalla Valley Scenic Character Assessment. Access to the Eagle Mountain mine site, and the transmission line and water pipeline corridors are through the Chuckwalla Valley. The Chuckwalla Valley is representative of desert basin features, as is the Pinto Basin, which is located north of the Project on the other side of the Eagle Mountains and effectively out of the Project viewshed. These expansive basins consist of relatively flat to gently sloping topography that visually separate and accent adjacent mountain ranges. The basins consist of a variety of colors created by the combinations of alluvial washes, wind-blown landforms, and vegetation.

The natural features of the Chuckwalla Valley are modified by residential and commercial developments, including the Eagle Mountain townsite, Lake Tamarisk, and Desert Center. Linear landscape elements within this landscape unit include roads, transmission lines, railroad tracks, off-highway vehicle tracks, the Colorado River Aqueduct (CRA), numerous stormwater draining dikes for the interstate and CRA, and the Metropolitan Water District's (MWD) Eagle Mountain Pumping Plant and related facilities. Primary transportation corridors within the unit include I-10 and State Route 177.

The expansive scale and flat topography of the basin offers panoramic views of the surrounding mountain ranges from many locations. However, the overall scenic quality of the Chuckwalla Valley within the viewshed of the Project is considered common (Class C). The relatively flat and uniform landscape character is typical of the regional landscape setting. Existing developments within it additionally detract from the natural qualities of the landscape (Figure 3.7-6).

Scenic Quality designations for the Project area are summarized in Table 3.7-1.

#### 3.7.2.4 Visual Sensitivity Analysis

An analysis of visual sensitivity takes into account several elements. These include viewer activity and expectations, viewer numbers, view duration, and viewer distance. Noted sites were analyzed for visual sensitivity according to these evaluation factors as summarized in Table 3.7-1. Locations and sites contributing to the area's visual sensitivity are described below.

**Joshua Tree National Park** (JTNP) surrounds the Central Project Area on three sides. While the rugged terrain and focus on backcountry use limits viewer numbers, viewer expectations of natural landscapes and view durations from ridge top trails would be high. Additionally, the view distance from nearby ridgetops is relatively short (foreground/middleground views, ¼ to 3 miles). Consequently, visual sensitivity from within the JTNP surrounding the Project is considered high.

#### Residential/Commercial Areas (Eagle Mountain townsite, Lake Tamarisk, Desert Center).

Visual sensitivity of the various developed communities in the vicinity range from low to high. The Eagle Mountain townsite currently has few permanent residents and most of the facility is inactive. The proposed landfill project would open and restore the town for some activity. However, this population is not expected to be large. Furthermore, because area workers would be familiar with the visual surroundings, visual sensitivity is rated as low.

View durations from residents of Lake Tamarisk and Desert Center are long, and user expectations or sensitivity to visual change generally is high for residents. Both sites have relatively low viewer numbers. While view distances to proposed Project features are far (8 to 12 miles) and views of the mine site are partially blocked by intervening landforms and screening (for Lake Tamarisk) visual sensitivity is considered to be moderate to high for Lake Tamarisk

residents. Desert Center's combination of commercial and work-related residential uses serves to create a visual sensitivity that is rated low to moderate.

**Travel Routes.** Motorists traveling on I-10 in the vicinity of Desert Center represent the largest numbers of viewers in the Project vicinity. Additionally, according to the Riverside County Comprehensive General Plan, the section of I-10 that passes by the Project vicinity is designated as an Eligible County Scenic Highway. This is based on the long, panoramic views of the surrounding mountains created by the flat landscape of the Chuckwalla Valley. While off-site views of the mountains are dramatic, view durations are relatively short as motorists are traveling this corridor at high rates of speed (posted 70 miles per hour). Due to the high viewer numbers and elevated significance of I-10 as an Eligible County Scenic Highway, the visual sensitivity is considered high.

State Route 177 is similar in landscape setting, but viewer numbers are much less and it has no scenic corridor designation. However, use increases particularly during the fall and winter months by travelers passing through from visiting recreation destinations and enjoying the scenery. Consequently, visual sensitivity is rated moderate for State Route 177.

Kaiser Road and Eagle Mountain Road have low visual sensitivity ratings. They are not through routes, have low volumes of traffic, and are used primarily by commuters (work expectations).

Table 3.7-1. Visual Sensitivity Analysis Results

Locations/Sites	User Expectations	View Duration	Use Volume	Visual Sensitivity			
Residents							
Eagle Mountain Town	Low	Long	Low	Low			
Lake Tamarisk	Moderate/High	Long	Low	Moderate/High			
Desert Center	Low/Moderate	Long	Low	Low/Moderate			
Recreation Sites							
JTNP and Wilderness Area	High	Long	Low	High			
Travel Routes							
I-10	High	Short	High	High			
State Route 177	High	Short	Moderate	Moderate			

#### 3.7.2.5 Distance Zones and Visibility

Another element of the visual resource assessment process is consideration of distance zones and visibility. Distance zone thresholds can vary, depending on a variety of factors. For this Project, a review of previous studies was conducted in addition to field assessment to establish visibility thresholds. The perception of form, texture, color, and line vary as a result of viewing distance relative to Project features. Geographical and landscape settings can impact viewing zones and visibility thresholds. For example, the mottled color and texture of this region's desert basins create a situation in which lattice tower structures become very hard to detect beyond 2 to 2.5 miles if they are not visible above the skyline. Generally, elements of form and line become more dominant than color and texture at longer viewing distances. Visibility thresholds or distance zones for this Project are presented in Table 3.7-2.

**Table 3.7-2. Distance Zone Thresholds** 

	Project Components				
Visibility Threshold	500kV Transmission Line	Central Project Site			
Foreground	0 to ¾ mile	0 to ¾ mile			
Middleground	3/4 mile to 2.5 miles	3/4 mile to 5 miles*			
Background/Seldom Seen	Beyond 2.5 miles	Beyond 5 miles*			
* Larger threshold due to greater scale and configuration of features					

The distance zone thresholds follow the BLM's VRM methodology according the following categories:

- Foreground The limit of a viewed area in which details are perceived and obvious.
   Texture and other aesthetic qualities of vegetation are most notable within 0 to ½ to ¾ miles.
- Middleground The zone in which details of foliage and fine texture ceases to be perceptible and outlines and patterns become more discernable than details. Distance is ½ to ¾ to 2.5 to 5 miles.
- Background The portion of the landscape where texture and color are usually weak and landforms and line become the most dominant elements. Distance is 2.5 to 5 to 15 miles.
- Seldom Seen Those areas of the landscape where topographic relief or vegetation screen viewpoints or when viewing distance is beyond 15 miles.

Figure 3.7-8 presents a general summary of the Project area's visual sensitivity, analyzed for foreground/middleground distance zones from KOPs (Figures 3.7-11 through 3.7-19). These KOPs, or areas, are briefly described below:

- KOP#1 View from Desert Center near the Kaiser Road and State Route 177 intersections. View looking north toward the Project site in the background.
- KOP#2 View from Lake Tamarisk. View looking north toward the Project site in the background.
- KOP#3 View from Eagle Mountain/I-10 Interchange. View looking north toward the Project transmission line approximately 2 miles in distance.
- KOP#4 View from I-10 westbound lane. View looking northwest across part of Desert Center, and toward the Project transmission line and Interconnection Substation.
- KOP#5 View north from State Route 177 of the proposed water pipeline crossing.
- KOP#6 View from Kaiser Road. View looking northwest toward the Project site.

- KOP#7 View from Eagle Mountain townsite. View looking north toward the Project site.
- KOP#8 View from Kaiser and MWD road intersection. View looking south-southwest toward the proposed Project transmission line approximately 1 mile away.
- KOP#9 All of the JTNP and Wilderness Boundary Edge. Due to greater expectations of visitors within these areas, visual sensitivity within foreground and middleground distance zones from these boundaries was given a high rating. Note: KOP #9 is a general area, not a specific viewpoint, so no figure was prepared to illustrate KOP #9. However, *see* Figure 3.10-8 in Section 3.10, Recreation, which illustrates Project visibility from designated trails within JTNP.
- KOP#10 View southeast from Eagle Mountain Road and Railroad intersection.
   Alligator Rock and the community of Desert Center approximately 5+ miles in the distance. Viewpoint is at approximate location where the proposed transmission line exits the BLM utility corridor boundary. The BLM boundary continues to the southwest while the transmission line continues south and southeast.

The visual sensitivity/distance zone analysis represents a very conservative estimate of the area's visual sensitivity zones, based on potential visibility from various locations. Local vegetation, structures and topography could completely or partially block views from select areas shown as being visible within the Project's current, composite viewshed.

#### 3.7.3 Potential Environmental Impacts

#### 3.7.3.1 Methodology

Preparation of this section included site visits and the use of photographs to pictorially represent the features of the Project as accurately as possible. The area was reviewed to identify any designated visual resources that could occur on-site or in the area.

Analysis of impacts to visual character is subjective by nature, because the qualities that create an aesthetically pleasing setting will vary from person-to-person. For purposes of this analysis, the Project vicinity was surveyed to evaluate the existing community visual character. Site photographs presented in this section depict the existing visual character of the Project site and have contributed to the visual analysis of the Project.

A detailed visual assessment was conducted through field investigations during 2008-2009, utilizing the BLM's VRM System (BLM handbook H-8410-1, 1986). This system is based on a three-step process that involves an assessment of (1) scenic quality, (2) visual sensitivity, and (3) viewing distance zones. Under this system, KOPs are established and the visual sensitivity of the area characterized based on defined landscape character types and scenic quality ratings. Results of these three assessment categories are grouped into established VRM Classes described above.

Private and non-federal lands generally are not inventoried and assessed utilizing the BLM VRM system. Private lands are not required to adhere to the same restrictions and mandates as the BLM. However, since the BLM visual methodology is a well-developed analytical process, it was applied to all Project lands, public and private, to assess the overall degree of visual impact.

The visual resource assessment study includes review of existing mapping and aerial photography, identification of key viewpoints, evaluation of scenic quality and visual sensitivity, and development of visual resource summary exhibits. Field investigations were conducted in 2008, 2009, and 2010 to support the effort.

In addition to the VRM System analysis, visual simulations were prepared displaying the view from the boundary of JTNP looking towards the proposed Project site.

**Project Area VRM Summaries.** Although much of the Central Project Area is in private ownership, the VRM classifications have been applied to both private and public lands within the Project site to provide a framework for assessment. VRM Class II designations apply to the higher slopes of the Eagle Mountains surrounding the disturbed lands and Central Project Area. Due to the extensive disturbance from past mining activities, the majority of the Central Project Area falls within VRM Class IV, which allows for modification of the existing character of the landscape.

Outside of the Central Project Area, VRM Class IV covers lands north of the Metropolitan Water District's Eagle Mountain Pumping Plant, which reflects the extent and dominance of the area's manmade features and its low visual sensitivity ratings. South of the Metropolitan Water District's Eagle Mountain Pumping Plant, the transmission line and water pipeline will cross through the Chuckwalla Valley and lands designated as VRM Class III.

### 3.7.3.2 Thresholds of Significance

The State Water Resources Control Board concludes that the Project may have significant impacts on aesthetics and visual resources if it does any of the following:

- (a) Has a substantial adverse effect on a scenic vista
- (b) Substantially damages scenic resources, including but not limited to trees, rock outcroppings and historic buildings within a state scenic highway
- (c) Substantially degrades the existing visual character or quality of the site and its surroundings and/or
- (d) Create a new source of substantial light and/or glare that would adversely affect day or nighttime views in the area

#### 3.7.3.3 Environmental Impact Assessment

Assessment of the area's existing visual resources and summarization of VRM Classes allow assessment of the significance of Project impact from the Project on visual resources. The impact

findings are based on assessment of the changes attributable to implementation of the Project relative to thresholds of significance. Ten KOPs were identified to help support the impact assessment. Locations of the KOPs are shown on Figure 3.7-9 and details provided in Figures 3.7-11 through 3.7-19.

#### 3.7.3.3.1 Central Project Area

Most of the Central Project Area and proposed pumped storage facilities fall into VRM Class IV categories due to the highly disturbed setting of the mine site. Most views of the Project site lie within background zones from the KOPs and intervening landforms block views of many of the surface facilities.

Hikers on surrounding ridge tops within the JTNP and Wilderness Area may view some of the Project features (mainly reservoirs and dams) which would be within middleground distance zones (*see* Figure 3.10-8 in Section 3.10 Recreation). Access to these ridge tops is very difficult and viewer numbers are low. Hikers would view Project features across lands not designated as wilderness, and would view Project features associated with an existing disturbed setting as well as existing transmission lines, the Eagle Mountain townsite, and the Metropolitan Water District's Eagle Mountain Pumping Plant. Generally, most hikers use lower elevation canyons and washes and cannot see the proposed Project site at all.

The baseline condition of the Central Project Area is of a highly disturbed area that in no way resembles a natural or wilderness setting. The proposed Project will not change the character of the landscape in a significant manner, since the majority of the landscape is currently a large scale open pit mine with associated tailing piles.

Figures 3.7-20 through 3.7-23 illustrate representative views from several ridge tops located within the JTNP's boundary nearest to the Project site. Viewers accessing these ridge tops will observe features located outside the JTNP's boundaries, including some of the proposed Project features. These proposed features will be visible within an existing setting that is disturbed by open pit mine tailings, and other features associated with past mining activity. As noted previously, these proposed Project features are all located outside of the JTNP boundaries, and while the reservoirs represent a change in visual character, the change is insignificant within the context of the mine. These viewpoints that may allow detection of the proposed Project are located in a remote and difficult-to-access portion of the JTNP. Minimal visual alteration may be experienced by a small number of visitors, but the change must be viewed in the context of the extremely modified landscape in the area

VRM Class II designations encompass the higher, undisturbed slopes of the Eagle Mountains surrounding the Project site. These slopes will not be disturbed by the proposed Project. Overall visual resource impacts within the Project site are not expected to be significant given the highly disturbed nature of the existing landscape setting from past mining activities and facilities.

During meetings with agencies, JTNP representatives noted that the backcountry portions of the JTNP (areas near the Project site) are very light-sensitive areas and expressed concern regarding increases in night lighting. Existing lighting from the Eagle Mountain townsite, Desert Center, and Lake Tamarisk is visible throughout the Chuckwalla Valley. A lighting study completed for the proposed Eagle Mountain Landfill concluded that the increase in light compared to natural or ambient background levels is relatively low, and would only be perceptible in the immediate vicinity of the Project, up to a distance of approximately 2 miles (CH<sub>2</sub>M Hill, 1996). The proposed Project may increase lighting over ambient levels temporarily during construction. After construction, lighting of facilities will be kept to a minimum and to facilities necessary for security and safety reasons.

#### 3.7.3.3.2 Transmission Construction

Construction of the Project's transmission line will create short-term visual impacts associated with construction including: visibility of Project construction equipment, materials, personnel, and construction staging areas. The Project's transmission line would be constructed over a relatively short period (12 months) and would directly affect only the transmission line corridor and immediately surrounding area.

### 3.7.3.3.3 *Transmission Line Operation*

Project Site to Metropolitan Water District's Eagle Mountain Pumping Plant. The proposed double-circuit 500 kilovolt (kV) transmission line will utilize lattice tower structures that are approximately 175 to 220 feet in height. North of the Metropolitan Water District's Eagle Mountain Pumping Plant, the proposed route will cross and parallel existing wood pole transmission lines, introducing a new element that is only incremental in its visual impact on existing conditions. Visibility of this route segment is limited primarily to travelers on north Kaiser Road. The transmission line may be visible to hikers within the JTNP and Wilderness Area. However, the structures would be viewed from middleground distance zones and their visual contrast will be relatively low due to distance, landscape background, and existing transmission lines and MWD facilities. Visibility of this segment of the transmission line from I-10 is in the background and is further limited by intervening landforms as exemplified by the viewshed summary presented in Figure 3.7-10. The proposed transmission line would meet the VRM Class III and IV management objectives in this area.

Although the 500 kV transmission line would not reflect the basic elements of the existing natural features in the landscape, it would reflect the characteristics of the existing transmission lines and MWD facilities and not dominate the view of the casual observer. Therefore, the low level of visual change that would be created by this portion of the transmission line would create only incremental visual impacts, and would be consistent with the applicable VRM Class III and IV management objectives.

Metropolitan Water District's Eagle Mountain Pumping Plant to Eagle Mountain Road Turnoff. South of the Metropolitan Water District's Eagle Mountain Pumping Plant the

transmission line parallels the existing Eagle Mountain Road for approximately 4 miles before turning southeast to the interconnection site. The transmission line will introduce a new feature to the landscape and create a visual contrast that varies in its degree of strength, depending on view location and view distance. The line segment paralleling Eagle Mountain Road will present a mild to moderate visual contrast from key viewpoints (Desert Center, I-10) since viewing distance is beyond middleground distance zones. Additionally, tower structures will not be skylined and will "blend" with the surrounding mottled landscape of the desert basin at these distance zones due to the higher elevations of the view locations. Similarly, visual contrast will be relatively mild from middleground view locations within the JTNP and Wilderness Area. While the new line would not reflect the basic elements of the existing natural features in the landscape, it would reflect the characteristics of the existing MWD transmission line that lies within far foreground views of the JTNP. Consequently, visual impacts in this location are expected to be less than significant and would be consistent with VRM Class III management objectives.

Construction of the transmission line segment east of the Metropolitan Water District's Eagle Mountain Pumping Plant near the existing railroad to the point where it turns away from the Eagle Mountain Road (5.7 miles) will create a new utility feature and right-of-way (ROW). Viewing opportunities of concern include middleground view opportunities from the JTNP and Wilderness Area, and to a lesser extent, background views from I-10 and Desert Center. While the new line would not repeat the basic elements of the existing natural features in the landscape, it would repeat the characteristics of the existing MWD transmission line that lies within foreground views of the JTNP. Visual contrast from background views of I-10 and Desert Center would be weak to moderate and should not dominate the view of the casual observer.

Eagle Mountain Road Turnoff to Interconnection Substation. Visual contrasts created by construction of access and spur roads and towers will become greater as the route leaves the Eagle Mountain Road and travels to the Interconnection Substation site. Here, the line enters middleground and foreground viewsheds of key viewpoints, notably I-10 and Desert Center residences. Visual contrast will be high due to increased visibility of structure details and conductors, and as a result of a new utility feature being introduced into the natural landscape. Although views from I-10 are of short duration, they sweep across this location due to the bend in the road alignment providing panoramic views of the Chuckwalla Valley. If the FAA requires lighting and balls to be installed on the transmission line, this will add to the visual impact of the line. Consequently, construction of this transmission line segment would not be compatible with VRM Class III management objectives.

VRM Class III areas require that the level of change to the characteristic landscape be "moderate or less" and that the Project should not dominate the view of the casual observer. While such visual impacts for viewers traveling at 70 miles per hour will be brief, the addition of a new 500 kV transmission line and substation into foreground views would create visual changes exceeding moderate levels that would dominate the view for a brief period. Similar conclusions were drawn for the Southern California Edison (SCE) Devers-Palo Verde No. 2 (DPV2)

Transmission Line north alternative segment that is proposed to route across the same vicinity (*see* SCE, DPV2 Transmission Line Project, Draft EIR/EIS, May 2006). The new DPV2 Transmission Line proposed to route through this area would reduce the visual contrast of the Project Transmission Line to some degree, but not sufficiently to meet VRM Class III management objectives in foreground and middleground view zones.

The proposed Interconnection Substation site will lie within foreground views of I-10 and Desert Center. While the substation may be constructed in proximity to the new DPV2 transmission line and therefore, not be the only utility element in the foreground, the station's size, discordant structures, lines and features within the foreground views from I-10 and Desert Center will create a strong visual contrast that would not be consistent with VRM Class III management objectives.

Of the nine KOPs established, two (I-10 and Desert Center) would be exposed to significant, unmitigable visual changes. Although the new structures would be similar in design and height to the new DPV2 line segment proposed to cross within the I-10 foreground (*see* Figures 3.7-7 through 3.7-10 for locations of existing and proposed transmission lines), the new structures would additionally block panoramic views of the Chuckwalla Valley and surrounding mountains. The new line and new ROW would also increase the structural complexity and industrial character, which would become more pronounced the closer the viewer is to the structures. Viewers traveling eastbound on I-10 would be most affected by the new transmission line since unobstructed views of it would become apparent as viewers come within the foreground/middleground view zones. The new structures will be apparent to westbound travelers as well, but potentially "filtered" due to the proposed DPV2 line. The moderate-to-high level of visual change that would be caused by this segment of the Project would be inconsistent with the applicable VRM Class III management objectives. Based upon the analysis above, the Project will result in a significant adverse visual impact on the existing visual character of the Project vicinity.

### 3.7.3.3.4 Water Pipeline Construction and Operation

The proposed water pipeline crosses lands visually dominated by undeveloped open desert areas, abandoned agricultural areas, road and utility ROWs. The pipeline, extending from wells that will provide make up water, will be buried, creating only short-term visual impacts during construction. Temporary visual impacts from construction will be noticeable to travelers on State Route 177 where the pipeline will cross. Overall, the pipeline will create a short-term visual impact due to creation of higher, but temporary visual contrast. Construction and operation of the pipeline will meet VRM Class III and IV management objectives identified for this area. Table 3.7-3 summarizes the results of the impact assessment presented above.

**Table 3.7-3. Project Visual Resource Impact Summary** 

	Visual Impact				
Project Feature	Pot. Signif. Impact	Less Than Signif. With Mit.	Less Than Signif. Impact	Mitigation Program	Remarks
Project Site	, and a second	Х	Į.	MM AES-1, PDF AES-1	Project development within a previously disturbed setting
Transmission Line	2.5 miles	5.7 miles	5.3 miles	PDF-AES 1, MM AES-3 MM AES-4	Significant impact due to introduction of a new line into a landscape lacking similar built structures within foreground and middleground view zones of KOPs. Moderate impacts due to introduction of line within landscape lacking similar structures but sufficiently away from view zones to cause weak to moderate contrast. Less-than-significant impacts due to construction in seldom seen areas or adjacent to existing structures.
Interconnection Substation	Х			MM AES-1 MM AES-3	Significant impacts due to strong visual contrast within fg view zones.
Water Pipeline		Х		MM AES-2	Temporary, short-term, less-than- significant impacts due to construction activity.

High Impact - Strong visual contrast in fg/mg view zones from a number of KOPs. Mitigation unlikely to reduce impact significance. Inconsistent with VRM Class designations.

Moderate Impact - Visual contrast noticeable but not dominant as viewed from KOPs. Mitigation can reduce impacts to less than significant levels. Consistent with VRM Class designations.

Low Impact - Weak visual contrast and/or adjacency to existing built structures and development. Mostly within background or seldom seen view zones. Consistent with VRM Class designation. Mitigation not necessary.

### **Environmental Impact Assessment Summary:**

- (a) Would the project have a substantial adverse effect on a scenic vista? No. Scenic vistas will not be affected by construction or operation of the proposed Project.
- (b) Would the project substantially damage scenic resources, including but not limited to trees, rock outcroppings and historic buildings within a state scenic highway? No. The Project will not damage scenic resources within a State scenic highway.
- (c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings? Yes. Of the nine KOPs established, two (I-10 and Desert Center) would be exposed to significant adverse visual impacts. The moderate to high level of visual change is inconsistent with the applicable VRM Class III management objectives. These impacts would be significant and would remain significant with mitigation. Therefore, these impacts would be significant and unavoidable.
- (d) Would the project create a new source of substantial light and/or glare that would adversely affect day or nighttime views in the area? The Project will include night

lighting. Mitigation (MM AES-1) is proposed to reduce this impact *below the level of significance*.

**Impact 3.7-1 Central Project Area.** This impact is *potentially significant and subject to the mitigation program* (MM AES-1). Visual impacts associated with the development of the Project's central facility are largely short-term due to construction activity and have a low potential to impact scenic vistas within the vicinity of the Project area.

**Impact 3.7-2 Transmission Line Construction.** This impact is considered *potentially significant and subject to the mitigation program* (PDF AES-1 and MM AES-4). The Project's transmission line will create short-term visual impacts associated with construction including: visibility of Project construction equipment, materials, personnel, and construction staging areas. This impact would be significant at I-10 and Desert Center, deemed to be a significant, unmitigable visual change. The new line and new ROW would also increase the structural complexity and industrial character, which would become more pronounced the closer the viewer is to the structures. The moderate-to-high level of visual change that would be caused by this segment of the Project would be inconsistent with the applicable VRM Class III management objectives.

Impact 3.7-3 Operation of Transmission Line from the Project Site to Metropolitan Water District's Eagle Mountain Pumping Plant. Visual impacts would be *less than significant* for this line segment.

Impact 3.7-4 Operation of Transmission Line from the Metropolitan Water District's Eagle Mountain Pumping Plant to Eagle Mountain Road Turnoff. Visual impacts resulting from construction of this segment of the transmission line are *potentially significant and subject to the mitigation program* (MM AES-3 and MM AES-4). The Project would be designed consistent with VRM Class III management objectives (regulatory LORS).

Impact 3.7-5 Operation of Transmission Line from the Eagle Mountain Road Turnoff to the Interconnection Substation. The transmission line segment from the Eagle Mountain Road turnoff to the interconnection substation (2.5 miles) would constitute a new utility feature within the landscape, creating high visual contrast within foreground view zones, resulting in a *significant and unavoidable* impact (MM AES-3 and MM AES-4).

**Impact 3.7-6 Construction and Operation of the Water Pipeline.** Short-term construction impacts would be *potentially significant and subject to the mitigation program* (MM AES-2) due to the water pipeline's low profile and proximity to existing access roads, State Route 177 and transmission utilities.

### 3.7.4 Mitigation Program

The mitigation program includes project design features (PDFs) and mitigation measures (MMs). Project design features are design elements inherent to the Project that reduce or eliminate

potential impacts. Mitigation measures are provided to reduce impacts to less than significant, where applicable. As appropriate, performance standards have been built into the mitigation measures.

As mentioned under Regulatory Settings, local, state, or federal regulations or laws are frequently required independent of California Environmental Quality Act review, yet these requirements offset or prevent certain impacts. The proposed Project will be constructed and operated in conformance with all applicable federal, state, and local LORS.

- **PDF AES-1.** Staging Areas. Staging areas and areas needed for equipment operation, material storage and assembly shall be combined with construction lands to the extent feasible, and organized to minimize the total footprint needed. Staging, storage, and temporary construction areas shall be reclaimed as soon as the use of each such area is completed.
- MM AES-1. Lighting. To minimize lighting effects and potential light pollution outside of the proposed Project boundaries, the final engineering design shall incorporate directional lighting, light hoods, low pressure sodium bulbs or light emitting diode (LED) lighting, and operational devices to allow surface night-lighting in the central site to be turned on as-needed for safety to minimize lights that would be directly visible from the National Park. Lighting systems will be designed to use the warmest light practicable for the application. The Licensee shall fund night sky monitoring to be conducted in collaboration with the National Park Service (NPS) during the post-licensing design period (to represent baseline conditions) and during construction and the initial operational period. In addition, the NPS will be consulted during the Project design phase to ensure that feasible measures to minimize light trespass are incorporated into final design.
- MM AES-2. Water Pipeline. For construction of the water pipeline, reduce side cast disposal of soils from open cut construction (by replacing disturbed soil within the trench and limiting the width of the construction disturbance) to reduce color contrast and disturbance with surrounding landscape. The area disturbed during pipeline construction shall be backfilled and revegetated with native vegetation immediately following completion of pipeline construction.
- MM AES-3. Road Crossings. For design of the transmission line, road crossings shall be aligned perpendicular to the road to minimize views up and down ROW corridors, and towers should be placed at the maximum distance from the road ROW. Steel lattice structures with a dull, galvanized steel finish shall be utilized to reduce visual contrast. Conductors shall be selected to reduce glare and visual contrast. The corridor should be collocated with the existing MWD transmission corridor, and tower spacing at Victory Pass designed so that as few towers as possible are skylighted on the ridgeline. These considerations will be balanced with

engineering constraints and concerns for minimizing impacts to other resources such a desert tortoise and cultural resources. Final design will be approved by the FERC.

MM AES-4. Transmission Line. For construction of the transmission line, existing access roads and construction laydown areas shall be used to the extent feasible. The transmission line disturbed zones that will not be required for long-term maintenance access will be revegetated with native vegetation immediately following completion of transmission line construction, consistent with the recommendations in the Biological Resources Revegetation Plan (see Section 12.14).

### 3.7.5 Level of Significance after Implementation of Mitigation Program

**Impact 3.7-1 Central Project Area.** The Central Project Area is already highly disturbed. Most Project features are underground. Above ground facilities are generally blocked from view by intervening landforms. MM AES-1 will ensure that visual impacts from Project lighting *are less than significant*.

**Impact 3.7-2 Transmission Line Construction.** Implementation of PDF AES-1 and MM AES-4 are intended to reduce construction-related visual impacts. The mitigation program would reduce transmission line construction impacts along two of the three transmission line segments; from the Project Site to Metropolitan Water District's Eagle Mountain Pumping Plant and from the Metropolitan Water District's Eagle Mountain Pumping Plant to Eagle Mountain Road Turnoff to a *less than significant* impact. However the third segment from the Eagle Mountain Road to Interconnection Substation would be significant at I-10 and Desert Center and deemed to be a significant, immitigable visual change resulting in a *significant and unavoidable* impact.

Impact 3.7-3 Operation of Transmission Line from the Project Site to Metropolitan Water District's Eagle Mountain Pumping Plant. The transmission line is consistent with applicable VRM Class III and IV management objectives, therefore this impact is *less than significant* and no mitigation measures are required.

Impact 3.7-4 Operation of the Transmission Line from the Metropolitan Water District's Eagle Mountain Pumping Plant to Eagle Mountain Road Turnoff. MM AES-3 and MM AES-4 would reduce visual effects of this Project component. Impacts are *less than significant* with incorporation of the migration program.

Impact 3.7-5 Operation of the Transmission Line from Eagle Mountain Road to Interconnection Substation. While project design features are included in the design, this portion of the Project would result in significant impacts. Mitigation measures (MM AES-3 and MM AES-4) would reduce these impacts; however, none of the mitigation measures would reduce this visual impact to less than significant. Therefore, this impact would be *significant and unavoidable*.

**Impact 3.7-6 Construction and Operation of the Water Pipeline.** Short-term impacts from construction of the water pipeline would be significant. However, with incorporation of MM AES-2, these impacts will be reduced to *less than significant*.

Residual aesthetics impacts from the operation of the transmission line from Eagle Mountain Road to interconnection substation would occur with implementation of the proposed Project.



Figure 3.7-1 Class A Scenic Quality — Coxcomb Mountains Varied colors and contrasts of Coxcomb Mountains viewed in background from Chuckwalla Valley



Figure 3.7-2. Class B Scenic Quality — Eagle Mountains and Foothills

View from west of Eagle Mountain Road looking northeast at MWD area Foothills.

Coxcomb Mountains in background.



Figure 3.7-3. Class C Scenic Quality – Chuckwalla Valley View from existing DPV Transmission Line row south of I-10 across Chuckwalla Valley.



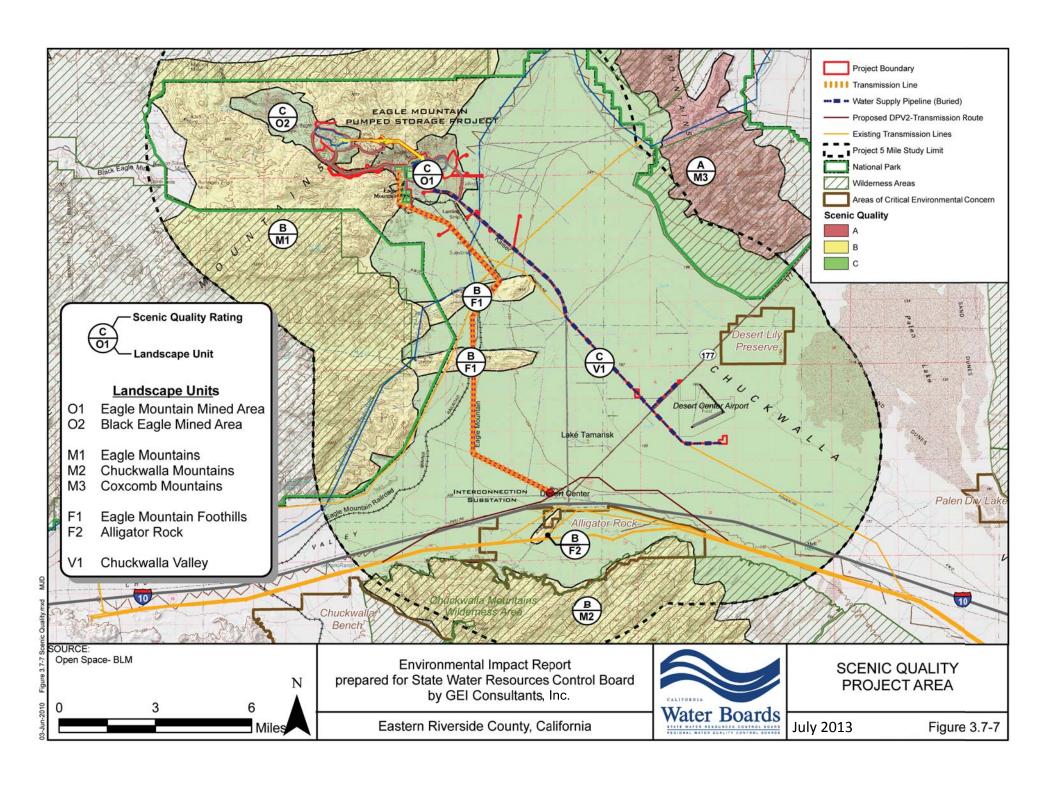
Figure 3.7-4. Class C Scenic Quality – Mine Site View northwest along access road 3 miles to Mine Site.

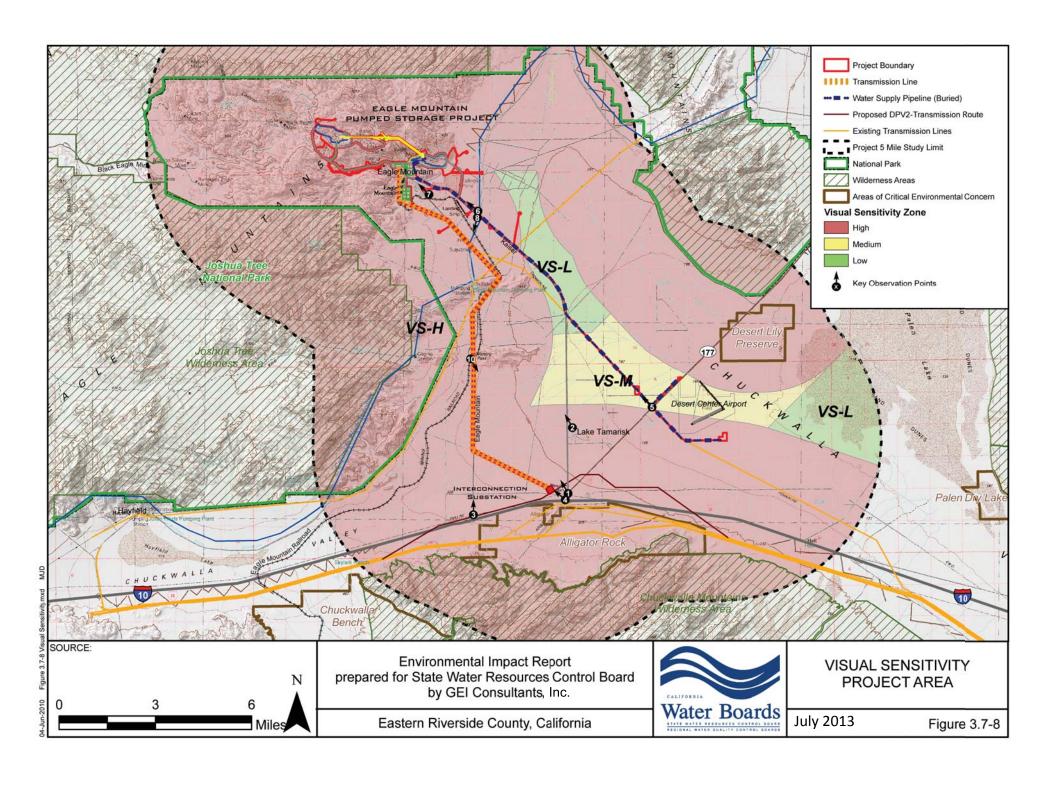


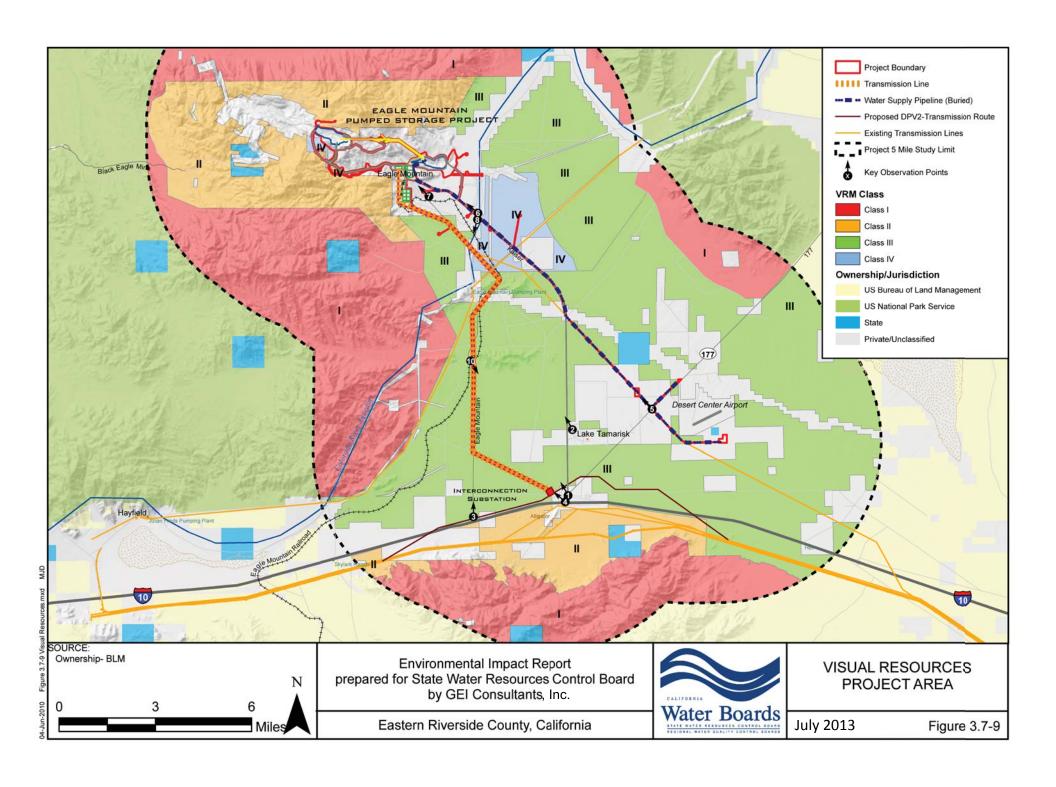
Figure 3.7-5. Class C Scenic Quality – Mine Site Tailings View from Aqueduct Road west 3/4 mile to tailings.

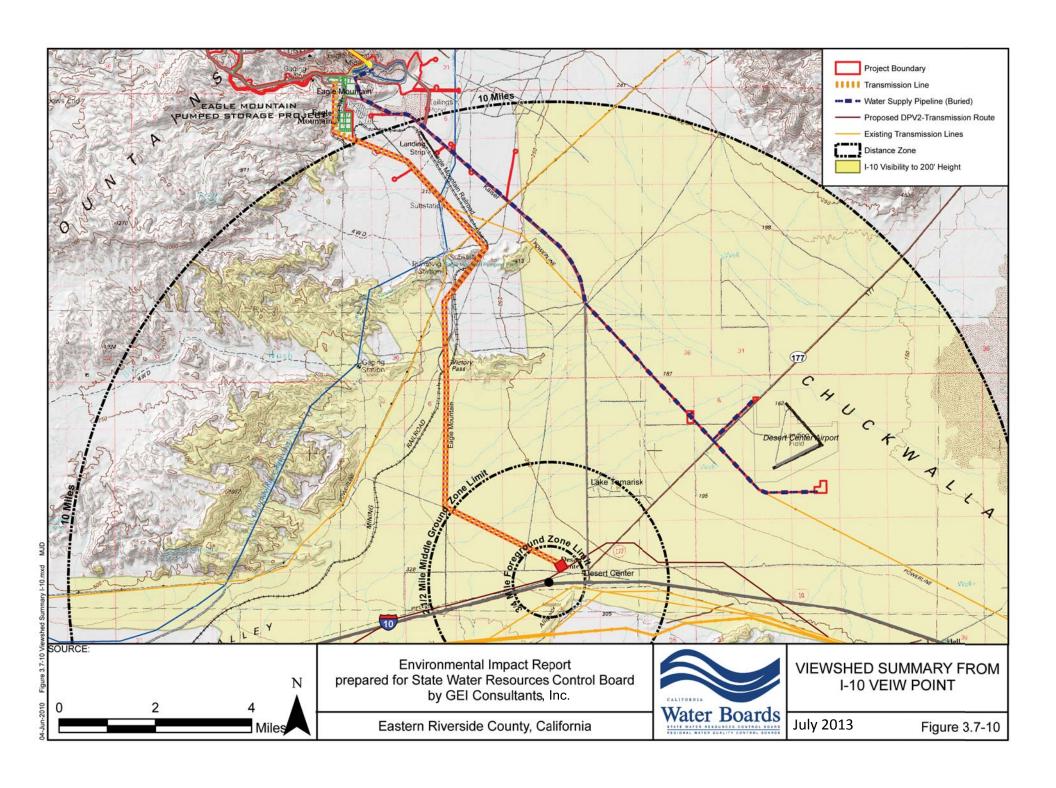


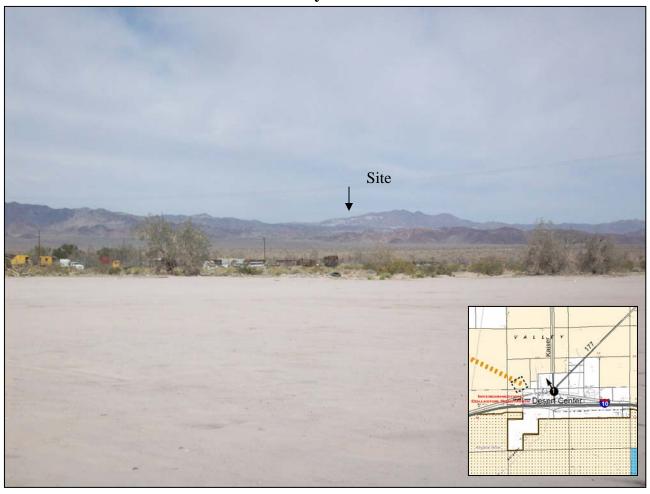
Figure 3.7-6. Class C Scenic Quality – I-10 and Desert Center View north/northwest from eastbound I-10 lane











**Location:** Desert Center

**Description:** Existing Condition, View north toward project site.

**View Distance to Project Site:** 12 miles +/-

**Visible Project Features:** *Small portion of proposed Upper Reservoir dam.* 

**VRM Class:** III - IV (SQ = B/C, VS = High, bg view distance).

**Remarks:** Small corner of upper reservoir dam may be visible, other features will be screened by topography; at 12 miles plus, details are absent and only basic shapes and colors are discernable. Most discernable contrast is the lighter color of the mine tailings.

View Analysis from KOP 1 to Upper Reservoir

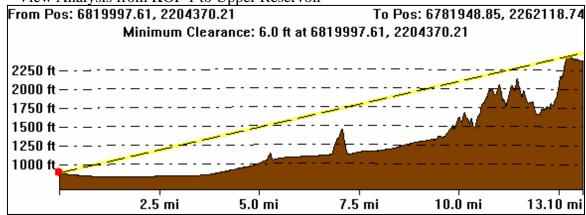


Figure 3.7-11 Key Observation Viewpoint- 1



**Location:** Lake Tamarisk

**Description:** Existing Condition View north toward project site.

View Distance to Project Site: 10 miles +/-

Visible Project Features: Small portion of upper reservoir dam

**VRM Class:** III-IV, (SQ = C, B on upper ridges, VS = High, bg view distance)

**Remarks:** Small corner of upper reservoir dam may be visible, other features will be screened by topography; at 10 miles plus, details are absent and only basic shapes and colors are discernable. Most discernable contrast is the lighter color of the mine tailings.

View Analysis from KOP 2 to Upper Reservoir

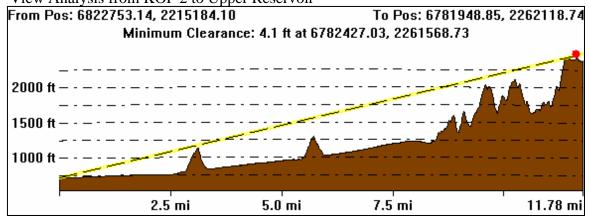


Figure 3.7-12 Key Observation Viewpoint- 2



**Location:** Eagle Mountain Road - I-10 Interchange

**Description:** Existing Condition, View north toward proposed transmission line route approximately 2 miles away. Proposed DPV2 transmission line would cross in immediate foreground.

View Distance to Nearest Project Feature: 2 miles +/-Visible Project Features: Proposed Transmission Line VRM Class: III (SQ = C, VS = High, fg/mg view distance)

**Remarks:** Proposed transmission line will parallel Eagle Mtn Road in bg view zone before turning southeast (right side photo) in mg view zone to connect to Interconnection substation 2.5 miles away.



**Location:** *I-10 Westbound Lane near I-10-Desert Center Interchange* 

**Description:** Existing Condition, View northwest toward Interconnection substation site

and proposed transmission line.

View Distance to Nearest Project Feature: 1/2 mile +/-

Visible Project Features: Proposed Transmission Line and Substation

**VRM Class:** III (SQ = C, VS = High, fg view distance)

**Remarks:** Proposed transmission line would connect to substation to be located to left of metal building (right side photograph). Proposed DPV2 transmission line would cross

photograph at same location.

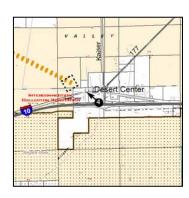


Figure 3.7-14 Key Observation Viewpoint- 4



**Location:** Route 177 and SCE Transmission Line ROW

**Description:** Existing Condition; View from Route 177 northwest toward water pipeline

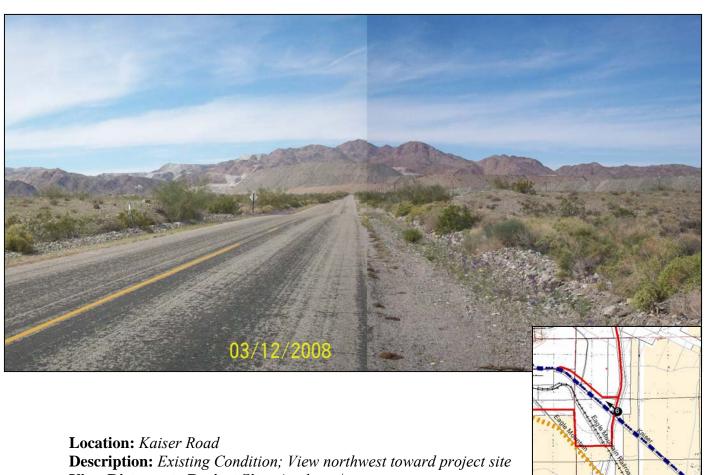
route.

**View Distance to Nearest Project Feature:** 0 mile +/-**Visible Project Features:** Proposed pipeline corridor. **VRM Class:** III (SQ = C, VS = Moderate, fg view distance)

**Remarks:** Proposed water pipeline row would traverse left side of existing transmission

line access road. Pipeline will be buried and surface re-vegetated.



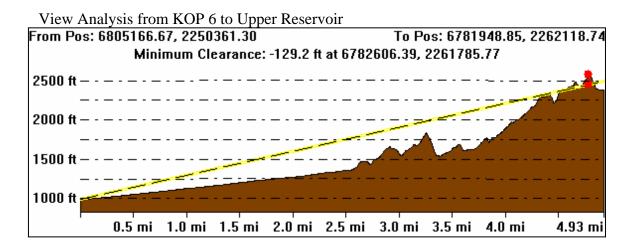


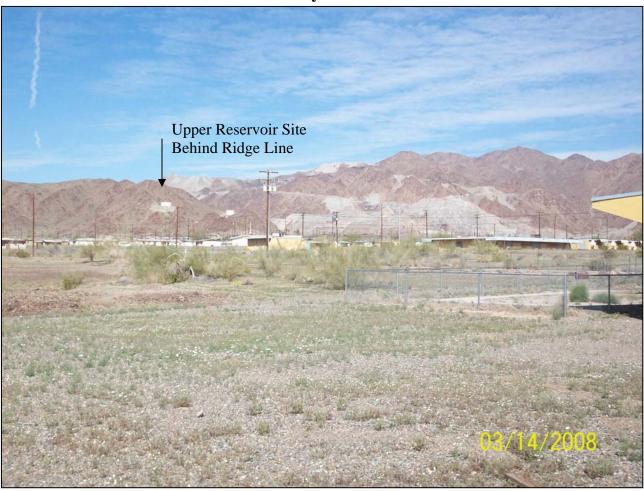
**View Distance to Project Site:** 4 miles +/-

**Visible Project Features:** Transmission Line, Upper Reservoir

**VRM Class:** IV-III (SQ = C, B on upper ridges, VS = low, mg/bg view distance)

**Remarks:** Intervening topography screens most project features. Transmission line will exit project and traverse the left side of photograph; small section of upper reservoir dam may be visible. Landforms and color contrasts of past mining activity are most evident.





**Location:** Eagle Mountain Town Site

**Description:** Existing Condition View north toward project site

View Distance to Nearest Project Feature: ½ - 1 mile.

Visible Project Features: Transmission Line, Miscellaneous support facilities, access

roads,

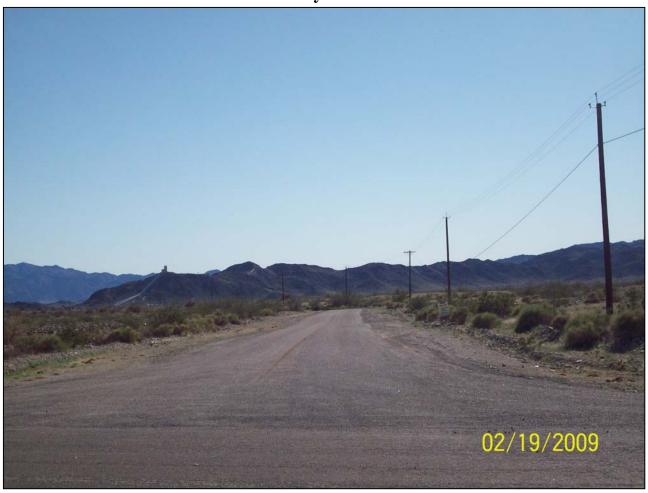
**VRM Class:** IV-II (SQ = C, B on upper Ridges, VS = low/high, fg/mg view distance) VRM II relevant to Eagle Mountains in background.

**Remarks:** Townsite is located at edge of project site. Proposed transmission would pass adjacent to existing water towers in photograph and continue south (left side of photograph); Proposed site switchyard would be placed at lower elevation and screened by topography. Upper Reservoir Site located to left of photograph; Lower Reservoir

located to right off photograph.

Figure 3.7-17

(See Figures 3.7-8 and 3.7-9 for KOP Location)



**Location:** Kaiser Road and MWD Aqueduct Road Intersection

**Description:** Existing Condition; View South-Southwest toward proposed transmission

line crossing. MWD Aqueduct Pipeline and Surge Chamber on Ridgetop.

**View Distance to Nearest Project Feature**: 1 Mile

Visible Project Features: Transmission Line

**VRM Class**: IV(SQ = C, VS = Low)

**Remarks:** Proposed transmission line will cross over existing transmission lines right to left approximately one mile in distance. Towers will be located on valley floor and avoid

ridgetops.

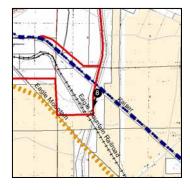


Figure 3.7-18 Key Observation Viewpoint- 8



# **Location: Eagle Mountain Road Near Railroad Crossing**

**Description:** Existing Condition, View Southeast toward Community of Desert Center and Alligator Rock approximately 5.5 miles away.

**View Distance to Nearest Project Feature:** 1/4 mile +/- to proposed transmission line

**Visible Project Features:** Proposed Transmission Line in FG/MG viewshed.

**VRM Class:** III (SQ = C, VS = High, fg-mg view distance)

**Remarks:** Proposed transmission line would pass from left-to-right in the photograph and parallel the Eagle Mtn Road for approximately 3 miles before turning southeast to connect with the proposed Interconnection substation. Interconnection site is approximately 5 miles distant from viewpoint. Viewpoint is at the edge of the BLM Utility Corridor boundary.



Figure 3.7-19 Key Observation Viewpoint- 10

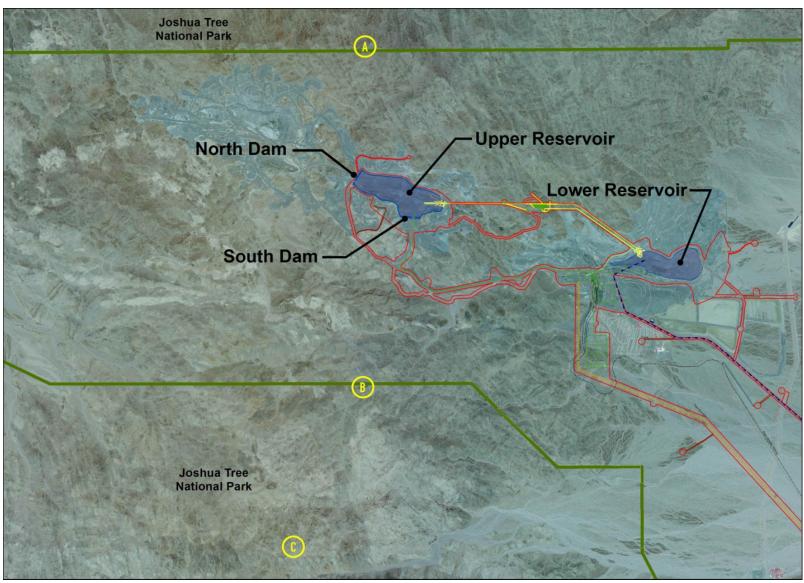


Figure 3.7-20. Aerial Overview of project area and proposed project features, indicating viewpoint locations at higher elevations within National Park Boundaries. Green lines indicate Park boundaries.

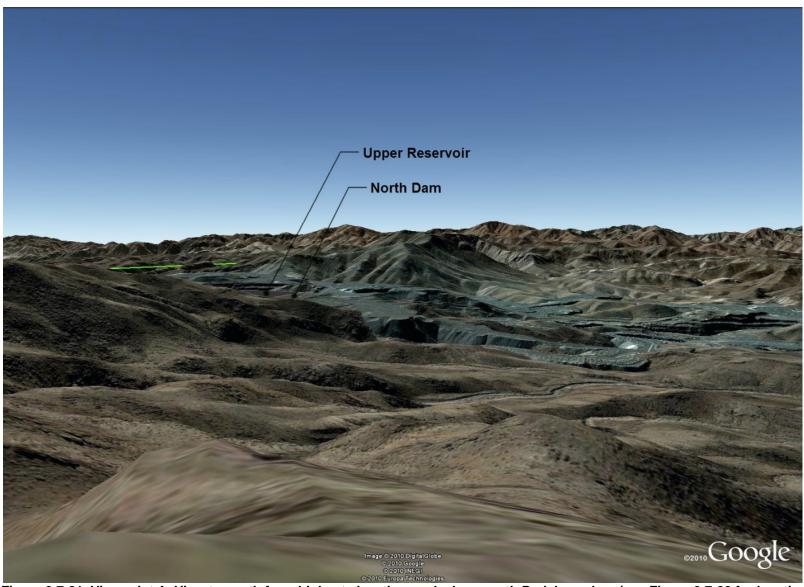


Figure 3.7-21. Viewpoint A. View to south from highest elevation peak along north Park boundary (see Figure 3.7-20 for location). Part of upper reservoir north dam and reservoir would be visible approximately 1.4 miles away.

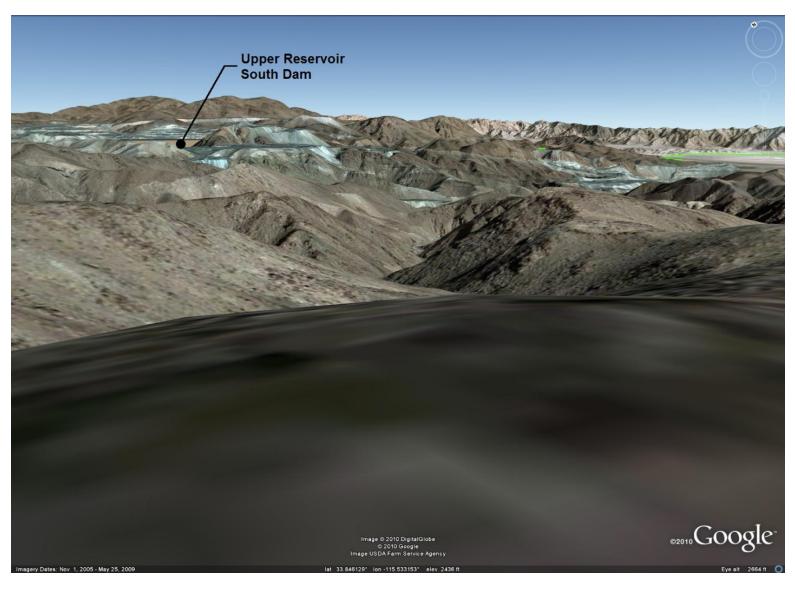


Figure 3.7-22. Viewpoint B. View to north from highest elevation peak along south Park boundary (see Figure 3.7-20 for location). Part of upper reservoir south dam and reservoir would be visible approximately 2 miles away.



Figure 3.7-23. Viewpoint C. View to north from highest elevation peak within Park south of project area (see Figure 3.7-20 for location). Part of upper reservoir south dam and reservoir would be visible approximately 4 miles away. Lower reservoir site screened by intervening topography.