4.3 Aesthetics/Visual Quality

This section evaluates the potential impacts of the Moosa 100K Alternative on aesthetics and the visual quality of the environment. This evaluation includes an assessment of the direct, indirect, short-term, long-term, and cumulative effects of the Moosa 100K Alternative on scenic vistas, scenic resources, and the existing visual character and quality of the project site and surroundings. The evaluation is based on observations in the field, review of topographic maps of the area, and development of visual simulations for selected viewpoints.

4.3.1 Affected Environment

4.3.1.1 Environmental Setting

The following discussion describes the existing visual setting within the Moosa 100K study area.

Key Viewsheds

Information on characteristics and ranking of viewsheds for the Moosa 100K Alternative would be the same as the Proposed Action. Please refer to Section 3.3.1.1 (Aesthetics/Visual Quality for the Proposed Action) of this EIR/EIS for information on: the general physical characteristics of viewsheds, including high, moderate, and low visual quality, and high, medium, and low viewshed sensitivity.

Key Viewsheds in the Moosa 100K Study Area

There are five key viewsheds that best define the visual character of the Moosa 100K study area. Figure 4.3-1 shows a map of these five viewsheds with corresponding viewpoints. Simulated views from viewsheds 2 through 5 are provided in Figures 4.3-2 through 4.3-5.

Viewshed 1 – Moosa Reservoir

The Moosa Reservoir viewshed is composed of the valley floor and moderately steep slopes. The Moosa Reservoir viewshed includes the area and residences that would have a view of the reservoir once the dam is completed and the canyon is inundated. Currently, approximately 65 single-family residences and other private structures are located on the valley floor, slopes, and ridgeline. Residences that would have a view of the reservoir would include those houses in Aerie Heights north of the reservoir and other houses adjacent to the reservoir to the south and east. Vegetation within the area includes nonnative grasses, orchards, ornamentals, southern sycamore riparian woodland, and southern willow scrub in the lower portions of the valley, and orchards, coast live oak woodland, and southern mixed chaparral on the surrounding slopes.

The visual quality and sensitivity to change of the Moosa Canyon viewshed is considered high because of the natural shape of the landform composed of the valley floor and adjacent slopes, and the diversity of the vegetation, and man-made and natural elements.
Viewshed 2 – Moosa Dam

The Moosa Dam viewshed is a relatively undisturbed viewshed northeast of the Hidden Meadows development (Figure 4.3-2). However, there are a few residences along the southern ridge of Moosa Canyon would have a view of the proposed Moosa Dam. Vegetation includes southern sycamore riparian woodland, coast live oak woodland, southern willow scrub, and southern mixed chaparral.

Both the visual quality and sensitivity to change are high for the Moosa Dam viewshed due to the presence of different predominant plant communities (riparian and chaparral), steep slopes, rocky outcrops, and Moosa Creek, which contribute to the high visual quality.

Viewshed 3 – Moosa Pump Station

The Moosa Pump Station viewshed encompasses the western end of Moosa Canyon, and includes a portion of Old Castle Road (Figure 4.3-3). The Moosa Pump Station would be situated just south of Old Castle Road enabling motorists to see the pump station from the road in both directions. Currently, rock outcrops are predominant on the north canyon slope, and major vegetation types beyond the orchards include southern sycamore riparian woodland, coast live oak woodland, southern and willow scrub in the drainages, and mixed chaparral and Diegan sage scrub on the hillsides. Approximately two or three residences would have a view of the Moosa Pump Station.

The steep, rugged slopes; rocky outcrops; combination of colors in the soil, rock, and vegetation; the diversity of natural and man-made features; and openness of the valley give the Moosa Pump Station a moderate visual quality and sensitivity to change.

Viewshed 4 – VCMWD South Pump Station

The VCMWD South Pump Station viewshed encompasses the north-south canyon and surrounding slopes on both sides of North Broadway, northwest of the City of Escondido boundaries, and southeast of the community of Hidden Meadows (Figure 4.3-4). An unpaved road, North Broadway, traverses the canyon floor, providing access to the scattered rural residential development and orchards in the canyon. The road switchbacks up the west-facing slope and joins Cougar Pass Road to the north. The slopes on the east, west, and north sides of the canyon are very steep. These slopes are covered with rock outcrops and mixed scrub.

The VCMWD South Pump Station viewshed has a moderate visual quality and moderate sensitivity to change due to the variety in the landform, the diversity of the vegetation, and the presence of residential and agricultural uses in the canyon.

Viewshed 5 – VCMWD North Pump Station

The VCMWD North Pump Station site is located in the northeastern portion of Moosa Canyon, where it is visible to a few houses situated to the north east of the pump station (Figure 4.3-5).
Both the visual quality and sensitivity to change are high for the VCMWD North Pump Station viewshed due to the presence of different predominant plant communities (riparian and chaparral), steep slopes, rocky outcrops, and Moosa Creek, which contribute to the high visual quality.

4.3.1.2 Regulatory Setting

The Water Authority is mandated by its principal act, the County Water Authority Act (Stats. 1943, c. 545) to provide water to meet the needs of member agencies in its service area. As defined under this Act, the Water Authority is not subject to local land use plans, policies, and ordinances. Furthermore, water supply facilities are exempt from local zoning per California Government Code Section 53091(d) and (e). According to Section 53091 of the California Government Code, zoning ordinances do not apply to the location or construction of facilities used for the production, generation, storage, or transmission of water. Refer to Section 3.9.1.2 (Regulatory Setting, Land Use and Planning for the Proposed Action) of this EIR/EIS for a discussion of the plans and policies that support the provision of water infrastructure.

4.3.2 Project Design Features

General Conditions and Standard Specifications that will be included in the project construction documents to reduce aesthetics/visual quality impacts associated with construction and operation of the Proposed Action are summarized in Section 1.9.1 (Introduction, Aesthetics/Visual Quality) of this EIR/EIS. Refer to Section 3.3.2 (Aesthetics/Visual Quality for the Proposed Action) for a list of project design features that also apply to the Moosa 100K Alternative including, but not limited to, vegetation removal and revegetation, preservation of rock outcrops, re-grading of disturbed areas, plant materials selection, fencing, and lighting. In addition, the following features would be implemented to minimize impacts from construction-related activities for the Moosa 100K Alternative:

**Downstream Side of the Dams**

- Grading measures will include grading of the slope disturbed by dam construction and the rounding of the grades where the slopes meet the valley floor. Rock outcrops will be preserved whenever possible.

- All areas cleared of vegetation for the dam construction zone and staging area will be revegetated at the completion of the project. The selection of plant materials will be compatible with the general character of the adjacent vegetation in the viewshed. Coordination with other biological mitigation measures will be necessary (refer to Section 3.6.2 [Biological Resources for the Proposed Action] of this EIR/EIS).

**Construction and Operation of Pump Stations and Electrical Lines**

- The pump station buildings will be designed utilizing materials and colors that are compatible with the predominant architectural style of residences/structures in the area.
• Adjustments to the site plan will preserve a significant number of the existing mature pines in the area. Attention should be given to preserving those trees that provide the greatest amount of screening as seen from Old Castle Road.

• Once construction is complete, the undeveloped portions of the site will be revegetated to control erosion and provide screening. Revegetation will include seeding and the planting of container stock to be compatible with the existing surrounding vegetation communities. Several large specimen trees will be used in various locations to add to the existing pine hedgerow appearance of the area. Additional planting of pines will occur directly in front of the existing mature pines.

• During construction, temporary screening will be provided by the use of earth berms (where possible) created from the excavated soil from the pump station site. These berms will be planted to minimize erosion. Trees and shrubs may also be utilized for screening. The selection of these plant materials will be incorporated into the revegetation plan for the site.

• Permanent screening techniques will include a combination of planted berms (where possible) to minimize direct views of the site and the planting of trees and shrubs on site to block views of the pump station buildings, as well as to minimize the scale of the building from surrounding residences, Old Castle Road, and Pamoosa Lane.

Moosa Saddle Dam/Spillway
• Rock outcrops will be preserved whenever practicable.

• All areas cleared of vegetation will be revegetated at the completion of the project. The selection of plant materials will be compatible with the character of the viewshed and adjacent vegetation.

Excavation Areas
• Earth berms, rock outcrops, and trees and shrubs will be utilized to screen and revegetate excavated areas outside of the inundated area.

4.3.3 Direct and Indirect Effects

4.3.3.1 Thresholds of Significance

The thresholds of significance used to evaluate potential aesthetic/visual quality impacts for the Moosa 100K Alternative would be the same those used to evaluate impacts for the Proposed Action and the SV 50K/Moosa 50K Alternative. The thresholds are based on applicable criteria in the State CEQA Guidelines (CCR §§15000-15387), Appendix G. A significant aesthetic/visual quality impact would occur if the Moosa 100K Alternative would:

1. Have a substantial adverse effect on a scenic vista.
2. Damage a scenic resource, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

3. Degrade the existing visual character or quality of the project site and its surroundings.

4. Create a new source of substantial light or glare that would adversely affect day or nighttime views or normal sleep patterns.

4.3.3.2 Impact Analysis

Methodology

The methodology used to evaluate potential aesthetic/visual quality impacts for the Moosa 100K Alternative would be the same as used for the Proposed Action (see Section 3.3.3.2 [Aesthetics/Visual Quality for the Proposed Action] of this EIR/EIS).

The following analysis is based on ESP key views that have been updated to reflect current development conditions since ESP was approved in 1996. Five key viewpoint locations were selected to provide a representation of typical views of the Moosa 100K Alternative dam from surrounding neighborhoods and sensitive receptors. Figure 4.3-1 provides a map of the five viewsheds and selected key viewpoints. The new marina that would be included in the Moosa 100K Alternative (see Section 2.3.1 and Figure 2.3-1 [Alternatives Analyzed] of this EIR/EIS) would occur within the reservoir and would not be visible from any of the representative key viewpoints (Figures 4.3-2 through 4.3-5); therefore, it does not appear in the photographs.

Analysis

Threshold 1: Have a substantial adverse effect on a scenic vista

As noted above, the Circulation Element of the County’s General Plan identifies Old Castle Road from the Vista City limits to SR-76 as a third-priority scenic route. The Valley Center Community Plan also states: “…Lilac Road from Old Castle Road to SR-76 are significant aesthetic resources. Future improvements should maintain as much of their original character as possible without compromising safety.” Additionally, the Valley Center Community Plan identifies a planned park in the Moosa 100K study area, “Old Castle Park, located near Old Castle Road, will consist of approximately 30 acres and will be used for passive park purposes.”

The Moosa 100K Alternative components that would be in proximity to Old Castle Road (including the future Old Castle Park) include the VCMWD North Pump Station and Moosa pipeline construction; the inundation area and dam would not be visible. From Lilac Road, the easterly perimeter of the new reservoir would be visible from the road in the project area.

The primary view of the VCMWD North Pump Station would be from the residences along Old Castle Road and Pamosa Lane. These residences would have constant views of the site and a high sensitivity to visual change. The impacts at these locations are addressed in Threshold 3. In terms of viewers from the future park, Old Castle Road, and Lilac Road, the majority of
construction activities that would alter topographic features would be located on the western side of the new reservoir; Lilac Road runs along the easterly side of the new reservoir. From vantage points along the road, the viewer would experience a loss of canyon views, natural vegetation, and scattered low-density residential lots characteristic of the existing agricultural community. This view would be replaced by the presence of water or lake feature in this area. The change of views from natural terrain and vegetation interspersed with residential and agricultural uses to views of water surrounded by the same residential and agricultural uses would retain the overall rural-agrarian setting of the valley. Therefore, impacts would be less than significant.

The Moosa 100K Alternative would not have a substantial adverse effect on vistas along Old Castle Road (a County third-priority scenic route) and Lilac Road (identified as a significant visual resource in the Valley Center Community Plan). Therefore, impacts of the Moosa 100K Alternative would be less than significant.

Threshold 2: Damage a scenic resource, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

Due to the nature of quarrying operations, which includes blasting, it is expected that some rock outcroppings would be altered by quarrying for the Moosa 100K Alternative. However, rock outcroppings would be preserved, wherever practicable, as a project design feature (see Section 4.3.2 above). Further, the changes in the rock outcroppings would be limited to a small area near the dam construction site that is not visible from the surrounding community. Inundation of the valley to fill the reservoir after construction would permanently remove rock outcroppings from the viewsheds along Lilac Road (the inundation areas would not be visible from Old Castle Road), but the rest of the topography would remain in its natural state with substantial outcroppings.

Old Castle Road and Lilac Road are identified as important scenic routes in the Valley Center Community Plan. However, impacts along Old Castle Road (a County third-priority scenic route) and Lilac Road resulting from the VCMWD North Pump Station, Moosa pipeline, and reservoir inundation would be less than significant because project design features such as compatible paint colors and vegetative screening, would reduce long-term visual impacts of the VCMWD North Pump Station (see Threshold 3), and views of water surrounded by the residential and agricultural uses would retain the overall rural-agrarian setting of the valley. There are no historic buildings along Old Castle Road or Lilac Road that would be affected by the Moosa 100K Alternative (refer to Section 4.7 [Cultural Resources for the Moosa 100K Alternative] of this EIR/EIS). Therefore, the Moosa 100K Alternative would not damage scenic resources, and impacts would be less than significant.

The Moosa 100K Alternative would not damage scenic resources, including trees and rock outcroppings, within or visible from scenic routes in the study area, and would not adversely affect historic buildings. Therefore, impacts of the Moosa 100K Alternative would be less than significant.
Threshold 3: Degrade the existing visual character or quality of the project site and its surroundings

The majority of the visible components of the Moosa 100K Alternative would be located on the downstream or western side of the existing dam. The construction of the concrete-faced rockfill Moosa Dam in an area with little disturbance could affect the visual quality, landform quality, view quality, and community character of the area. Other elements that could affect the visual quality include the following:

- The introduction of a large water body into a rural residential and agricultural area;
- The removal of vegetation below the normal pool level and the inundation of Turner Reservoir;
- The construction zone, staging areas, temporary facilities and access roads;
- On-site quarry operations, which would be used to process the aggregate for the concrete to construct the dam.
- Construction of the new marina; and/or
- Construction of three pump stations (VCMWD North Pump Station, VCMWD South Pump Station, and Moosa Canyon Pump Station).

The visual quality impacts are based on the number of viewers, in this case more than 100, who would have portions of their view altered by components of the Moosa 100K Alternative. The majority of the viewers would be residents on the upper portions of the slopes surrounding the reservoir site. These residents have constant views of the reservoir site and a high sensitivity to visual change. Existing residents who live in the vicinity of the proposed Moosa Reservoir generally have views of high visual quality. Therefore, these residents would have a high sensitivity to physical modifications within their viewshed. Other viewers include agricultural workers and motorists on roads in the Moosa 100K study area, which have a low to moderate sensitivity to changes in the viewshed. The quantity of all viewers is considered moderate. The following impact analysis is presented by viewshed.

Viewshed 1 – Moosa Reservoir

Approximately two hundred residential parcels would have a view of the Moosa Reservoir inundation area. Moosa Canyon has been identified as a Resource Conservation Area in the Valley Center Community Plan. The community plan indicates that development that would detract from the scenic quality of the natural topographic features should be minimized and specimen trees that contribute to the community character should be preserved. Vegetation within Moosa Canyon, including oak and riparian woodlands, would be permanently lost from inundation and construction of the new dam and reservoir. A large amount of clearing within the canyon would be required, resulting in the loss of substantial stands of vegetation, which would contrast with the existing visual setting.
During construction, residents and motorists traveling on roads within Viewshed 1 would have views of rock quarrying and other excavation activities that would occur within the proposed inundation area. In addition, residents and motorists would be able to view dam and marina construction and clearing and grubbing of the inundation area. Construction activities at the dam site in staging areas and along access roads would contrast with the undeveloped character of Moosa Canyon and would result in the loss of extensive areas of native vegetation and rock outcrops. The existing visual character of the project site and the surrounding area would be temporarily degraded due to construction activities. Therefore, short-term impacts of the Moosa 100K Alternative to Viewshed 1 would be significant.

Upon completion of construction of the Moosa 100K Dam, Moosa Canyon would be inundated with water. Inundation of the area would replace views of grading impacts and other construction activities with views of the water stored in the reservoir. The presence of water in a reservoir that is integrated into the natural topography and surrounding vegetation is subjectively considered a positive visual factor in terms of community character. In addition, the changes in grade that would be created as a result of the excavation outside of the inundation area would be substantial but would not be highly visible because the area would be revegetated as part of the project, once construction activities at the site are complete. The revegetation effort would reclaim the excavated areas so that there would be no visible scar in the topography. Therefore, long-term impacts of the Moosa 100K Alternative to Viewshed 1 would be less than significant.

Viewshed 2 – Moosa Dam

Views of the proposed Moosa Dam and saddle dam/spillway would be visible to approximately 20 to 30 residences along the southern ridge of Moosa Canyon near Canyon Country Road and Rolling Rock Road. The remaining parcels with views of the Moosa Dam and saddle dam/spillway consist of orchard and field cropland and vacant land.

Construction activities at the dam and saddle dam/spillway sites in staging areas and along access roads would contrast with the undeveloped character of Moosa Canyon and would result in the loss of extensive areas of native vegetation and rock outcrops. Construction activities would disrupt the existing high visual quality of Moosa Canyon. Therefore short-term impacts of the Moosa 100K Alternative in Viewshed 2 would be significant.

Following completion of construction, existing views of natural landforms and vegetation, which have a high sensitivity to change, would be replaced by permanent views of rockfill slopes of the main dam and saddle dam, as well as cut slopes and concrete associated with the spillway. The changes visible to observers would depend on the individuals’ locations relative to the dam and saddle dam/spillway. The dam structure would block the view corridor of some downstream areas and would contrast with the existing views of the area (Figure 4.3-2). The completed dam would create a silhouette against the skyline when viewed from lower elevations and would contrast sharply with the curvilinear forms of the slopes. The saddle dam/spillway for Moosa Dam would not be incorporated into the dam structure but would be located north of the dam. The construction of a saddle dam/spillway in an undisturbed canyon would alter the visual character of the area. The completed saddle dam/spillway would moderately contrast with the
undeveloped character of Moosa Canyon and would result in the loss of minor areas of native vegetation and rock outcrops. The completed dam and saddle dam/spillway would be in sharp contrast to the existing natural landforms and vegetation, which would negatively affect the visual quality of the area. Therefore, long-term impacts of the Moosa 100K Alternative in Viewshed 2 would be significant.

**Viewshed 3 – Moosa Pump Station**

The primary viewers of the Moosa Pump Station would be the motorists along Old Castle Road and residences along Pamoosa Lane. Residences would have constant views of the site and a high sensitivity to change. Because Old Castle Road is a relatively large road in the Valley Center area, a substantial number of motorists would view the pump station, some on a daily basis.

Construction activities at the Moosa Pump Station site would contrast with the undeveloped character of Moosa Canyon and would result in the loss of some native vegetation in the area. Elements visible during the construction period would include site clearing, grading, and soil excavation. Construction activities would disrupt the existing high visual quality of the area and would especially be noticeable to motorists traveling along Old Castle Road. Therefore short-term impacts of the Moosa 100K Alternative in Viewshed 3 would be significant.

The pump station building would contrast with the existing lower scale buildings in the area. It would also become a dominant visual feature within the area and could direct viewers’ attention away from the other more positive viewing elements, such as Moosa Canyon and the surrounding steep slopes. Although project design features such as compatible paint colors and vegetative screening, would reduce long-term visual impacts of the Moosa Pump Station, the pump station would be visible to a substantial number of motorists traveling along Old Castle Road. The completed Moosa Pump Station would contrast with the low-density, rural residential and agricultural character of the area, and could be considered to conflict with the community character and the community character goals of the Valley Center Community Plan. Therefore, impacts from the Moosa Pump Station on the existing visual character or quality of Viewshed 3 would be significant.

**Viewshed 4 – VCMWD South Pump Station**

The primary viewers of the VCMWD South Pump Station would be the residents along North Broadway, Cougar Pass Road, and Reidy Canyon Road. The pump station would be visible to approximately 50 residences, a relatively small number of homes. The VCMWD South Pump Station would not be visible to any major road through the area. Residents would have constant but partial views of the site and a high sensitivity to visual change.

The VCMWD South Pump Station would require the construction of a large water storage tank and buildings to house pump facilities. The construction of large structures in an area that is predominated by low-density, rural residential development and native slopes could be subjectively perceived by viewers as a negative visual effect. Elements visible during the
construction period would include site clearing, grading, and soil excavation. However, construction of the VCMWD South Pump Station would not be visible from any major road, and most residents in the viewshed would only have partial views of the construction area. Therefore short-term impacts of the Moosa 100K Alternative to Viewshed 4 would be less than significant.

The majority of the canyon is in its native state. The removal of native vegetation, including mixed chaparral and coastal sage scrub, would create a change within this portion of the viewshed, and a large industrial-type building in a rural residential and agricultural area could moderately contrast within the viewshed because there are no other large structures in close proximity. However, the pump station would be recessed into the canyon, buildings would be designed with compatible materials, and landscaping would be provided. In addition, most residences would only have partial views of the pump station. Therefore, impacts on the existing visual character or quality of Viewshed 4 from the VCMWD South Pump Station would be less than significant.

**Viewshed 5 – VCMWD North Pump Station**

The VCMWD North Pump Station would be visible to approximately five to ten residences along Wilkes Road. The VCMWD South Pump Station would not be visible to any major road through the area. Residents living in this rural area would have a high sensitivity to a change in the visual environment.

The VCMWD North Pump Station would require the construction of a large water storage tank and buildings to house pump facilities. The construction of large structures in an area that is predominated by low-density, rural residential development, native slopes, and orchards, could negatively affect the visual quality. Elements visible during the construction period would include site clearing, grading, and soil excavation. The construction of the VCMWD North Pump Station would also require the installation of overhead electrical lines from an existing connection east of Wilkes Road along Old Castle Road to the pump station. In addition, the duration of construction would be temporary, and planned project design features would minimize visual impacts. Therefore construction impacts of the Moosa 100K Alternative in Viewshed 5 would be less than significant.

The presence of a large industrial-type building in a rural residential and agricultural area would create a contrast within the viewshed because there are no other large structures in close proximity. The removal of native vegetation, including mixed chaparral and coastal sage scrub, would create a change within this portion of the viewshed. However, project design features such as compatible paint colors and vegetative screening, would reduce long-term visual impacts of the VCMWD North Pump Station. In addition, very few residents living in the area would have a view of the pump station, and the pump station would not be visible to any major road in the area. Therefore, impacts on the existing visual character or quality of Viewshed 5 from the VCMWD North Pump Station would be less than significant.

*Construction of the Moosa Dam and Reservoir would temporarily degrade the existing visual character of Moosa Canyon; therefore, short-term impacts in Viewshed 1 (Moosa Reservoir)*
would be significant (Impact M/VQ 1). Upon completion of construction, quarry areas would be inundated when the reservoir is filled, and other excavation areas would be revegetated. Therefore, long-term impacts in Viewshed 1 would be less than significant.

Construction activities for the Moosa Dam and saddle dam/spillway would disrupt the high visual quality of Moosa Canyon; therefore, short-term impacts in Viewshed 2 (Moosa Dam and Saddle Dam/Spillway) would be significant (Impact M/VQ 2). The completed dam would substantially contrast with existing natural topography and scenic views of Moosa Canyon; therefore, long-term impacts in Viewshed 2 would be significant (Impact M/VQ 3).

Construction of the Moosa Pump Station would affect the community character due to the high degree of contrast created by construction of the pump station and its proximity to Old Castle Road; therefore short-term impacts in Viewshed 3 (Moosa Pump Station) would be significant (Impact M/VQ 4). The completed Moosa Pump Station would be visible from Old Castle Road and a substantial number of motorists; therefore, long-term impacts in Viewshed 3 would be significant (Impact M/VQ 5).

Construction of the VCMWD South Pump Station would result in moderate changes to the existing visual character or quality of Reidy Canyon. However, residents would only have partial views of construction activities; therefore, short-term impacts in Viewshed 4 (VCMWD South Pump Station) would be less than significant. The completed VCMWD South Pump Station would be recessed into the canyon, buildings would be designed with compatible materials, and landscaping would be provided; therefore, long-term impacts in Viewshed 4 would be less than significant.

Construction of the VCMWD North Pump Station would be visible to a small number of residences (approximately five to ten), and implementation of project design features would minimize its visibility; therefore, short-term impacts in Viewshed 5 (VCMWD North Pump Station) would be less than significant. New overhead power lines for the VCMWD North Pump Station would be similar to existing lines. The completed VCMWD North Pump Station would moderately impact the community character due to the contrast created by the pump station facilities; however, very few residences would have a view of the pump station Therefore, long-term impacts in Viewshed 5 would be less than significant.

**Threshold 4: Create a new source of substantial light or glare that would adversely affect day or nighttime views or normal sleep patterns**

The proposed Moosa 100K Alternative construction schedule would require the use of night lighting for tunneling work performed during nighttime hours to ensure the safety of working crews and employees. However, as a project design feature to be included in the contractor specifications (refer to Section 4.3.2 above), any construction night lighting would be directed and shielded to minimize lighting impacts. The shielding would prevent construction lighting from the Moosa 100K Alternative from being a new source of substantial light that would adversely affect nighttime views in the area. In addition, nighttime lighting would be temporary, lasting only as long as construction. Therefore, impacts would be less than significant.
Security lighting on the Moosa 100K Alternative dam would be minimal and would be directed downward. The downstream face of the raised dam would be a rockfill face that would have a natural look. The construction of the new Moosa 100K dam would not introduce a new source of substantial glare into the surrounding environment. Therefore, glare impacts from the new dam structure would be less than significant.

*The Moosa 100K Alternative would not create a new source of substantial light or glare that would adversely affect day or nighttime views or normal sleep patterns. The Moosa 100K Alternative would include project design features to minimize lighting impacts during construction and operation of the dam and reservoir. Therefore, impacts of the Moosa 100K Alternative would be less than significant.*

### 4.3.3.3 Mitigation Measures

No mitigation has been identified to fully offset significant impacts on existing visual character or quality from Moosa Dam in Viewshed 1 (*Impact M/VQ 1*) and Viewshed 2 (*Impact M/VQ 2, Impact M/VQ 3*), and from Moosa Pump Station in Viewshed 3 (*Impact M/VQ 4, Impact M/VQ 5*). Therefore, impacts would remain significant and unmitigable.

### 4.3.3.4 Residual Impacts after Mitigation

Even with implementation of General Conditions and Standard Specifications listed in Section 1.9.1 (Introduction, Aesthetics/Visual Quality) of this EIR/EIS and the project design features in Section 4.3.2 above, the aesthetics/visual quality impacts of the Moosa 100K Alternative (*Impacts M/VQ 1, M/VQ 2, M/VQ 3, M/VQ 4, and M/VQ 5*) would be significant and unmitigable.

### 4.3.4 Cumulative Effects

#### 4.3.4.1 Other CIP Projects

As described in Section 4.2 (Cumulative Projects for the Moosa 100K Alternative) of this EIR/EIS, it was determined that Hubbard Hill Flow Regulatory Structure, North County Distribution Pipeline Flow Regulatory Structure, and Second Crossover Pipeline are the only CIP projects with the potential for cumulative impacts when combined with the Moosa 100K Alternative.

The PEIR for the Regional Water Facilities Master Plan concluded that development of the recommended water delivery, storage, and treatment facilities would result in cumulative adverse impacts on aesthetic resources in the region. Adverse aesthetic impacts would result from the construction of visible aboveground and partially buried facilities such as pump stations, treatment plants, and other ancillary facilities. It was also concluded that, in general, the facilities would occur in heavily modified urban and industrial settings or adjacent to existing facilities. The cumulative aesthetic/visual quality impacts of projects located in rural or open.
space areas were concluded to be of the greatest concern, as they have the potential to create substantial visual contrasts with their settings. Implementation of program-level mitigation measures was anticipated to reduce cumulative aesthetic/visual impacts to below a level of significance. Those program-level mitigation measures, such as placing facilities below ground, using architectural designs, textures, and colors that complement the surrounding natural areas, and landscaping are applied to all Water Authority projects located within visually sensitive areas. The above conclusions are incorporated into the cumulative analyses in Section 4.3.4.2 below.

4.3.4.2 Other Planned Projects with CIP Projects

This section evaluates the cumulative aesthetic impacts of the Moosa 100K Alternative when considered in conjunction with the other planned projects listed in Table 4.2-2 (Cumulative Projects for the Moosa 100K Alternative), and incorporates the cumulative aesthetic impacts associated with the CIP projects described in the above section. The following cumulative aesthetic analysis addresses each of the four significance thresholds listed in Section 4.3.3 above.

**Cumulative Threshold 1: Have a substantial adverse effect on a scenic vista**

Impacts of the Moosa 100K Alternative to viewers along Old Castle Road (a County third-priority scenic route) and Lilac Road (identified as a significant visual resource in the Valley Center Community Plan) would be less than significant. Several cumulative projects are anticipated along Old Castle Road and Lilac Road in the Proposed Action study area and have a greater potential to affect views due to their scale or type of development. The Moosa 100K Alternative contribution to a significant cumulative aesthetic impact would not be cumulatively considerable, and the cumulative impact would be less than significant.

**Cumulative Threshold 2: Damage a scenic resource, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway**

Impacts of the Moosa 100K Alternative to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway would be less than significant. The Moosa 100K Alternative includes several design features (Section 4.3.3.2 above) that would minimize impacts. Therefore, the Moosa 100K Alternative contribution to a significant cumulative aesthetic impact would not be cumulatively considerable, and the cumulative impact would be less than significant.

**Cumulative Threshold 3: Degrade the existing visual character or quality of the project site and its surroundings**

The proposed Moosa 100K Alternative would result in significant and unmitigable impacts on community character from the short-term construction impacts and the degradation of the high visual quality of Moosa Canyon, and the short- and long-term impacts of the Moosa Pump Station. Therefore, the Moosa 100K Alternative’s incremental contribution to cumulative aesthetic impacts when combined with other planned, CIP projects would be cumulatively
considerable, and the cumulative impact would be significant and unmitigable (*Impacts M/VQ 1C, M/VQ 2C, M/VQ 3C, M/VQ 4C and M/VQ 5C*).

**Cumulative Threshold 4: Create a new source of substantial light or glare that would adversely affect day or nighttime views or normal sleep patterns**

Construction and operational lighting impacts from the Moosa 100K Alternative would be less than significant. The Moosa 100K Alternative includes several design features (Section 4.3.3.2 above) that would minimize light and glare impacts. Therefore, the Moosa 100K Alternative contribution to a significant cumulative aesthetic impact would not be cumulatively considerable, and the cumulative impact would be less than significant.

The rockfill face of the Moosa 100K Alternative dam would not inject a new permanent source of glare into the area. Therefore, the Moosa 100K Alternative contribution to a significant cumulative aesthetic impact would also be less than significant.

*The Moosa 100K Alternative would not have a substantial adverse effect on a scenic vista; would not damage a scenic resource, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; and would not create a potential source of substantial light or glare in the community. However, the Moosa 100K Alternative would substantially degrade the existing visual character or quality of several viewsheds in the study area. Therefore, the Moosa 100K Alternative’s contribution to cumulative aesthetic impacts (*Impacts M/VQ 1C, M/VQ 2C, M/VQ 3C, M/VQ 4C and M/VQ 5C*) (community character), when combined with aesthetics/visual quality impacts associated with the CIP projects listed above and planned cumulative project listed in Table 4.2-1, would be significant and unmitigable. A Statement of Overriding Considerations would be required for project approval.*
FIGURE 4.3-1

Viewsheds for the Moosa 100K Alternative

SOURCE: PBS&J, 2006
Viewpoint 1: Existing View looking east from North View Court.

Viewpoint 1: Simulated View looking east from North View Court.

SOURCE: PBS&J, 2006

VIEWSHED 2: MOOSA DAM

FIGURE 4.3-2
Alternative 2: Moosa 100,000 AF
Aesthetics/Visual Quality
Viewpoint 2: Existing View looking east from Pamoosa Lane off Old Castle Road.

Viewpoint 2: Simulated View looking east from Pamoosa Lane off Old Castle Road.

SOURCE: PBS&J, 2006

VIEWSHED 3: MOOSA PUMP STATION

FIGURE 4.3-3
Alternative 2: Moosa 100,000 AF
Aesthetics/Visual Quality
Viewpoint 3: Existing view looking north from North Broadway Avenue.

SOURCE: PBS&J, 2006
Viewpoint 4: Existing view looking north from scattered residences to the east of Wilkes Road/Sierra Rojo Road intersection.
Alternative 2: Moosa 100,000 AF
Aesthetics/Visual Quality