

IV.20 VISUAL RESOURCES

The analysis in this chapter addresses potential impacts to visual resources from the No Action Alternative and implementation of the various action alternatives of the Desert Renewable Energy Conservation Plan (DRECP). The analysis includes impacts from covered renewable energy and transmission development activities, the Reserve Design, and Bureau of Land Management (BLM) Land Use Plan Amendment (LUPA) decisions proposed under each alternative, including proposed Visual Resource Management (VRM) Classes.

The DRECP would encourage the development and operation of covered renewable energy facilities and transmission lines within Development Focus Areas (DFAs). The VRM Class designations on BLM-administered lands indicate the level of visual change allowed.

The primary consideration in quantifying visual impacts at a programmatic and plan level of analysis is the extent to which the visual resource elements described in Volume III, Chapter III.20, Visual Resources, are affected by the proposed DFAs, transmission, and reserve design conservation land designations and management.

IV.20.1 Approach to Impact Analysis

IV.20.1.1 General Methods

Visual impacts from development on BLM-administered lands are analyzed using BLM's VRM system. This approach considers scenic quality, viewer sensitivity, and distance zones when conducting a Visual Resource Inventory (VRI). The VRI describes existing conditions but does not prescribe management actions. BLM considers information from the inventory when assigning VRM classifications to specific geographic areas.

Specific projects or sites resulting from a proposed planning direction are not identified or under review in this programmatic Environmental Impact Report/Environmental Impact Statement (EIR/EIS). On BLM lands, the approach to analysis of visual impacts used in the EIR/EIS identifies the amount of BLM land that would fall under various VRI and VRM classifications for each alternative and the extent to which those lands are or would be under conservation management or available for development. This approach is used to understand the potential impact on visual resources and their differences under each alternative.

On non-BLM lands, visual impacts from development are analyzed using a somewhat different approach, one that considers visual quality, viewer concern and exposure, and overall visual sensitivity from key observation points. Factors include visual contrast, project dominance, view blockage, and overall visual change. As with BLM-administered lands, a proxy is used to represent the amount of land on which visual impacts could occur. This

analysis identifies the acreage in the DFA under each alternative that potentially would be available for development of renewable energy facilities.

Future projects constructed pursuant to Plan approval will be reviewed when they are proposed, on a case-by-case basis and on a site-specific scale, to determine their consistency with the adopted VRM objectives of the applicable land use plan.

IV.20.1.2 CEQA Standards of Significance

Appendix G of the California Environmental Quality Act (CEQA) Guidelines identifies four standards for determining the significance of impacts to aesthetics from a project. Impacts could be considered significant if the project would:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including trees, rock outcroppings, and historic buildings within a State Scenic Highway.
- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Create a new source of substantial light or glare, which will adversely affect day or nighttime views in the area.

These CEQA standards of significance are subsumed under the broader impact statements applied to the visual impact analysis of each alternative (e.g., see Section IV.20.3.2.1, Plan-wide Impacts of Implementing the DRECP: Preferred Alternative). These impact statements (1) identify the short-term and long-term diminution of scenic quality resulting from project implementation and (2) consider impacts on scenic vistas, scenic resources along State Scenic Highways, the visual character and quality of a site and its surroundings, and the introduction of light and glare, among other factors.

IV.20.2 Typical Impacts Common to All Action Alternatives

This section describes visual impacts typically associated with solar, wind, and geothermal energy development, and transmission requirements (rights-of-way, major transmission lines, generator tie-lines [i.e., electrical lines connecting energy facilities to the larger electric grid], and substations). The impact of a given project would depend upon the intensity of project-specific resource development, including energy type, technologies used, site layout, scale, location, impact minimization strategies employed, timing and degree of disturbance, complexity of the facilities, and other factors analyzed at the project level.

The analysis in this programmatic EIR/EIS draws on information in other environmental documents. Typical effects of renewable energy development on visual resources were

evaluated by reviewing the Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States (Solar PEIS), the Wind Energy Development Programmatic Environmental Impact Statement (Wind Energy PEIS), and the Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States (Geothermal PEIS). In these documents, potential effects from actions similar to those that might occur under the DRECP alternatives were assessed.

Visual impacts can be divided into short-term impacts, generally associated with site characterization and active construction and decommissioning activities, and longer-term impacts that result from the visible physical changes wrought by construction, including site alterations, the physical presence of facilities, and facility operation. For purposes of analysis, short-term visual impacts are considered to occur and be present for no more than 5 years. These impacts are associated with visible construction activities and material/equipment staging and would cease once construction is completed. Long-term visual impacts extend beyond a 5-year period, when construction has been completed and operations are ongoing.

IV.20.2.1 Impacts of Renewable Energy and Transmission Development

Impacts can occur at various phases of a project: site characterization, construction and decommissioning, and operation and maintenance. Many types of impacts on visual resources are common among renewable energy projects, regardless of the technology employed. Visual changes due to utility-scale renewable energy and transmission development activities result from a range of actions or activities, including:

- Disturbance of ground surface.
- Alteration or removal of vegetation and landforms.
- Introduction of structures (e.g., energy collection and generation units, buildings, towers, and ancillary facilities).
- New or upgraded roads.
- New or upgraded utilities and/or rights-of-way (e.g., widening of rights-of-way, addition of transmission lines, and upgrading of transmission capacity).
- Presence and movement of workers, vehicles, and equipment.
- Visible emissions (e.g., dust and water vapor plumes).
- Reflectance, glare, and lighting.

IV.20.2.1.1 Impacts of Site Characterization

Site characterization activities can introduce visual impacts due to:

- Contrasts in form, line, color, and texture resulting from vegetation clearing and surface disturbance (if required for activities such as meteorological tower and access road construction and drilling of temperature gradient wells).
- Presence of trucks and other vehicles and equipment.
- Presence of idle or dismantled equipment and litter, if allowed to remain on the site.

During site characterization, ruts, windblown dust, and visible vegetation damage may occur from cross-country vehicle traffic if existing or new roads are not used. Soil disturbance can lead to growth of invasive species or erosion of soil, both of which could introduce contrasts in line, color, and texture, primarily for foreground and near-middle ground views. Site characterization visual impacts, such as occur with the presence of equipment and vehicles, are short-term. However, impacts due to road construction, erosion, landform alteration, or vegetation clearing may be visible for an extended period.

IV.20.2.1.2 Impacts of Construction and Decommissioning

Construction and decommissioning activities can introduce contrast in form, line, color, and texture resulting from:

- Vegetation clearing and ground disturbance needed to prepare project sites and laydown/staging areas.
- Road building and improvement.
- Night lighting.
- Debris.
- Physical presence of project elements (solar energy collectors, wind turbines, geothermal generating plants, and support facilities).
- Presence and movement of vehicles, equipment, and workers.
- Dust and other visible emissions.

Construction visual impacts vary in intensity, frequency, and duration during construction and, later, decommissioning. For a utility-scale project, these activities may last several years.

Solar project visual impacts vary based on the technology used, but they have a number of common features, including extensive grading to prepare areas for installing solar-collector or focusing arrays. This creates color and texture contrasts between existing soil and vege-

tation conditions and the disturbed, unvegetated project footprint. Clearing also creates opportunities for visible windblown dust clouds to occur. Numerous vehicles are required to deliver and install the arrays, resulting in movement, dust, and the presence of the vehicles themselves. Often, temporary structures are installed or erected for component assembly and finishing and to provide project site offices.

For wind energy projects, large cranes and other equipment would be needed to construct foundations and assemble and mount towers, nacelles (turbine housings), and rotors. This equipment would be especially visible near the activity and from a middle distance. Construction equipment would produce emissions and may create visible exhaust plumes. The disturbed footprint of individual turbines typically would be small, but for a field of turbines can be extensive. Collectively, multiple turbines would create a visual impact due to the size of their vertical and rotating elements and from required night safety lighting.

For geothermal projects, facilities to capture and use the geothermal resource would be constructed. Needed infrastructure can include roads, sump pits, production-size wells, injection wells, well field equipment, power plant facilities, pipelines, and transmission lines.

For all renewable energy projects, decommissioning the project and restoring the site to pre-project condition would entail removing structures and equipment, earthwork (re-contouring, grading, scarifying), and revegetation (stabilizing surfaces, seeding/planting, and providing temporary irrigation, if needed). Restoration might not be possible in all cases. The contours of restored areas might not be identical to pre-project conditions. Under the arid conditions generally found in the Plan Area, disturbed soils can create a visual contrast that persists for many years, until vegetation could begin to disguise past disturbance. Without proper management, invasive plant species may colonize reclaimed areas, producing contrasts in color and texture noticeable for many years. Unsuccessful restoration of previously cleared areas could erode soil, collapse slopes, and create gullies, which could result in or continue long-term adverse visual impacts.

IV.20.2.1.3 Impacts of Operations and Maintenance

The operation and maintenance of renewable energy projects and associated electricity transmission lines, roads, and rights-of-way would have long-term adverse visual effects. Among these are land scarring, introduction of structural contrast and industrial elements into natural settings, view blockage, and skylining (silhouetting of elements against the sky). All renewable energy facilities would include enclosed and open workspaces, exterior lighting around buildings, access roads, fencing, and parking areas. Built structures (buildings, piping, fencing, collector arrays, etc.) would introduce industrial elements into the landscape and contrast with surrounding undisturbed areas in form, line, color, and texture. They also can block views and create skylining, depending on their dimensions and

location relative to the viewer. The need for security and safety lighting could contribute to light pollution in areas where night lighting is otherwise absent or minimal. Light impacts include skyglow, off-site light trespass, and glare. Another impact common to renewable energy facilities is dust generated by vehicle movement within a site or along a right-of-way or access road. Without proper disturbed soil management strategies, wind can mobilize dust from project sites and create visible plumes or clouds of dust.

Solar

Some impacts are common to all utility-scale solar projects, regardless of the technology employed. Solar projects introduce strong geometric shapes and repeated linear elements into the visual environment. Typically, these projects have a large footprint and are in open and relatively flat settings with little to no vegetative or other screening. Valley floor locations are visible from nearby mountains and elevated viewpoints. Solar energy collectors rely on mirrored or glass surfaces that are highly reflective and produce glare (U.S. Department of Energy 2013). In addition to the collector or reflector arrays, solar projects can include other components with reflective surfaces, such as array support structures, steam turbine generators, piping, fencing, and transmission towers and conductors. Under certain viewing conditions, these surfaces give rise to specular reflections (glint and glare) visible to stationary or moving observers from long distances, and can constitute a major source of visual impact. Glint and glare from photovoltaic facilities are typically lower than solar concentrating facilities using trough, power tower, and solar dish technologies that employ mirrors and lenses. During the life of a solar project, panels, towers, troughs, and associated structures may need to be upgraded or replaced, creating visual impacts similar to impacts occurring during initial construction and assembly.

Solar energy projects also vary in their visual impacts because of the different technologies employed. Solar technologies include both concentrating solar power systems (which generate power using focused sunlight to either heat liquid to drive a turbine or generate electricity directly) and traditional photovoltaic systems. For example:

- Parabolic trough systems comprise rows of trough-shaped mirrors that direct solar insolation to a receiver tube running along the axis of the trough. Solar trough facilities have a relatively low profile when viewed from a distance, but a high potential for glare because they rely on reflected, focused light from large mirrors. Reflectivity varies widely during daylight hours based on sun angle but can be highly visible from elevated viewpoints.
- Power tower systems consist of thousands of ground-mounted sun-tracking mirrors that direct sunlight to a receiver atop a tall tower, where a liquid is heated then piped to a ground-based steam generator. Power tower projects have greater visual

impacts over larger areas than photovoltaic or thermal trough technologies because of their high vertical profile (i.e., one or more towers rising 300 to 700 feet above ground level with brightly glowing reflections at the receiver location), power plant, cooling towers, steam plumes, and highly visible and pulsing day/night aircraft safety beacons.

- Photovoltaic technologies differ from concentrated solar technologies; instead of concentrating sunlight to generate heat, they use panels to convert solar energy directly to electrical current (BLM 2013). Photovoltaic projects generally have lower visual impacts than the other solar technologies because of the comparatively low profile of the collector arrays and the lower reflectance from photovoltaic panels, as compared with mirrors used in other technologies. They do not have cooling towers, plumes, or power plants and do have fewer lights and low worker activity. Still, some panels can be reflective, especially when seen from higher elevations, and can be visible for long distances (up to 20 miles). Power conversion units (inverters) associated with these facilities can also cause visual contrasts (U.S. Department of Energy 2013). Because photovoltaic facilities do not require the generation infrastructure of other solar technologies (turbines, boilers), they are visually simpler and associated with lower visual contrasts (BLM 2013).
- Concentrated photovoltaic systems work like simple photovoltaic technologies, but they include lenses to focus the sun's rays on photovoltaic cells to generate more electricity than standard photovoltaic systems.

Wind

Wind energy projects would be highly visible because of the large vertical towers and rotating turbines that would be erected in an area where there are few, if any, comparable tall structures in the generally strongly horizontal landscapes typical of BLM lands in the Plan Area. Visibility and contrast would be heightened at locations where these structures are sited along mesas or ridgelines, silhouetting them against the sky. Additionally, strong nighttime visual contrasts would occur from aviation warning lighting on the towers (BLM 2013). Wind turbines may create visually incongruous "industrial" associations for viewers, particularly in a predominantly natural landscape. Their moving blades attract visual attention. Depending on the time of day, the shadows of tall turbine towers extend great distances across the landscape, in a sundial effect. The direction and length of this effect varies with the relative position of the sun in various seasons and at different times of the day, with morning and evening producing the longest shadows. The regular periodic interruption of sunlight by rotating turbine blades may produce a strobe-like effect, flickering alternating light and shadow over the area where the shadow is cast. During the life of a wind project, towers, nacelles, and rotor blades may need to be upgraded or replaced, creating visual impacts similar to impacts occurring during initial construction

and assembly. Collectively, multiple turbines would create a visual impact due to the numbers in close proximity to each other, their vertical and rotating elements, and the required night aviation safety lighting.

Geothermal

Visual impacts associated with the operation and maintenance of geothermal energy projects largely derive from ground disturbance and the visibility of industrial power plants, wells, pipes, steam plumes, and transmission lines.

Transmission

Visual impacts associated with the operation and maintenance of transmission facilities include the visual contrast of the transmission lines, support structures, and access roadways, as well as the occasional vehicle, equipment, and helicopter use along the transmission right-of-way or at substations, and the presence of workers conducting inspections or making repairs. Roads used for access are kept relatively free of vegetation. These features in the landscape can result in a strong visual contrast in form, line, color, and texture. Visibility and contrast would be heightened where towers and other structures are sited along mesas or ridgelines, resulting in skylining. Lattice towers are considered less visually obtrusive in natural landscape than monopoles when not close to sensitive viewing locations, because they are more transparent against background textures and colors (BLM 2013).

IV.20.2.2 Impacts of the Reserve Design

In general, the DRECP reserve design and associated Conservation and Management Actions (CMAs) would encourage projects to be located within the DFAs, thereby concentrating effects on visual resources in these areas. The avoidance, minimization, compensation, conservation, and management actions required to achieve the conservation strategy would reduce the proliferation of impacts on visual resources to some extent by encouraging development in specific areas and not in others, in contrast to permitting dispersed development throughout the Plan Area.

While the reserve design and CMAs vary among the action alternatives, there are similarities among all alternatives. The Reserve Design Lands (comprising existing conservation areas, the BLM LUPA Conservation Designations, and the Conservation Planning Areas [CPAs]) would limit or exclude renewable energy development in these areas, thereby protecting visual resources in large areas of the desert.

Visual resources are enhanced when desert areas are protected other reasons, such as for species and habitat protection. For example, the legislative and/or legal restrictions relevant to existing conservation areas direct that they be managed for the benefit of Covered

Species. These protective actions afford visual resource protections to these areas as well by limiting or excluding development.

The proposed BLM LUPA Conservation Designations are administrative designations intended to reduce or expand National Landscape Conservation System (NLCS) lands, Areas of Critical Environmental Concern (ACECs), and wildlife allocation designations on BLM-administered land. In addition to other resource values, relatively high levels of scenic quality and visual resources typically are associated with these areas.

Under the DRECP, not all conserved areas would be on existing public land. Conservation areas not otherwise protected in the reserve design by BLM designations are lands that would be conserved through acquisition or conservation easements from willing sellers of lands within the mapped CPAs. Conservation of these lands would be part of the compensation required for allowing various project impacts to occur. CPAs, acquisition agreements, and conservation easements would have restrictions limiting development and ground disturbing activities, thereby protecting or enhancing habitat for Covered Species. Such limitations would benefit visual resources as well.

The CMAs are critical components of the conservation strategy for the DRECP and serve to avoid and minimize impacts and contribute to the assembling of the reserve design through compensation for the loss of biological and other resources. CMAs would generally reduce the severity of impacts to visual resources by requiring impact avoidance and minimization measures for siting, design, construction, and decommissioning of renewable energy facilities.

BLM-specific CMAs for VRM include measures that apply Plan-wide, measures specific to DFAs, DRECP Study Areas (Future Assessment Areas, Special Analysis Areas, and DRECP Variance Lands), and transmission corridors, and a detailed set of visual resource best management practices (BMPs). The BMPs incorporate the measures identified in *Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands* (BLM 2013). This publication identifies 122 BMPs that can be used to avoid or reduce potential visual impacts associated with the siting, design, construction, operation, and decommissioning of utility-scale renewable energy generation facilities, including wind, solar, and geothermal facilities. The BMPs were compiled from a variety of sources, including guidance documents developed by various federal and state agencies; existing environmental analyses, including programmatic and project-specific environmental impact statements and assessments; professional practice literature; consultations with landscape architects, engineers, and renewable energy professionals; and field observations of existing renewable energy facilities and facilities under construction.

In addition to technology-specific BMPs, more general BMPs for design, construction, operation, and decommissioning activities include the following:

- Visual impact analysis and mitigation planning
- Facility siting and design
- Structure design and materials selection
- Materials surface treatments
- Lighting design and operation
- Avoiding unnecessary disturbance
- Soil management and erosion control
- Vegetation management
- Interim and long-term reclamation
- “Good housekeeping” practices

Together, these VRM CMAs provide a comprehensive framework of guidelines and specifications under which visual impacts would be avoided where possible and minimized and/or mitigated to the extent practicable. They would avoid or reduce visual contrast in form, line, color, and texture using a range of techniques, such as sensitive siting, revegetation, recontouring to match existing terrain characteristics, or painting facility components to blend with the landscape.

BLM-specific CMAs for other resources could also benefit visual resources. These include CMAs applicable to

- Air resources (stringent dust control requirements).
- Trails and travel (protecting views by buffering trails and managing travel routes and corridors).
- Cultural resources (prioritizing protection of visual resources on landscapes considered culturally significant to Native Americans).
- Lands and realty (acquisition and protection of visual resources of conservation lands).
- Livestock grazing (protection and restoration of scenic riparian and wetland systems).
- Recreation (maintenance and/or enhancement of naturalness).
- Soil and water (protection of scenic qualities of water systems, riparian, and wetland habitat, and soil surfaces).

Appendix H provides a detailed listing of CMAs.

Collectively, the proposed reserve design and conservation actions would increase the amount of conserved land, thereby protecting scenic values in those areas. Conservation would protect visual values by protecting natural, cultural, or other resources with associated visual values.

IV.20.2.3 Impacts of BLM Land Use Plan Decisions

IV.20.2.3.1 Impacts of Renewable Energy Development and Transmission on BLM Lands

The typical visual impacts from the various renewable energy and transmission technologies on BLM lands would be the same as those described in Section IV.20.2.1, Impacts of Renewable Energy and Transmission Development. However, the specific locations in which energy and transmission development will be allowed will be driven by LUPA decisions, which may encourage or restrict development in some areas.

IV.20.2.3.2 Impacts of BLM Land Designations and Management Actions

Because the BLM LUPA land designations would be managed to protect ecological, historic, cultural, scenic, scientific, and recreation resources and values, they also would confer general protection for visual resources. While other land uses are allowed within these areas, these uses must be compatible with the resources and values that the land designation is intended to protect.

Designation of VRM Classes, as proposed under all of the action alternatives, would establish visual management objectives for all BLM land areas in the Plan Area. VRI and the VRM system provide a framework for managing visual resources on BLM-administered lands. Included in this system is a mechanism for identifying visual resource values, minimizing the impacts of surface-disturbing activities on visual resources, and maintaining the scenic value of land tracts for the future.

Land designations protect visual resources by imposing restrictions on renewable energy development and limiting the amount of surface disturbance allowed. For example, proposed NLCS lands have disturbance caps of from 0.25% to 1%, ACECs exclude renewable energy and have disturbance caps of from 0.1% to 1%, and wildlife allocations and Special Recreation Management Areas (SRMAs) exclude renewable energy facilities. Another benefit to visual resources of land designations is the buffering of National Trails with Trail Management Corridors 0.25 to 10 miles in width. Disturbance caps and corridor widths vary by alternative.

Details on allowable uses and management within NLCS lands are in the proposed LUPA description in Volume II. Details on the goals, objectives, allowable uses, and management actions for each ACEC and SRMA unit are presented in the LUPA worksheets in Appendix H.

IV.20.2.4 Impacts of Natural Community Conservation Plan and General Conservation Plan

The Natural Community Conservation Plan (NCCP), administered by the California Department of Fish and Wildlife, would apply to state special-status species throughout the Plan Area. The General Conservation Plan (GCP), administered by the U.S. Fish and Wildlife Service, would apply to federal special-status species on nonfederal lands, a subset of the entire Plan Area.

IV.20.2.4.1 Natural Community Conservation Plan

The impacts of renewable energy development permitted under the NCCP would be the same as those defined for the Plan-wide impacts, including the typical impacts described in Section IV.20.2, Typical Impacts Common to All Action Alternatives, and for each alternative as described in this chapter.

IV.20.2.4.2 General Conservation Plan

The types of impacts resulting from renewable energy development permitted under the GCP would be the same as those defined for the Plan-wide impacts, including the typical impacts described in Section IV.20.2. However, the locations where these impacts would occur would vary by alternative. Any differences in these impacts that result from the locational differences are described for each alternative.

IV.20.3 Impact Analysis by Alternative

This section presents the impact analysis for the No Action Alternative, the Preferred Alternative and Alternatives 1 through 4. Table IV.20-1 summarizes the amount of visually sensitive area occurring under each alternative. For reference, columns from this table are repeated in the discussion of each alternative to compare the Preferred Alternative with the No Action Alternative and then with Alternatives 1 through 4.

IV.20.3.1 No Action Alternative

The No Action Alternative assumes the state's renewable energy goals would be achieved without implementing the DRECP and that mitigation for visual resource impacts from renewable energy and transmission projects in the Plan Area would occur on a project-by-

project basis in a pattern and manner similar to past and ongoing projects and under applicable laws and regulations.

Under the No Action Alternative, the BLM would not designate new VRM Classes for the California Desert Conservation Area (CDCA). Under the CDCA plan, visual resources are addressed through the multiple-use classes, and these designations would remain as they are currently. In accordance with BLM policy, all wilderness areas and wilderness study areas (WSAs) are managed as VRM Class I and would continue as VRM Class I under the No Action Alternative (Figure IV.20-1, BLM VRM Classifications, No Action Alternative).

The No Action Alternative would continue the existing VRM policies or designations in the CDCA Plan, Bishop Resource Management Plan (RMP), and Imperial Sand Dunes Recreation Area Management Plan (RAMP) applicable to the Plan Area and the CDCA outside the Plan Area. (No goals and objectives or management actions were identified for visual resources under the Caliente RMP.) No new or modified BLM LUPA Conservation Designations would be implemented, except as they may be required of individual projects. In the absence of specific resource decisions, management would occur (1) on BLM lands based on existing federal law, regulations, and BLM policy and guidance and (2) on nonfederal lands based on applicable federal, state, and local laws, regulations, and plans.

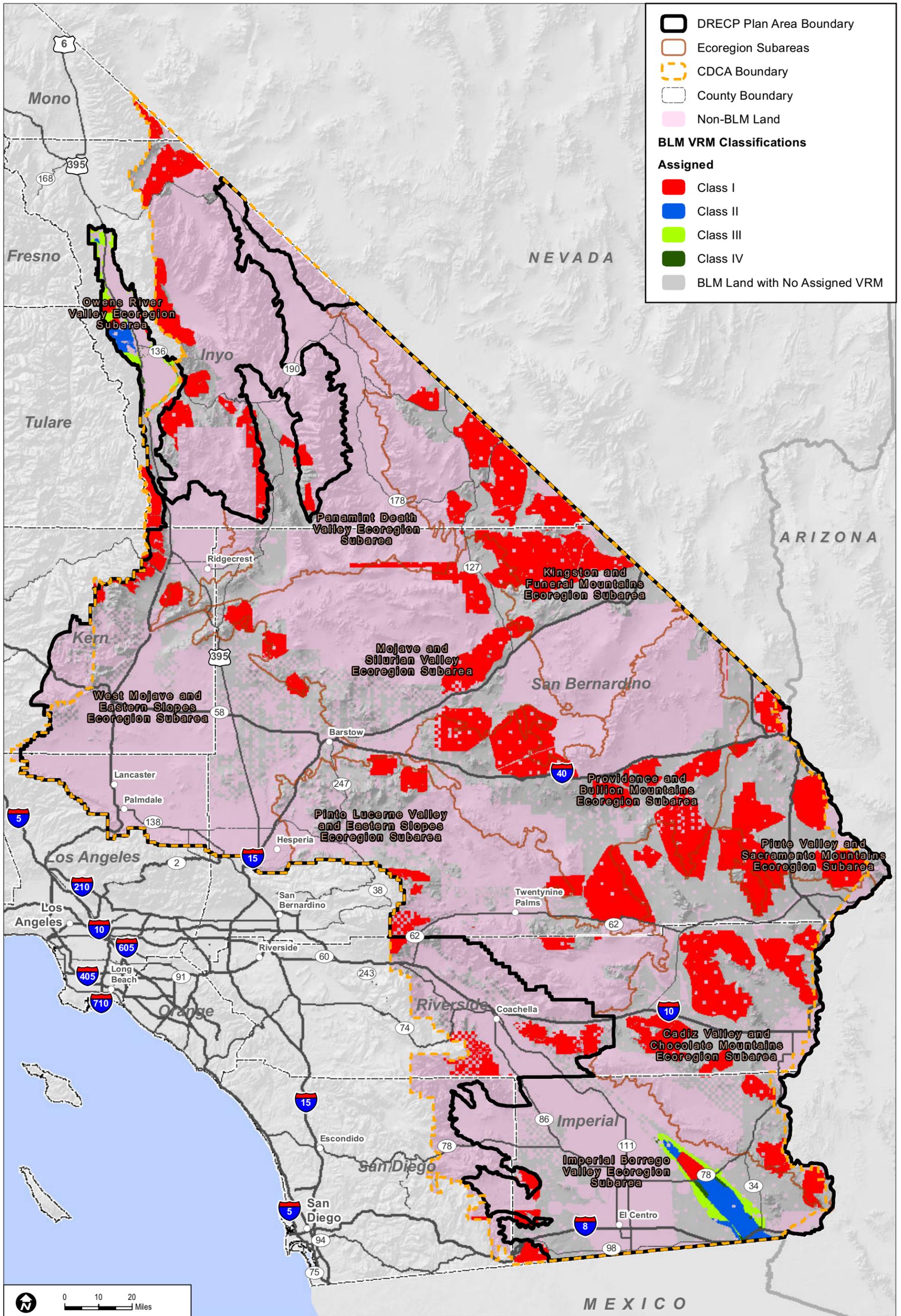
Under the No Action Alternative, visual impacts of future renewable energy development would be similar to those from current development patterns and technology mixes:

- Solar development would be emphasized in the Cadiz Valley and Chocolate Mountains and the Imperial Borrego Valley ecoregion subareas; wind development in the West Mojave and Eastern Slopes ecoregion subarea; and geothermal in the Imperial Borrego Valley ecoregion subarea.
- One new transmission line is estimated to extend from Imperial Substation to Sycamore Substation in San Diego.
- Solar PEIS Variance Lands would be available for development, as would other lands.
- Conservation would continue on existing protected lands (Legislatively and Legally Protected Areas) and existing areas managed by the BLM for the conservation of resource values (existing ACECs or wilderness areas), but additional conservation areas would not be designated.

**Table IV.20-1
Potentially Affected Visual Resources and Visually Important Management Units by Alternative**

	No Action Alternative	Preferred Alternative	Alternative 1	Alternative 2	Alternative 3	Alternative 4	
<i>Development Areas (acres)</i>							
Available Development Area	9,788,000	—	—	—	—	—	
DFAs	—	2,024,000	1,070,000	2,473,000	1,406,000	1,608,000	
<i>Visual Resource Elements Within Development Areas (acres unless otherwise indicated)</i>							
Visual Resource Inventory	Class I	0	0	0	0	0	
	Class II	36,000	17,000	4,000	39,000	5,000	200
	Class III	41,000	61,000	8,000	89,000	20,000	3,000
	Class IV	35,000	27,000	7,000	66,000	25,000	2,000
Visual Resource Methodology	Class I	0	0	0	0	0	0
	Class II	10	0	0	0	0	0
	Class III	3,000	0	0	0	0	0
	Class IV	0	106,000	19,000	191,000	50,000	5,000
National Scenic Byways	1 mi	0	0	0	0	0	
National Trails	20 mi	1 mi	2 mi	6 mi	2 mi	1 mi	
California State Parks	1,000	0	0	0	0	0	
State Scenic Highways	6 mi	0	0	0	0	0	
Wild and Scenic Rivers	0	0	0	0	0	0	
<i>Reserve Design Lands (Conservation Lands) (acres)</i>							
Reserve Design Lands	—	14,920,000	15,885,680	15,085,000	15,159,000	14,476,000	
No Action Alternative (existing conservation only)	7,662,000	—	—	—	—	—	

Note: VRI Class I represents the highest level of inventoried visual resource values; VRM Class I represents the most restrictive visual management objectives. The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

FIGURE IV.20-1

BLM Visual Resource Management Classifications, No Action Alternative

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IV.20.3.1.1 Impacts Within the Entire Plan Area in No Action Alternative

IV.20.3.1.1.1 Impacts and Mitigation for Renewable Energy and Transmission Development in No Action Alternative

Impacts

There are more than 9.7 million acres of Available Development Areas (ADAs) in the Plan Area under the No Action Alternative, resulting in a projected 123,000 acres of long-term disturbance (see Table IV.1-1). ADAs include both federal and nonfederal lands and represent nearly half of the entire Plan Area. Visual impacts associated with this scale of development would be dispersed across the Plan Area in accordance with allowances within existing BLM multiple-use classes and County plans.

Current development patterns emphasize solar in the Cadiz Valley and Chocolate Mountains and the Imperial Borrego Valley ecoregion subareas; wind in the West Mojave and Eastern Slopes ecoregion subarea; and geothermal in the Imperial Borrego Valley ecoregion subarea.

Impacts to visual resources in various areas under the No Action Alternative are as follows (see Appendix R2.20, Table R2.20-1 for additional detail):

- There are approximately 36,000 acres of VRI Class II lands, 41,000 acres of VRI Class III lands, and 35,000 acres of VRI Class IV lands within ADAs under the No Action Alternative. Protection of the scenic values identified for these lands would continue to be through the application of current CDCA multiple-use class guidelines or from existing VRM assignments under existing management plans.
- Approximately 10 acres of BLM land in ADAs are VRM Class II, and 3,000 acres are VRM Class III under the No Action Alternative. These lands would continue to be managed according to their VRM classifications. New VRM Classes would not be assigned under the No Action Alternative. VRM objectives would be applied only to existing classified lands, wilderness areas (VRM I), and WSAs (VRM Class I).
- Less than 1 mile of Bradshaw Trail National Back Country Byway is within an ADA.
- Approximately 20 miles of National Scenic and Historic Trails are within ADAs, potentially affecting the visitor experience of people using those trails. Under the No Action Alternative, no Trail Management Corridors would be established along these trails, although buffering of trails could be imposed on a case-by-case basis during project review and approval.
- Approximately 900 acres of California State Park lands are within ADAs.

- ADAs do not include any portion of National Parks or Preserves or segments of State Scenic Highways under the No Action Alternative.
- ADAs do not include any designated or eligible Wild and Scenic River corridors under the No Action Alternative.

Under the No Action Alternative, there would be a high potential for visual impacts to occur where land available for facility development abuts or is visible from Legislatively and Legally Protected Areas. These include Mojave National Preserve, Death Valley National Park, Joshua Tree National Park, numerous Congressionally designated wilderness areas, and the west side of the Imperial Sand Dunes Recreation Area.

The impacts to visual resources resulting from the No Action Alternative are as follows.

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Pre-construction activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include road upgrading, damage to or removal of native vegetation, construction of meteorological towers, drilling of temperature gradient wells, vehicles, and lighting.

During construction and decommissioning, activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include dust and exhaust emissions, removal of vegetation during site clearing, contouring and grading, use of vehicles and equipment, mobilization and demobilization activities, material delivery and staging, assembly of components, site lighting, and construction of and later removal of structures.

Impact VR-2: The presence of Plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

The continued presence of equipment, structures, fencing, roads, lighting, and other elements required to operate a facility would have a long-term adverse effect on the visible landscape. Areas of persistent surface and vegetation disturbance and the presence of structures would create visual contrast in form, line, color, and texture as compared with pre-project conditions. Depending on viewer location, physical elements introduced by a project could block views or create skylining. Even after project removal and site reclamation are completed, visual contrast would remain. Restoring the natural, pre-disturbance visual character of a desert environment is extremely difficult, can take decades, and often is unsuccessful. Therefore, surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes.

Renewable energy projects, particularly utility-scale solar facilities, would create new sources of light and/or glare that would affect daytime and nighttime views and result in long-term impairment of scenic quality. Depending on the technology, solar facilities use a multitude of mirrored surfaces that can be sources of glint (a brief flash of light) or glare (light bright enough to cause annoyance or discomfort) (BLM 2013). Solar facilities are capable of causing off-site glare that may cause annoyance, discomfort, or in certain circumstances, ocular damage. In some instances, the glare can be bright enough to cause a viewer to close their eyes in reaction (Sullivan, et al. 2012).

Glint and glare are safety concerns, particularly with regard to vehicle operators and pilots for whom even momentary blindness is a human safety threat. Recently, the Federal Aviation Administration received complaints in which glare was identified as a flight hazard because it allegedly impaired the ability of the pilot to fully scan the sky for other aircraft (The Press-Enterprise 2014). Two pilot complaints of adverse visual impacts from the Ivanpah Solar Electric Generating System were received by the California Energy Commission from the Clark County Department of Aviation (Spectrus 2014).

Glare from solar receivers also adversely affects the views and visitor experience of recreationists and can be seen from wilderness areas at distances less than 5 miles (California Energy Commission 2013).

Glint and glare from wind and geothermal facilities is a concern as well. Glare and glinting from white wind turbine blades increases their contrast with the surrounding natural landscape. If geothermal facilities and pipe networks are not painted or coated appropriately to reduce reflectance and blend with the landscape, their surfaces may be highly visible.

The structure, size, and industrial character of utility-scale renewable energy and transmission facilities during their operation and maintenance—as well as any associated glare, reflectivity, and lighting—would visually contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Laws and Regulations

Existing laws and regulations would reduce the impacts of renewable energy development projects in the absence of the DRECP. Relevant regulations are presented in the Regulatory Setting in Volume III. Note that because this EIR/EIS addresses amendments to BLM's land use plans, these plans are addressed separately and are not included in this section. The requirements of relevant regulations would reduce impacts through the following mechanisms:

- **Federal Land Policy and Management Act of 1976** – This act mandates public lands be managed in a manner that will protect the quality of the scenic (visual) values of these lands.

- **Solar PEIS** – Numerous design features have been adopted by BLM that would avoid, minimize, and/or mitigate potential impacts on visual resources from solar energy development (see Appendix W). It is assumed that these or similar design features would apply to all renewable energy and transmission projects developed within the Plan Area. These design features include various actions listed as numbers VR-1 through VR-4 in the Solar PEIS to reduce visual impacts (BLM and Department of Energy 2010):
 - **VR1-1:** Requires assessing conformance to VRM Class designations and identifying visual resource conflicts. Among the actions to be taken are consulting with BLM; factoring VRI Class values into project planning and design; including a qualified professional with VRM experience on the development team; consulting the local public to identify important visual resources in the area; consulting on viewshed protection with managers responsible for areas with special designations; evaluating impacts on historic trails; considering landscape setting observed from National Parks, National Historic Sites, and similar areas; using topographical data of engineering-design quality and digital terrain mapping for project planning and design; preparing simulations depicting project facilities as seen from key observation points and visual resource-sensitive locations; conducting public outreach to disseminate visual resource information; and performing visual mitigation planning and design based on field assessments and other means.
 - **VR2-1:** Requires consideration of siting and design to minimize glint and glare and taking appropriate actions. These actions include identifying glint and glare effects, assessing and quantifying these effects to determine potential safety and visual impacts, and having qualified people conduct such assessments. Methods to minimize glint and glare include limiting use of signs; using reflective or luminescent markers instead of permanent lighting; minimizing off-site visibility of signs and lighting; using nonglare materials and appropriate colors; mitigating or offsetting visual impact by reclaiming unnecessary roads, removing abandoned buildings, using undergrounding utility lines, and rehabilitating and revegetating disturbed areas; and other actions determined in consultation with the BLM.
 - **VR2-2:** Requires solar facilities be sited and designed to minimize night-sky effects. Identification of night-sky effects is to include assessing and quantifying potential lighting impacts and conducting assessments by using qualified individuals. Methods to minimize night-sky effects include using minimum intensity lighting of an appropriate color consistent with safety needs, prohibiting strobe lighting except where it is required for safety; shielding all permanent lighting unless otherwise required for safety; mounting lighting so that light is downward focused; controlling lighting with timers, sensors, and dimmers; and using

- vehicle-mounted lights for nighttime maintenance work rather than permanently mounted lighting.
- **VR2-3:** Requires that the siting and design of solar and related facilities explore and document means to reduce visual dominance in the viewshed and that the project comply with VRM Class objectives. Methods include conforming with VRM Class objectives (through use of BLM Handbook H-8431-1); determining the extent of the viewshed and selecting key observation points where people are expected to be observing the landscape; integrating visual design elements into plans, details, drawings, and specifications; and siting the facility to minimize the profile of all structures. Ways to minimize visual dominance include using existing topography and vegetation as screening; considering visual design elements when clearing vegetation and doing earthwork; siting projects outside of key observation point viewsheds; avoiding locating facilities near visually prominent landscape features; avoiding skylining of structures; designing linear features to follow natural land contours rather than straight lines; locating linear features at the edges of natural lines of transition between vegetation types and topography; using alternative means of access in visually sensitive areas to preserve landscape conditions; minimizing vegetation and ground disturbance; reducing cut and fill; shaping, staining, and vegetating excavations to conform with local conditions; creating natural-looking earthwork forms; repeating characteristics of naturally occurring openings in vegetation for roads, structures, and similar elements; burying linear utilities and lines along roads or paths; selecting appropriate materials and surface treatments for structures to reduce visual contrast; using nonspecular conductors and nonreflective coatings on transmission lines; minimizing signage; delineating construction limits and minimizing area of surface disturbance; salvaging vegetation and topsoil for reuse; and removing stakes and flagging after construction.
 - **VR2-4:** Requires preconstruction meetings with the BLM and designated specialists to coordinate the VRM mitigation strategy. This includes a review of final design and construction documents with regard to visual impacts and mitigation.
 - **VR3-1:** Requires the project developer to monitor compliance with VRM mitigation requirements and consult with the BLM during operations and maintenance. Maintaining visual resource design elements would include maintaining revegetated surfaces until self-sustaining; keeping facilities in good repair and repainting as necessary; restoring lands as soon as possible after disturbance; controlling dust and noxious weeds; and operating so as to avoid high-intensity light (glare) being reflected off site.

- **VR4-1:** Requires immediate reclamation of the site after construction. Methods for minimizing visual contrast during reclamation and decommission include undertaking treatments such as thinning and feathering vegetation at project edges, enhancing contouring, salvaging landscape materials, and revegetating; restoring the project area to predevelopment visual conditions and the inventoried visual quality rating; removing aboveground and near-ground-level structures; contouring soil borrow areas and other features to approximate natural slopes; using native vegetation to establish form, line, color, and texture consistent with the surrounding undisturbed landscape; distributing stockpiled topsoil to disturbed areas and replanting; and removing or burying gravel or other surface treatments.
- **Existing VRM policies or designations** – These incorporate those in the CDCA Plan, Bishop RMP, Imperial Sand Dunes RAMP, and other BLM guidance, including:
 - **BLM’s Manual 8400** – VRM system addresses BLM’s basic responsibility to identify and protect the quality of the scenic (visual) values on all BLM lands. The VRM system requires visual design considerations be incorporated into all surface-disturbing projects regardless of size or potential impact.

Guidance on visual management for renewable energy projects is in BLM’s *Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands* (BLM 2013). These BMPs provide a comprehensive set of strategies for avoiding and reducing visual impacts associated with renewable energy generation facilities and ancillary components, such as electric transmission, roads, and structures. They also address project siting and design and other key activities that can have a major effect on visual quality. Examples include mitigation planning, structure design and materials selection, paint colors, material surface treatments, lighting practices, and soils and vegetation management.

Mitigation

Many visual impact mitigation measures applicable to existing renewable energy projects would be adopted and applied to future projects under the No Action Alternative (see Appendix W and the previous discussion under Laws and Regulations). Examples of general visual impact mitigation measures applicable to any project implemented in the absence of Plan approval include:

- Modifying facility designs, colors, locations, and materials to reduce visibility and contrast.
- Adjusting site configurations and harmonizing earthwork with local topographic forms and contours.

- Treating structure surfaces to reduce contrast and glare.
- Minimizing lighting overall, using fixtures that minimize night-sky impacts and down-focus fixtures.
- Avoiding unnecessary ground disturbance beyond what is required for the project.
- Controlling dust and erosion.
- Restoring and managing disturbed land and vegetation.
- Restoring and reclaiming areas as soon as feasible.

Examples of visual mitigation measures applicable to solar projects include development and implementation of a glint and glare mitigation and monitoring plan; screening of solar collectors from roads; retaining vegetation beneath solar collector arrays; prohibiting commercial signs, logos, or messages on towers and arrays; and using visually compatible color treatments and nonreflective materials for support structures and other components. In addition to direct reduction in visual quality, visual quality degradation can compromise the integrity of historical resources or traditional cultural places. In cases where such visual impacts occur, compensatory mitigation can include requiring research, field inventories, worker training, and other efforts specific to the resource and groups affected.

Examples of visual mitigation measures for wind energy projects include siting to reduce visibility, clustering turbines, creating visual order and unity among groups of turbines, using radar-activated visual warning systems to reduce night-sky impacts, prohibiting signs and messages on towers, keeping turbines clean and in good repair, and promptly removing disused or abandoned equipment and parts.

Examples of visual mitigation measures specific to geothermal energy projects include using air-cooled systems (to avoid plumes that water-cooled systems may generate under some conditions), minimizing drill rig and well-test facility lighting, and screening of pipelines.

IV.20.3.1.1.2 Impacts from Reserve Design in the No Action Alternative

There would be no reserve design under the No Action Alternative. Renewable energy projects would be evaluated and approved on a case-by-case basis with project-specific mitigation requirements imposed by the responsible agencies. In the absence of approval of a DRECP action alternative, there would be continued protection of existing Legislatively and Legally Protected Areas, such as parks and wilderness areas, under existing laws and regulations.

It is assumed that under the No Action Alternative, mitigation requirements would include conservation actions to offset resource impacts to particular resources, such as protected

species. These measures would include land acquisition, conservation easements, or other agreements that would set aside and protect areas, which would increase the amount of conserved land under the No Action Alternative compared with the current amount of conserved land. Such conservation actions would reduce the potential for long-term adverse impacts to visual resources to occur or persist on lands being conserved or restored as part of biological or other resource mitigation requirements.

Tables in Appendix R2 quantify the amount of visual resource elements of concern occurring within existing protected areas (Legislatively and Legally Protected Areas, Military Expansion Mitigation Lands, and BLM ACECs). Under the No Action Alternative, existing protected areas and BLM Conservation Designations would provide ongoing conservation of resources, including visual resources; however, there would be no reserve design established to guide where BLM Conservation Designations might be established in the future or where reserves and conservation areas could be assembled to offset the effects of renewable energy or transmission development. Any additional conservation associated with renewable energy or transmission development would derive solely from the mitigation requirements imposed on a project-by-project basis.

Existing conservation areas in the No Action Alternative cover approximately 7.7 million acres of the Plan Area. Conserved and protected lands include wilderness areas, Military Expansion Mitigation Lands, and ACECs as well as portions of National Scenic and Historic Trails, Scenic Highways, and Wild and Scenic Rivers. Visual resources in these areas would continue to benefit from the policies and requirements applicable to the conservation of these lands. (See Appendix Table R2.20-2, for detailed data.) The amount and location of any additional conserved lands that might be added to the total through mitigation acquisition would be determined on a project-by-project basis as impacts become known and offsets required.

IV.20.3.1.2 Impacts on BLM Lands of Existing BLM Land Use Plans in No Action Alternative

The No Action Alternative would continue the existing visual management policies set forth in the CDCA Plan, Bishop RMP, and Imperial Sand Dunes RAMP. (The Caliente RMP does not include goals and objectives or management actions specifically identified for visual resources.) The Bishop RMP and Imperial Sand Dunes RAMP each have assigned VRM Classes, which would continue to set objectives for visual resource management in those plan areas.

Under the No Action Alternative, existing BLM land use plans within the Plan Area would continue to apply and renewable energy development would be allowed in certain land designations, including Solar Energy Zones and Solar PEIS Variance Lands. In addition, as

has been the case for previous individual solar, wind, and transmission projects on BLM land, new projects would be approved along with project-specific LUPAs, if required. In all cases, BLM's policies and guidance for visual impact assessment and impact reduction would apply.

Existing BLM plans identify various land designations and associated management actions for existing protected areas, such as ACECs, SRMAs, and National Scenic and Historic Trails. Protective measures in these designations offer a level of protection for visual resources under the No Action Alternative.

Under the No Action Alternative, solar energy development on BLM-administered land would be subject to the Solar PEIS. The Solar PEIS created a comprehensive set of updated and revised policies and procedures, including standards for visual resource management, and established categories of lands excluded from utility-scale solar development. Both actions could help protect visual resources within the Plan Area.

The Wind PEIS Record of Decision (December 2005) established policies, BMPs, and minimum mitigation requirements for wind development on BLM land. However, the Wind PEIS did not amend BLM plans in the Plan Area. Therefore, under the No Action Alternative, wind energy development within the Plan Area would be under the existing CDCA Plan; and wind energy right-of-way applications would continue to be considered on a case-by-case basis. (The Bishop and Caliente RMPs do not address wind energy.)

The following summarizes the key aspects of visual impacts on BLM lands under existing BLM Land Use Plans in the No Action Alternative. These include visual resources within BLM conservation lands (i.e., existing SRMAs and ACECs). Table R2.20-3 in Appendix R2 includes detailed information. The following are within existing SRMAs and/or ACECs:

- 3.3 million acres of VRI classified lands
- 898,000 acres of VRM classified lands
- 23 miles of the Bradshaw Trail National Back Country Byway
- 157 miles of National Trails
- 22 miles of the Amargosa River

Currently, VRM Classes are assigned only for the Bishop Field Office and the Imperial Sand Dunes RAMP. As well, under BLM policy, VRM Class I is assigned to wilderness areas and WSAs. This would not change under the No Action Alternative. Generally, a low correlation between the VRM Classes and the underlying VRI Classes results in a greater potential for adverse impacts to visual quality (e.g., VRI Class II or III lands managed to meet the objectives of VRM Class IV). Conversely, impacts would most likely be reduced by alternatives

proposing visual resource management that either closely corresponds to the VRI classes or proposes a more restrictive (higher) class designation (e.g., VRI Class III lands managed to meet the objectives of VRM Class II.)

Under the No Action Alternative, VRI Class lands within the VRM Classes on BLM LUPA lands would be as shown in Table IV.20-2.

The following summarizes the key points from this comparison of VRI Classes and existing VRM Classes under the No Action Alternative:

- By BLM policy, all existing VRI Class I lands in the Plan Area are assigned VRM Class I for management purposes. This is due to wilderness areas and WSAs being designated VRM Class I. The breakdown by VRI Classification is as follows:
 - **VRI I:** 100% of VRI Class I lands, including wilderness areas and WSAs, would continue to be managed as VRM Class I, reflecting a high level of management protection.
 - **VRI II:** 75% of VRI Class II lands would continue to be managed as VRM Class II, reflecting a moderately high level of management protection. Approximately 20% would continue to be managed as VRM Class III and 5% as VRM Class IV.
 - **VRI III:** More than 84% of VRI Class III lands would continue to be managed as VRM Class III or as II, reflecting a moderate to high level of management protection. Approximately 35% would continue to be managed to meet VRM Class II objectives, which restrict visual contrast and affect more than VRM Class III does. Approximately 16% would be managed as VRM Class IV, which allows for more visual contrast and impact than VRM Class III objectives allow.
 - **VRI Class IV:** More than 58% of VRI Class IV lands would continue to be managed as VRM Class II or III; 41% would continue to be managed as VRM Class IV.

Table IV.20-2
VRI Classes Within Existing VRM Classes on BLM LUPA Lands – No Action Alternative

LUPA-VRM Class Designations	Existing Visual Resource Inventory Classes								Total
	VRI Class I		VRI Class II		VRI Class III		VRI Class IV		
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
VRM Class I	3,866,000	100%	0	0%	0	0%	0	0%	3,866,000
VRM Class II	0	0%	100,000	75%	25,000	35%	3,000	22%	128,000
VRM Class III	0	0%	65,000	20%	15,000	49%	65,000	36%	145,000
VRM Class IV	0	0%	18,000	5%	1,000	16%	3,000	41%	22,000
Total	3,866,000	100%	183,000	100%	41,000	100%	71,000	100%	4,161,000

Note: VRI Class I represents the highest level of inventoried visual resource values; VRM Class I represents the most restrictive visual management objectives. Under the No Action Alternative, VRM Classes are assigned only for the Bishop Field Office and the Imperial Sand Dunes RAMP. By BLM policy, VRM Class I is assigned to wilderness areas and WSAs. The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.1.3 Impacts of Natural Community Conservation Plan in No Action Alternative

The NCCP would apply to all lands within the Plan Area. In the absence of Plan implementation, the NCCP would not be approved; and no incidental take permits would be issued under the NCCP. Projects would continue to be considered by the appropriate lead agency on an individual basis. The impacts that would occur in the absence of the NCCP would be the same as those described in Section IV.20.3.1.1.1, Impacts and Mitigation for Renewable Energy and Transmission Development in No Action Alternative, (Plan-wide analysis).

IV.20.3.1.4 Impacts of General Conservation Plan in No Action Alternative

As described in Appendix M, the GCP would apply to nonfederal lands in the Plan Area. In the absence of Plan implementation, the GCP would not be approved; and no incidental take permits would be issued under the GCP. Projects would continue to be considered by the appropriate lead agency on an individual basis. The impacts that would occur in the absence of the GCP would be the same as those described in Section IV.20.3.1.1.1 (Plan-wide analysis) but would be specific to nonfederal lands.

IV.20.3.1.5 Impacts Outside the Plan Area in No Action Alternative

It is feasible to characterize existing visual conditions in identified transmission corridors, but project-level analyses would be required to determine specific future projects' impacts on visual resources. The methodology used for project-level analyses would vary depending on the agency with jurisdiction over the land involved. Analyses of visual impacts on BLM lands use BLM's VRM system (described in detail in Volume III, Section III.20.1.1.2). For facilities on lands administered by the Angeles, San Bernardino, and Cleveland National Forests, the analytical approach is described in the U.S. Forest Service's Scenery Management System. For projects subject to CEQA, the analysis would address the criteria established in the CEQA Guidelines to determine the significance of impacts to aesthetics and visual resources.

Development or enhancement of transmission and substation facilities outside the Plan Area would occur in a variety of remote, rural, suburban, and urban settings. In general, the visual character of a landscape is defined by the amount and type of development found within the setting, natural variations in topography, and the density and height of vegetation. Color, hue, and contrast are important variables to be considered in any analysis. The geographic area from which a transmission line or substation would be visible is referred to as the facility's viewshed; this is primarily determined by the surrounding land elevation relative to the facility location and the landforms, structures, or vegetation that would block views that otherwise would exist. A facility's effective viewshed is limited by dis-

tance; with increased distance between a facility and a viewer, atmospheric moisture and particles affect the visibility and distinctness of the facility. The perceived color, contrast, and size of a facility relative to its surroundings diminish; and the facility becomes indistinct and blends into the background.

Transmission lines and substations differ in their visible elements, how they are situated in the landscape, and the duration of views. Transmission lines are linear facilities that introduce rhythmic, repeating elements across a landscape. These ribbon-like facilities extend many miles. They consist of stand-alone tower structures ranging from 100 to 160 feet high. Although it varies by terrain, spacing can be uniform, typically 4 to 5 per mile for 500-kilovolt lines and 7 to 10 per mile for 230-kilovolt lines. Depending on tower types, they may require a permanently cleared area beneath them. They also may require new access roads to and along their rights-of-way, and stub roads extended from those roads to tower sites if they do not already exist.

In contrast to transmission lines, substations are confined, single-site facilities. Outside the Plan Area, such facilities receiving renewable power are expected to be sited at or near existing 500/230-kilovolt substations. Large substations can include pads that extend over dozens of acres, with additional space for access roads, water tanks, and buffers. For example, the DRECP Transmission Technical Group assumed that 176 acres would be required for a high transmission substation to incorporate the disturbance from additional infrastructure. Circuit breakers, disconnect switches, transformers, capacitors, and associated equipment, as well as control or equipment buildings and firewalls, are typical ground-level elements of a substation. Dead-end structures used to loop lines in and out of the substation, busses, and overhead structures above the equipment and facilities are also situated on the substation pad. Typically, these are lattice- or tubular-steel components with cross members.

IV.20.3.1.5.1 Impacts of Transmission Outside the Plan Area

Outside the Plan Area, additional transmission lines would be needed to deliver the additional renewable energy to load centers (areas of high demand). It is assumed that transmission outside the Plan Area would use existing transmission corridors that run between the Plan Area and existing substations in the more populated coastal areas of the state. Existing substations would serve as the portals for the power to be transmitted from the desert to load centers. These portals include Whirlwind, Vincent, Lugo, Devers, Suncrest, and Imperial substations. These are the same under the No Action Alternative, the Preferred Alternative, and Alternatives 1 through 4. Likewise, the transmission corridors outside the Plan Area are the same for all alternatives. Therefore, at a programmatic level, there is no difference among the alternatives based on transmission outside the Plan Area. The actual corridors used and the number and type of transmission

lines installed would depend upon the ultimate location of generation facilities in the Plan Area. Any transmission projects proposed outside the Plan Area would need a project-specific environmental review.

Existing corridors contain transmission towers, conductors, and access roads; therefore, a degree of visual impact already is present. The type and degree of visual impacts in these corridors would vary based on whether the area through which the corridor passes is undeveloped or urbanized.

There are relatively open landscapes between the substations acting as portals from the Plan Area to the urbanized areas where the electrical demand exists. This open landscape is in a mix of public and private ownership. In Southern California, the transition from open landscapes to urban landscapes can be abrupt. Areas subject to BLM or U.S. Forest Service jurisdiction would require project-by-project analysis under their respective visual management protocols. Areas subject to state or local jurisdiction would be subject to project-by-project analysis by the California Public Utilities Commission, which has authority over high-voltage transmission lines.

Impacts to visual resources from construction of transmission lines outside the Plan Area would be as follows:

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Pre-construction activities and equipment would be visible to observers in the vicinity of the work would result in short-term diminished scenic quality for viewers. Examples include access road upgrading, damage to or removal of native vegetation, and presence and movement of vehicles, dust, and lighting. This would be true for both open landscapes and urbanized areas.

Impact VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Transmission towers and conductors would have an adverse effect on the visible landscape. Areas of persistent surface and vegetation disturbance, such as access roads and tower footprints, and the presence of structures would create visual contrast with existing conditions. Depending on viewer location, physical elements introduced by a project could create skylining. These effects would be similar to those of existing lines. Surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes. The presence of towers, roads, and other elements required to operate a transmission facility would have a long-term effect on visual resources.

Notably, transmission lines create long linear features in the landscape visible from a considerable distance in flat terrain.

In open landscapes through which portions of these corridors pass, such as national forests or the desert, visual contrast would remain even after decommissioning and removal of facilities. Restoring the natural, pre-disturbance visual character of an arid or semi-arid environment is difficult, can take decades, and is not always successful. Surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes.

In urbanized areas, the lines would be in existing transmission corridors mostly surrounded by urban development. The presence of buildings and vegetation would tend to block long sightlines to the transmission structures, limiting the area from which they could be seen. If new towers are located near existing towers, this would increase the number of industrial-like elements visible within the urban setting. However, this would be an incremental increase over existing conditions and not a radical departure. In some cases, existing transmission lines would be replaced with upgraded towers and conductors. This would exchange one set of visual impacts for another similar set, potentially reducing the number of towers visible but possibly introducing taller towers into the view.

Visual impacts from the construction and operation of transmission lines outside the Plan Area would be reduced by application of various mitigation measures. Generally, applicable measures to lessen impacts include controlling dust, aligning tower locations so they are adjacent, locating towers so they do not skyline on ridges, and using nonreflective (nonspecular) surface treatments. The level of significance of the impacts can be determined only through a detailed analysis of proposed actions at specific locations.

IV.20.3.1.5.2 Impacts of Existing BLM Land Use Plans Outside the Plan Area

Under the No Action Alternative, the existing BLM CDCA land use plan would continue to be implemented on CDCA lands; and renewable energy projects would still be developed through BLM's existing policies. Impacts on visual resources would be of the types described in Section IV.20.2.1 with similar mitigation measures being included on a case-by-case basis. Existing land designations—such as existing protected areas, ACECs, SRMAs, and National Scenic and Historic Trails—would continue to be managed to protect their associated scenic values and visual resources.

The following summarizes the key aspects of the visual resource elements occurring on BLM land designations outside the Plan Area (see Table R2.20-4 in Appendix R2 for detailed data).

- **VRI Classes:** Approximately 233,000 acres of VRI lands are within existing SRMAs and/or ACECs outside the Plan Area.

- **VRM Classes:** Approximately 138,000 acres of VRM lands are within existing SRMAs and/or ACECs outside the Plan Area.
- **National Scenic Byways:** Approximately 6 miles of the Bradshaw Trail National Back Country Byway are within existing SRMAs and/or ACECs outside the Plan Area.
- **National Scenic and Historic Trails:** No segments of National Scenic and Historic Trails are within existing SRMAs and/or ACECs outside the Plan Area.
- **Wild and Scenic Rivers:** No segments of Wild and Scenic Rivers are within existing SRMAs and/or ACECs outside the Plan Area.

IV.20.3.1.6 CEQA Significance Determination: No Action Alternative

Section IV.20.1.2, CEQA Standards of Significance, identifies four criteria to apply when determining if there are significant impacts from a project under CEQA. These criteria are included as part of the more general impacts identified in this section as VR-1 and VR-2.

The visual impacts and their associated significance determinations for the No Action Alternative are as follows:

VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality. Existing prescriptive measures for avoiding, reducing, and mitigating short-term visual impacts, as required under existing laws and regulations and described previously, would reduce short-term visual effects. However, to fully mitigate these impacts to less than significant levels, additional mitigation would be necessary. These measures, defined in Section IV.20.3.1.1.1, include controlling dust, screening construction yards, and minimizing night lighting. If fully and successfully implemented, these combined measures would reduce short-term impacts to less than significant levels in most cases.

VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality. Long-term visual impacts would be significant and unavoidable, even with the application of mitigation. The size and industrial character of utility-scale renewable energy and transmission facilities would create visual contrast with the surrounding landscape and result in long-term diminished scenic quality for viewers. Even with application of mitigation measures (such as use of earth-tone surface treatments, minimization of roads, and alternate site layouts), the extensive alteration of the physical landscape and presence of numerous manmade structures extending over considerable acreage would create a long-term significant impact on visual resources.

Prescriptive measures for avoiding, reducing, and mitigating long-term construction, operations, and decommissioning visual impacts, as required under existing laws and regulations, would have limited effectiveness, even if fully implemented. For example:

- Tall and brightly illuminated power tower receivers would be highly visible over a great distance, introducing a tall vertical element into the landscape and creating a strong visual contrast to existing conditions. In addition, a solar project would disturb large areas of ground surface, creating visual contrast; and operations would contribute to glare, light pollution, and diminished night-sky darkness, resulting in diminished scenic quality.
- Tall and night-illuminated wind turbines and support structures would be highly visible and create strong visual contrast, resulting in diminished scenic quality. Towers, nacelles, and rotors may need to be upgraded or replaced, thereby repeating initial visual impacts of construction and assembly.
- Geothermal facilities and steam plumes would create a strong visual contrast and result in diminished scenic quality.
- Although photovoltaic projects would generally have lower visual impacts than the other technologies because of the lower profile of collector arrays, reflective glass plates would create glare, attracting visual attention and creating a strong visual contrast under certain light conditions, resulting in diminished scenic quality.
- Increased structure contrast, industrial character, tower and conductor reflectivity, maintenance access, and skylining associated with additional transmission lines would result in long-term diminished scenic quality for viewers. New substation facilities would introduce strong visual contrast in line, form, texture, and color when located in nonindustrial surroundings. Cleared and maintained access roads would open views of scarring, especially down the length of the right-of-way, and introduce changes in form, line, color, and texture.

Additional mitigation, if required on a case-by-case, site-specific basis, could reduce these long-term impacts, but not to less than significant levels.

IV.20.3.2 Preferred Alternative

The Preferred Alternative includes more than 2 million acres where development could occur within DFAs and nearly 15 million acres of Reserve Design Lands (comprising more than 7 million acres of Existing Conservation, 6 million acres of BLM LUPA Conservation Designations, and more than 1 million acres of CPAs). (See Table IV.1-1)

Effects of the Preferred Alternative on baseline conditions, including transmission development and BLM LUPA decisions outside of the DRECP area, are described in the following

sections. For reference, Table IV.20-3 compares the No Action Alternative to the Preferred Alternative for key visual elements occurring within development areas and within 5 miles of development areas. The latter information is included because project visual impacts can extend to lands outside development areas.

**Table IV.20-3
Affected Visual Resources – No Action Alternative Compared to Preferred Alternative**

	No Action Alternative	Preferred Alternative
<i>Development Areas (acres)</i>		
ADA ¹	9,788,000	—
DFA ²	—	2,024,000
<i>Visual Resource Elements Within Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	0 [I] 36,000 [II] 41,000 [III] 35,000 [IV]	0 [I] 17,000 [II] 61,000 [III] 27,000 [IV]
VRM [Class]	0 [I] 10 [II] 3,000 [III] 0 [IV]	0 [I] 0 [II] 0 [III] 106,000 [IV]
National Scenic Byways	1 mi.	0
National Scenic and Historic Trails	20 mi.	1 mi.
California State Parks	1000	0
State Scenic Highways	6 mi	0
Wild and Scenic Rivers	0	0
<i>Visual Resource Elements Within 5 miles of Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	1,847,000 [I] 965,000 [II] 1,549,000 [III] 1,607,000 [IV]	366,000 [I] 389,000 [II] 731,000 [III] 709,000 [IV]
VRM [Class]	1,827,000 [I] 71,000 [II] 64,000 [III] 10,000 [IV]	351,000 [I] 515,000 [II] 555,000 [III] 694,000 [IV]
National Scenic Byways	83 mi.	13 mi.
National Parks and Preserves	1,670,000	15,000
National Scenic and Historic Trails	757 mi.	350 mi.
Trail Management Corridors	N.A.	659,000
California State Parks	323,000	108,000
State Scenic Highways	34 mi.	0

**Table IV.20-3
Affected Visual Resources – No Action Alternative Compared to Preferred Alternative**

	No Action Alternative	Preferred Alternative
Wild and Scenic Rivers	23 mi.	0
<i>Reserve Design Lands (Conservation Lands) (acres)</i>		
Reserve Design Lands	N.A.	14,984,000
Existing Conservation	7,662,000	(included in above acres)

¹ Applies only to No Action Alternative

² Applies only to action alternatives.

Note: The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.2.1 Plan-Wide Impacts of Implementing the DRECP: Preferred Alternative

IV.20.3.2.1.1 Plan-Wide Impacts and Mitigation Measures from Renewable Energy and Transmission Development

Impact Assessment

Under the Preferred Alternative, DFAs are areas within which the Covered Activities associated with solar, wind, and geothermal development and operation would be permitted. Under the Preferred Alternative, renewable energy related activities covered by the Plan would be confined to DFAs, resulting in a projected 145,000 acres of long-term disturbance (See Table IV.1-1.) The DFAs are geographically dispersed in the Imperial Valley, eastern Riverside, Lucerne Valley, Barstow, and Tehachapi areas, with smaller DFAs along the U.S. 395 corridor and near Hidden Hills. Solar energy is the largest renewable energy technology type in most counties, but wind also is prominent in Riverside and San Bernardino counties. Under the Preferred Alternative, geothermal development would have Covered Activities only in Imperial and Inyo counties. Transmission development and operation would be permitted both within and outside of DFAs.

The distribution of DFAs under the Preferred Alternative is far less widespread than the broad distribution of ADAs under the No Action Alternative. Characteristics of the Preferred Alternative are as follows:

- Ecoregion subareas that would have the smallest DFAs include Kingston and Funeral Mountains, Mojave and Silurian Valley, Owens River Valley, and Providence and Bullion Mountains.

- Visual impacts from solar would be primarily in two ecoregion subareas: West Mojave and Eastern Slopes, and Cadiz Valley and Chocolate Mountains.
- Visual impacts from wind energy would be mostly in two ecoregion subareas: West Mojave and Eastern Slopes, and Pinto Lucerne Valley and Eastern Slopes.
- Visual impacts from geothermal energy would be in two ecoregion subareas: Imperial Borrego Valley and Owens River Valley.

The following summarizes the key points in comparing the Preferred Alternative's visual impacts from renewable energy and transmission development to those of the No Action Alternative (see Appendix R2, Table R2.20-5 for detailed data):

- **VRI Classes:** Under the Preferred Alternative, there would be approximately 17,000 acres of VRI Class II lands, 61,000 acres of VRI Class III lands, and 27,000 acres of VRI Class IV lands within DFAs. Per the CMAs for visual resources, these 78,000 acres of VRI Class II and III lands within DFAs would be managed as VRM Class IV and thereby could sustain a degradation of underlying scenic values as identified by BLM's completed visual inventories (described in Volume III). Approximately 13,000 acres of transmission would occur on inventoried lands.

Under the No Action Alternative, 36,000 acres of VRI Class II, 41,000 acres of VRI Class III, and 35,000 acres of VRI Class IV lands occur in ADAs and approximately the same amount of transmission.

- **VRM Classes:** Unlike the No Action Alternative, the Preferred Alternative would have VRM Classes assigned under it; and VRM objectives would be applied to all BLM lands. Under the Preferred Alternative, all DFAs on BLM land would be designated as VRM Class IV (106,000 acres); therefore there would be no VRM Class I, II, or III lands in DFAs (Figure IV.20-2, Proposed BLM VRM Classifications, Preferred Alternative). Approximately 13,000 acres of transmission would occur, the majority of which would be on VRM Class III and IV lands.

Under the No Action Alternative, which does not assign new VRM Classes, there are 3,000 acres of VRM Class II or III lands in ADAs and approximately 40 acres of transmission on those lands.

- **National Parks and Preserves:** As with the No Action Alternative, the footprint of renewable energy projects would not directly affect these lands under the Preferred Alternative, but project facilities and activities that are visible from National Parks and Preserves would diminish scenic quality for viewers in those conservation areas, where expectations for scenic quality are typically high.
- **National Scenic Byways:** No segments of the Bradshaw Trail National Back Country Byway would be within DFAs under the Preferred Alternative.

- **National Scenic and Historic Trails:** Under the Preferred Alternative, approximately 1 mile of the Old Spanish National Historic Trail alignment would be within a wind energy DFA. Under the No Action Alternative, approximately 20 miles of National Scenic and Historic Trails would be within ADAs for solar and wind.

As with National Parks and Preserves, renewable energy project facilities and activities visible from National Trails could diminish scenic quality for trail users, where expectations for scenic quality are typically high. However, under the Preferred Alternative, Trail Management Corridors would be established along National Scenic and Historic Trails, generally at a width of 5 miles from the centerline of the trail, for a total width of 10 miles (see Section IV.20.2.2, Impacts of the Reserve Design).

- **State Scenic Highways:** There would be no segments of State Scenic Highways within DFAs or ADAs under the Preferred Alternative or the No Action Alternative.
- **Proximity of Visual Resources to DFAs.** Visual resource elements within 5 miles of development areas can be compared between the Preferred Alternative and the No Action Alternative. This information is summarized in Table IV.20-3. The Preferred Alternative has far fewer visual resource elements within 5 miles of DFAs, as compared with the same 5-mile distance from ADAs under the No Action Alternative. One example of this is the acres of VRI Class I lands: nearly 1,850,000 acres are within 5 miles of development areas under the No Action Alternative compared with 366,000 acres under the Preferred Alternative. There is more than 100 times the National Parks and Preserves acreage within 5 miles of development areas under the No Action Alternative as there would be under the Preferred Alternative.

This 5-mile distance is particularly important for visual resources, because 5 miles is typically used as a measure of foreground and middleground distance zones, where management activities and changes in the landscape might be viewed in detail. The outer boundary of this distance zone is defined as the point where the texture and form of individual plants are no longer apparent in the landscape (BLM 1984).

The visual impacts resulting from the Preferred Alternative are:

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Preconstruction activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include road upgrading, damage to or removal of native vegetation, construction of meteorological towers, drilling of temperature gradient wells, vehicles, and lighting.

During construction and decommissioning, activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include dust and exhaust emissions, removal of vegetation during site clearing, contouring and grading, presence of vehicles and equipment, mobilization and demobilization activities, material delivery and staging, assembly of components, site lighting, and construction of and later removal of structures.

Impact VR-2: The presence of project components and disturbance would result in long-term diminished scenic quality.

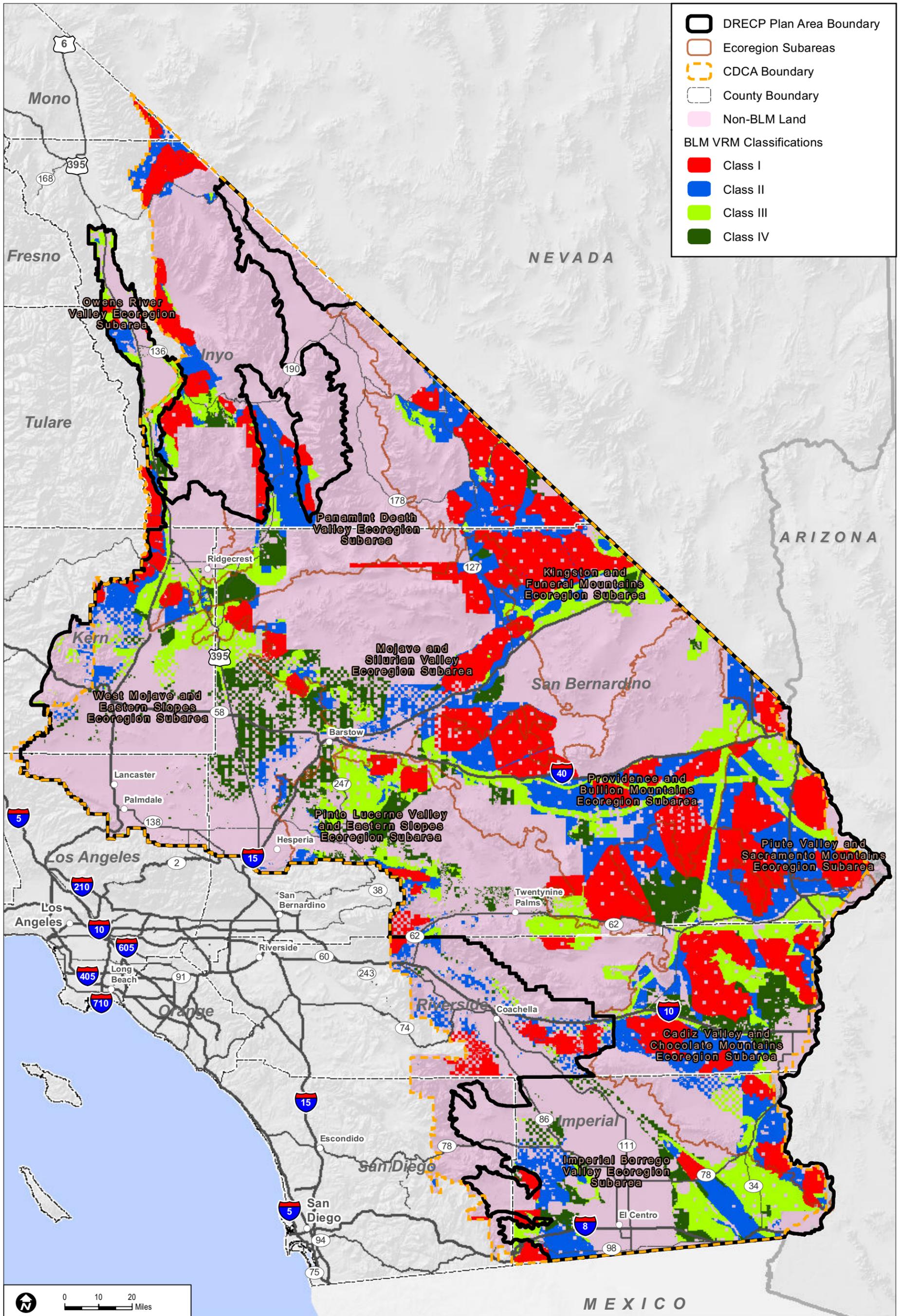
The continued presence of equipment, structures, fencing, roads, and other elements required to operate a facility would have a long-term adverse effect on the visible landscape. Areas of persistent surface and vegetation disturbance and the presence of structures would create visual contrast in form, line, color, and texture compared to pre-project conditions. Depending on viewer location, physical elements introduced by a project could block views or create skylining. Even after project removal and site reclamation are completed, visual contrast would remain. Restoring the natural, pre-disturbance visual character of a desert environment is extremely difficult, can take decades, and often is unsuccessful. Therefore, surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes.

The structure, size, and industrial character of utility-scale renewable energy and transmission facilities during their operation and maintenance—as well as any associated glare, reflectivity, and lighting—would visually contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Impacts in Study Area Lands

Study Area Lands refer to three categories of lands shown on alternative maps: Future Assessment Areas (FAAs), Special Analysis Areas (SAAs) and DRECP Variance Lands.

Future Assessment Areas (FAAs). Lands within FAAs are neither reserve lands nor DFAs; they are simply areas that are deferred for future assessment. The future assessment will determine their suitability for renewable energy development or ecological conservation. If renewable energy development occurs on FAA lands, a BLM LUPA would not be required. FAAs for each alternative are included and located as shown in Table IV.1-2 and Figure II.3-1. The FAAs represent areas where renewable energy development or inclusion in the reserve design could be implemented through an amendment to the DRECP, but additional assessment would be needed.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

FIGURE IV.20-2

Proposed BLM Visual Resource Management Classifications, Preferred Alternative

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Because most of the FAAs are presented as “undesigned areas” in the action alternatives, there would be no difference between the FAAs in the Preferred Alternative except that renewable development in an FAA would not require a BLM LUPA; so the environmental review process would be somewhat simpler than if the location were left undesignated.

Special Analysis Areas (SAAs). There are two areas defined as SAAs, representing areas subject to ongoing analysis. These areas (in the Silurian Valley and just west of U.S. 395 in Kern County) have high value for renewable energy development, ecological and cultural conservation, and recreation. SAA lands are expected to be designated in the Final EIR/EIS as either DFAs or included in the Reserve Design/Conservation Designation. Visual resource elements within the SAAs of the Preferred Alternative include approximately 35,000 acres of VRI Class II, III, and IV lands and 35,000 acres of VRM Class III and IV lands. No VRI Class I lands or VRM Class I or II lands are within SAAs.

DRECP Variance Lands. DRECP Variance Lands represent the BLM Solar PEIS Variance Lands as screened for the DRECP and EIR/EIS based on BLM screening criteria. Covered Activities could be permitted for NCCP purposes only through an NCCP plan amendment. However, development of renewable energy on Variance Lands would not require a BLM LUPA; so the environmental review process would be somewhat simpler than if the location were left undesignated. Per CMAs for visual resources, development of DRECP Variance Lands would be required to conform to the visual management objectives of VRM Class III.

Impact Reduction Strategies and Mitigation

The implementation of the Preferred Alternative would result in landscape-scale conservation of desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Preferred Alternative would be lessened in a number of ways. The Preferred Alternative would incorporate CMAs for each alternative, including specific biological reserve design components and LUPA components. In addition, the implementation of existing laws, orders, regulations, and standards would reduce the impacts of project development.

Conservation and Management Actions

The conservation strategy for the Preferred Alternative (presented in Volume II, Section II.3.1.2) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes a definition of the reserve design and specific CMAs for the Preferred Alternative. While the CMAs were developed for BLM lands only, this analysis assumes that all CMAs would be applied to nonfederal lands as well.

Specific visual resource CMAs have been developed. These visual resource CMAs apply to the Preferred Alternative and all action alternatives and are summarized here:

- CMAs for the entire Plan Area:
 - Ensure that development within each area with a VRM Class designation meets the VRM objectives described above as measured through a visual contrast rating process.
 - Ensure that transmission facilities are designed and located to meet the VRM Class objectives for the area in which they are located. Transmission lines routed through approved corridors where they do not meet VRM Class objectives will require RMP amendments to establish a conforming VRM objective. All reasonable effort must be made to reduce visual contrast of these facilities to meet the VRM Class before pursuing RMP amendments. This includes changes in routing, using lattice towers (as opposed to monopoles), color treating facilities using an approved color from the BLM Environmental Color Chart CC-001 (dated June 2008 or June 2013)(as opposed to galvanized metal) on towers and support facilities, and employing other BMPs to reduce contrast. Such efforts will be retained even if an RMP amendment is determined to be needed. Visual resource BMPs that reduce adverse visual contrast will be applied in VRM Class conforming situations.
- CMAs for DFAs and DRECP Study Area Lands:
 - Manage all DFAs as VRM Class IV to allow for industrial-scale development. Employ BMPs to reduce visual contrast of facilities.
 - Manage all Variance Lands as VRM Class III.
 - Require development to incorporate visual design standards and include latest BMPs (from Solar, Wind, West Wide Energy Corridor, and Geothermal PEISs, the Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands, and other programmatic BMP documents).
 - Encourage development in a planned fashion within DFAs (e.g., similar to the planned unit development concept used for urban design, i.e., in-fill vs. scattered development, use of common road networks, generator tie-lines, use of similar support facility designs materials, colors, etc.) to avoid industrial sprawl.
 - Require regional mitigation for visual impacts for public lands outside of DFAs but open to consideration for energy development (Variance Lands etc.). Mitigation will be based on the VRI Class and the underlying visual values (scenic quality, sensitivity, and distance zone) for the development area as it stands at the time the Record of Decision is signed for the DRECP. Compensation may involve reclamation of visual impacts present within other areas designated as

- BLM VRM class I or II lands (so that they are no longer visible in the long-term), mitigation on BLM lands inventoried as having equal to or greater visual resource values, or amending RMPs for lands within VRM Class III or IV to a higher level of protection (VRM Class I or II) for areas that are visually intact with no cultural modifications and have visual resource inventoried values that are equal to or greater in value and delineate a protective visual ACEC around the compensatory mitigated area. The following mitigation ratios will be applied:
- VRI Class II 2:1 ratio
 - VRI Class III 1:1 ratio
 - VRI Class IV no mitigation required
- Require compensatory mitigation on public lands developed within DFAs at one-half the level of lands outside of DFAs;
 - VRI Class II 1:1 ratio
 - VRI Class III 2:1 ratio
 - VRI Class IV, no mitigation required
 - Require additional mitigation measures where projects affect viewsheds of specially designated areas (e. g., National Scenic and Historic Trails, National Parks, etc.) as discussed under those programs (See CMAs assigning VRM Class II for National Scenic and Historic Trail Management Corridors.)
 - Required visual resource BMPs. All development within and outside the DFAs will abide by the BMPs addressed in *Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*, including, but not limited to the following:
 - Transmission
 - Color treat monopoles Shadow Gray per the BLM Environmental Color Chart CC001 unless the local Field Office VRM specialist selects a more effective color.
 - Lattice towers and conductors will have nonspecular qualities.
 - Lattice towers will be located a minimum of $\frac{3}{4}$ mile away from key observation points such as roads, scenic overlooks, trails, campgrounds, navigable rivers, and other areas people tend to congregate and located against a landscape backdrop when topography allows.
 - Solar – Color treat all facilities Shadow Gray from the BLM Environmental Color Chart CC001 unless a more effective color is selected by the Field Office VRM specialist, including but not limited to:
 - Concentrated solar thermal parabolic trough panel backs

- Solar power tower heliostats
- Solar power towers
- Cooling towers
- Power blocks
- Wind – Color treat all facilities Shadow Gray with the exception of the wind turbine and towers 200 vertical feet or more.
- Night Sky – BMPs to minimize impacts to night sky including light shielding will be employed.
- CMAs for ACECs and SRMAs:
 - Manage Alabama Hills SRMA and Manzanar ACEC to conform to VRM Class II standards.
- CMA for lands managed for wilderness characteristics:
 - Manage the areas as VRM Class II

These visual resource CMAs provide a comprehensive framework of state-of-the-art guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Laws and Regulations

Similar to the No Action Alternative, existing laws and regulations will reduce certain impacts of Plan implementation. Relevant regulations are presented in the Regulatory Setting in Volume III. The requirements of relevant laws and regulations are summarized in Section IV.20.3.1.1.1.

Mitigation Measures

The visual impact avoidance and reduction strategies in existing guidance, including Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands, are detailed and comprehensive. The CMAs proposed under the DRECP (see Appendix H) provide additional detail and direction. These represent state-of-the-art visual impact avoidance and mitigation as they apply to the Plan Area; no additional mitigation has been developed.

IV.20.3.2.1.2 Impacts of the Reserve Design

The reserve design area under the Preferred Alternative would total nearly 15 million acres, which is approximately 70% of the Plan Area. This would result in the protection of

visual resources in this portion of the Plan Area because of the limitations on development incorporated in existing laws and regulations and in the CMAs associated with the Reserve Design. Nearly half of the reserve design under the Preferred Alternative would be Legislatively and Legally Protected Areas and Military Expansion Mitigation Lands that currently are under Conservation Designations.

Approximately 30% (6,118,000 acres) of the Preferred Alternative reserve design would be composed of BLM LUPA Conservation Designations, including NLCS lands, ACECs, and wildlife allocations.

Approximately 8% of the reserve design area under the Preferred Alternative is composed of CPAs. The CPAs would include 1,139,000 acres of private and public land located outside of existing Conservation Designations, including BLM LUPA Conservation Designations. These CPAs would be part of mitigation to meet DRECP biological goals and objectives and would be acquired from willing sellers. The conservation protections afforded the CPAs also would protect visual resources.

There would be 14,920,000 acres of Reserve Design Lands under the Preferred Alternative, whereas no equivalent reserve system would be established under the No Action Alternative. Key points in comparing the Preferred Alternative visual impacts of the reserve design with those of the No Action Alternative are identified in Table R2.20-6 in Appendix R2.20 and summarized as follows:

- **VRI Classes:** The Reserve Design Lands for the Preferred Alternative would include 100% of VRI Class I lands and approximately 74% of VRI Class II lands, 67% of VRI Class III lands, and 72% of Class IV lands. Under the No Action Alternative, 100% of VRI Class I lands, 24% of VRI Class II lands, 25% of Class III lands, and 22% of VRI Class IV lands would be in conservation.
- **VRM Classes:** Approximately 100% of VRM Class I lands, 83% of VRM Class II lands, 79% of VRM Class III lands, and 38% of VRM Class IV lands would be in the Reserve Design. More than 4 million acres of these lands are in BLM LUPA Conservation Designations.

In the No Action Alternative, 100% of the VRM Class I lands are in conservation; but very little (<1%) of VRM Classes II, III, and IV are in conservation lands.

- **National Parks and Preserves:** The National Parks and Preserves would have 100% of their land areas in the Reserve Design Lands under both the Preferred Alternative and No Action Alternative.
- **National Scenic Byways:** Under the Preferred Alternative, approximately 51% of the Bradshaw Trail National Back Country Byway and 15% of State Route (SR) 190

would be in the Reserve Design. This provides a higher or similar level of protection of visual and scenic values as in conservation under the No Action Alternative (33% and 15% respectively.)

- **National Scenic and Historic Trails:** Under the Preferred Alternative, approximately 4% of the Juan Bautista de Anza National Historic Trail, 58% of the Old Spanish National Historic Trail, and 40% of the Pacific Crest National Scenic Trail alignments would be in the Reserve Design.

Under the No Action Alternative, approximately 43% of the Juan Bautista de Anza National Historic Trail, 46% of the Old Spanish National Historic Trail, and 32% of the Pacific Crest National Scenic Trail alignments are in conservation.

The Preferred Alternative provides a lower level of conservation of the Juan Bautista de Anza National Historic Trail alignment and a higher level of conservation of the Old Spanish National Historic Trail and Pacific Crest National Scenic Trail alignments than the No Action Alternative.

- **California State Parks:** Under the Preferred Alternative, most California State Park land would be in Reserve Design Lands. This would vary by individual park or preserve; but most parks would have more than 90% in existing conservation areas, BLM LUPA designations, or CPAs. Exceptions are the (1) Desert Cahuilla/Freeman Project (4%), (2) Picacho State Recreation Area (SRA) (78%), and (3) Salton Sea SRA (86%).

Under the No Action Alternative, the extent of California State Parks under existing conservation varies due to land ownership and management considerations. While most of the California State Park lands are in conservation (95%), several have less in conservation (e.g., Picacho SRA, Red Rock Canyon State Park, and Salton Sea SRA).

- **State Scenic Highways:** Approximately 15% of SR 190 but no portion of the SR 78 and U.S. 395 alignments would be in Reserve Design Lands, compared to similar portions under the No Action Alternative.
- **Wild and Scenic Rivers:** 100% of the designated Amargosa Wild and Scenic River corridor as well as the eligible Surprise Canyon Creek and Mojave River segments would be within the reserve design under both the Preferred Alternative and No Action Alternative.

IV.20.3.2.2 Impacts of DRECP Land Use Plan Amendment on BLM Land: Preferred Alternative

This section addresses two components of effects of the BLM LUPA: the streamlined development of renewable energy and transmission on BLM land under the LUPA and the impacts of the amended land use plans themselves.

IV.20.3.2.2.1 Impacts from Renewable Energy and Transmission Development on BLM Land

The visual impacts of DFAs on VRI and VRM lands for the Preferred Alternative would be the same as those described in Section IV.20.3.2.1 for the Plan-wide analysis.

IV.20.3.2.2.2 Impacts of Changes to BLM Land Designations

The DRECP LUPA Preferred Alternative would establish VRM classes for all lands in the CDCA. (Currently, only the Bishop RMP and the Imperial Sand Dunes RAMP have VRM Classes designated. In accordance with BLM policy, all wilderness areas and WSAs are managed as VRM Class I.) It also would (1) designate new NLCS lands; (2) designate new ACECs and expand and reduce existing ACECs; (3) designate new SRMAs and expand and reduce existing SRMAs; (4) create buffer corridors along National Scenic and Historic Trails; (5) manage lands with wilderness characteristics to protect those characteristics; and (6) designate new wildlife allocations. The BLM LUPA also would replace existing multiple-use classes.

The VRM Classes and BLM land designations proposed under the Preferred Alternative would offer protective measures that would avoid or reduce visual impacts. CMAs for visual resources would be established and implemented. The BLM-specific CMAs proposed under the Preferred Alternative would be the same for all action alternatives. These visual resource CMAs and the restrictions and protective measures of the land designations provide a framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Under the Preferred Alternative, Trail Management Corridors would be established along National Scenic and Historic Trails, at a width of generally 5 miles from the centerline of the trail, for a total width of 10 miles. As discussed in Volume II, Section II.3.2.2.2, these Trail Management Corridors would be managed as components of the BLM's NLCS. Where National Trails overlap other NLCS lands, the more protective CMAs or land use allocations would apply. All Trail Management Corridors would be designated as VRM Class II, except within approved transmission corridors (VRM Class III) and DFAs (VRM Class IV). However, state-of-the-art VRM BMPs for renewable energy would be employed commensurate with the protection of nationally significant scenic resources and cultural landscapes to minimize the level of intrusion and protect trail settings.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements under the Preferred Alternative (see Appendix R2, Table R2.20-7 for detailed, quantitative data and analysis):

- **SRMAs:** There would be the potential for recreational activities or facilities allowed in SRMAs to affect scenic values, particularly those of the VRI Class I and II lands (approximately 274,000 acres) with which they coincide.

- **NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality, particularly to the VRI Class I, II, III, and IV lands (3.6 million acres) with which they coincide.
- **ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRI Class II, III, and IV lands (1.4 million acres) with which they coincide.
- **Wildlife Allocation Areas:** The management of these areas must be compatible with protection and enhancement of wildlife and plant habitat and would generally benefit visual resources, particularly the VRI Class III and IV lands (approximately 18,000 acres) with which they coincide.
- **Lands Managed for Wilderness Characteristics:** Management strategies to protect wilderness characteristics would benefit visual resources, particularly the VRI Class II, III, and IV lands (approximately 299,000 acres) with which they coincide.
- **Trail Management Corridors:** One effect of the 10-mile-wide corridors would be to provide a higher level of protection (VRM Class II objectives) to approximately 50 acres of VRM Class III and IV lands that would otherwise be managed under less restrictive visual management objectives. Importantly, the Trail Management Corridors would provide a consistent framework for protecting and managing scenic values along National Scenic and Historic Trails within National and California state park lands. Trail Management Corridors are not established under the No Action Alternative.

The Preferred Alternative would assign VRM classes to all BLM lands within the Plan Area. Generally, a low correlation between the VRM classes and the underlying VRI classes (e.g., VRI Class II or III lands managed to meet the objectives of VRM Class IV) would result in greater adverse impacts to visual quality. Conversely, impacts would most likely be less for alternatives proposing visual management that either closely corresponds to the VRI classes or proposing a more restrictive (higher) class designation (e.g., proposing VRM Class II management of VRI Class III lands).

Under the Preferred Alternative, VRI Class lands within the proposed VRM Classes on BLM LUPA lands would be as indicated in Table IV.20-4. Key effects of VRM classifications on VRI lands under the Preferred Alternative are summarized here:

- **VRM Designations:** The majority of inventoried lands would be designated as VRM Class I, II, or III. Less than 10% would be designated as VRM Class IV.
 - **VRI Class I:** 100% of VRI Class I lands would be managed as VRM Class I, reflecting a high level of management protection.

- **VRI Class II:** Approximately 75% of VRI Class II lands would be managed as VRM Class II or I, reflecting a moderate to high level of management protection. Approximately 20% would be managed as VRM Class III, and approximately 5% would be managed as VRM Class IV.
- **VRI Class III:** More than 80% of VRI Class III lands would be managed as VRM Class III, II, or I, reflecting a moderate to high level of management protection. Approximately 35% would be managed to meet VRM Class II objectives, which restrict visual contrast and impact more than the VRM Class III objectives do. Approximately 49% would be managed as VRM Class III, and 16% would be managed as VRM Class IV, which allows for more visual contrast and impact than the VRM Class III objectives.
- **VRI Class IV:** Approximately 58% of VRI Class IV lands would be managed as VRM Class I, II, or III; 41% would be managed as VRM Class IV.

Table IV.20-4
VRI Classes Within Proposed VRM Classes on BLM LUPA Lands – Preferred Alternative

LUPA-Proposed VRM Class Designations	Existing Visual Resource Inventory Classes								Total
	VRI Class I		VRI Class II		VRI Class III		VRI Class IV		
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
VRM Class I	3,842,000	100%	6,000	0%	3,000	0%	700	0%	3,851,700
VRM Class II	0	0%	1,622,000	75%	963,000	35%	444,000	22%	3,029,000
VRM Class III	0	0%	425,000	20%	1,364,000	49%	721,000	36%	2,510,000
VRM Class IV	0	0%	112,000	5%	437,000	16%	810,000	41%	1,359,000
Total	3,842,000	100%	2,165,000	100%	2,767,000	100%	1,975,700	100%	10,749,700

Note: VRI Class I represents the highest level of inventoried visual resource values; VRM Class I represents the most restrictive visual management objectives. Acres above include CDCAs outside the Plan Area. The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

Compared to the No Action Alternative, the Preferred Alternative would result in a higher potential for retaining the integrity of the inventoried visual resource values and, consequently, a lower level of potential visual impact to those values compared with the No Action Alternative. The designation of VRM Classes throughout the CDCA would have the value of providing the level of visual change allowed prior to an area being considered for projects that would introduce change. Currently, VRM Classes are designated only for the Bishop Field Office, the Imperial Sand Dunes RAMP, wilderness areas, and WSAs.

Under the proposed CMAs, all DFAs would be managed as VRM Class IV lands to allow for utility-scale development. In those cases, implementation or incorporation of BMPs would still be required to reduce the visual contrast levels of proposed facilities to the extent practicable.

IV.20.3.2.3 Impacts of Natural Community Conservation Plan: Preferred Alternative

The analysis of Covered Activities under the NCCP is equivalent to the Plan-wide analysis of the interagency alternatives. Reserve design features and other conservation actions under the NCCP alternatives represent more detailed categories of the reserve design under the interagency Plan-wide alternatives. These NCCP differences in reserve design features do not affect nonbiological resources analyzed in this document, and the analysis of reserve design and conservation and management actions under the NCCP is therefore equivalent to the Plan-wide analysis of the interagency alternatives. The visual impacts of the NCCP for the Preferred Alternative would be the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis.

IV.20.3.2.4 Impacts of General Conservation Plan

The visual impacts of the GCP for the Preferred Alternative would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.2.5 Impacts Outside the Plan Area

IV.20.3.2.5.1 Impacts of Transmission Outside the Plan Area

The impacts of transmission outside the Plan Area would be the same under all alternatives. These are as described for the No Action Alternative in Section IV.20.3.1.5.1, Impacts of Transmission Outside the Plan Area.

IV.20.3.2.5.2 Impacts of BLM LUPA Decisions Outside the Plan Area

Under the proposed BLM LUPA, changes outside the Plan Area would include the designation of NLCS lands, ACECs, National Scenic and Historic Trails Management Corridors, VRM classes, and new land allocations to replace multiple-use classes on CDCA lands.

The VRM Classes and other BLM land designations proposed under the Preferred Alternative would benefit visual resources to the extent that they offer protective measures that would avoid or reduce visual impacts. CMAs for visual resources would be established and implemented. The BLM-specific CMAs for the Preferred Alternative would be the same for all action alternatives. These visual resource CMAs and the restrictions and protective measures of the land designations provide guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements, outside the Plan Area, under the Preferred Alternative (see Appendix R2, Table R2.20-8 for detailed, quantitative data and analysis):

- **Proposed NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality.
- **Existing and Proposed ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRM Class II, III, and IV lands (approximately 207,000 acres) with which they coincide.
- **Trail Management Corridors:** The primary effect of these 10-mile-wide corridors would be to provide a consistent framework for protecting and managing scenic values along National Scenic and Historic Trails within National and California State park lands. As with all action Alternatives, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II.

IV.20.3.2.6 CEQA Significance Determination for the Preferred Alternative

The significance determinations for short-term and long-term impacts are described in Section IV.20.3.1.1.1 for the No Action Alternative. Section IV.20.1.2 identifies four criteria to apply when determining if there are significant impacts from a project under CEQA. These criteria are included as part of the more general impacts identified in this section as VR-1 and VR-2.

The visual impacts and their associated significance determinations for the Preferred Alternative are as follows:

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples of short-term impacts are dust and exhaust emissions, presence of vehicles and equipment, mobilization and demobilization activities, material delivery and staging, outdoor assembly of components, temporary site lighting, and temporary trailers and structures.

The presence of vehicles and equipment, worker activity on a site, and the use of temporary trailers during construction are unavoidable; and short-term visual impacts end with the end of construction. Because they are time-limited and are typical of any construction project, they create less than significant impacts.

High daytime temperatures in the desert may make steel too hot for safe handling and pose a health and safety risk to workers. During periods of very high daytime temperatures, some work at night may be required, such as assembling steel lattice transmission towers. This would require night lighting in the work area. Intense artificial lighting can have a significant adverse effect on the desert night sky and on the night visual environment.

Implementation of Mitigation Measure AQ-1a (from Chapter IV.2, Air Quality) would control fugitive dust. Also, implementation of appropriate CMAs would address most other short-term impacts, except night construction lighting.

Impact VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Long-term impacts to visual resources for the Preferred Alternative would be significant and unavoidable, as described in detail for the No Action Alternative (Section IV.20.3.1.6, CEQA Significance Determination: No Action Alternative). Changes in line, form, and color introduced by large-scale development and the contrast of such development with surrounding conditions create unmitigable degradation of views. The CMAs that apply to the Preferred Alternative would reduce the impact on visual resources, but not to a less than significant level.

IV.20.3.2.7 Comparison of the Preferred Alternative with No Action Alternative

Chapter IV.27 presents a comparison of all action alternatives and the No Action Alternative across all disciplines. This section summarizes the comparison of the Preferred Alternative with the No Action Alternative.

IV.20.3.2.7.1 Preferred Alternative Compared with No Action Alternative for Plan-wide DRECP

Similar types of visual impacts are expected to occur under both the Preferred and No Action Alternatives, based on the assumptions that California's renewable energy goals would be achieved in both cases. The impacts would vary in geographic distribution and in the mitigation measures applied to them. Importantly, the Preferred Alternative by designation of DFAs would concentrate development in smaller and less sensitive areas, whereas development under the No Action Alternative is not similarly constrained.

Geographic Distribution. Under the Preferred Alternative, the eastern-northeastern portion of the Plan Area, where there are large areas set aside as National Parks, Preserves, and wilderness areas, has the lowest concentration of DFAs. As a result, fewer renewable energy projects would be visible from extensive areas of existing or proposed conservation. From a scenery management perspective, the concentration of development, especially when facilities are visually intrusive, could increase localized adverse impacts as compared with the No Action Alternative, which would continue to allow renewable energy development across a larger area of the desert. However, under the Preferred Alternative, overall impacts would be much lower, because the visual integrity of the large-scale open desert landscapes would not be as compromised by concentrated development in DFAs as it would be by the more widely dispersed development of the No Action Alternative.

The severity of visual impacts depends partly on the number of potential viewers. More intense wind and solar project development in the West Mojave area, which has a large DFA in the Preferred Alternative, would add to the existing visual disturbance experienced by residents in the Mojave, Lancaster, and Palmdale areas due to extensive wind and solar development in those areas. Similarly, the DFA around Victorville, Adelanto, and Lucerne Valley surrounds another of the more densely populated areas of the Plan Area.

The severity of visual impacts also relates to expectations of viewers who are seeking to enjoy the undeveloped desert environment. The areas of the eastern Plan Area are sensitive because they contain the Mojave National Preserve, Death Valley National Monument, and several BLM Wilderness Areas. The Preferred Alternative generally avoids development in these areas, except for the Pahrump Valley. However, the Preferred Alternative does include solar development in the entire East Riverside Solar Energy Zone, which is visible from Joshua Tree National Park as well from BLM Wilderness Areas.

Extent of Potential Renewable Energy Development. The area in which development could occur under the No Action Alternative is five times greater than the area of DFAs under the Preferred Alternative (9.8 million acres of ADAs under No Action Alternative compared with 2 million acres of DFAs in the Preferred Alternative). The more constrained development within the DFAs of the Preferred Action would result in a much smaller areas of the desert from which renewable energy development would create visual impacts.

Conservation. Conservation under the No Action Alternative would be limited to the existing 7.7 million acres currently conserved. Under the Preferred Alternative, there would be nearly 15 million acres of conservation lands in the Reserve Design, or nearly twice the amount of land in conservation.

In summary, the composition and structure of the Preferred Alternative would provide far greater opportunities for the avoidance, reduction, and minimization of visual impacts than the No Action Alternative.

IV.20.3.2.7.2 Preferred Alternative Compared with No Action Alternative for the BLM Land Use Plan Amendment

VRM Classes have been assigned to BLM lands within the Bishop RMP and Imperial Sand Dunes RAMP and by BLM policy to wilderness areas and WSAs. This would be the situation under the No Action Alternative. The Preferred Alternative would assign VRM Classes to all BLM lands within the CDCA, including those outside the Plan Area. This would provide a unifying framework and an established system for addressing visual resources throughout the desert and would eliminate the need to address visual resources under multiple-use classes, which would be replaced by the LUPA. Additionally, because the Preferred Alternative proposes 10-mile-wide Trail Management Corridors, which would not occur under the No Action Alternative, the scenic values and viewer experience along National Scenic and Historic Trails would have a much greater level of protection under the Preferred Alternative than under the No Action Alternative.

IV.20.3.2.7.3 Preferred Alternative Compared with No Action Alternative for NCCP

The visual impacts of the NCCP for the Preferred Alternative are the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis. As a result, the comparison of the Preferred Alternative with the No Action Alternative for the NCCP is the same as described previously for Plan-wide DRECP.

IV.20.3.2.7.4 Preferred Alternative Compared with No Action Alternative for the GCP

The visual impacts of the GCP for the Preferred Alternative would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands

only. In the absence of Plan implementation, the GCP would not be approved; and the visual impacts of projects would continue to be evaluated by the appropriate lead agency on an individual basis.

IV.20.3.3 Alternative 1

Alternative 1 includes 1,070,000 acres of DFAs and 15,037,000 acres of Reserve Design Lands (comprising existing Conservation, BLM LUPA Conservation Designations, and CPAs). For reference, Table IV.20-5 compares the Preferred Alternative to Alternative 1 for key visual elements.

**Table IV.20-5
Affected Visual Resources – Preferred Alternative Compared to Alternative 1**

	Preferred Alternative	Alternative 1
<i>Development Areas (acres)</i>		
DFAs	2,024,000	1,070,000
<i>Visual Resource Elements Within Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	0 [I] 17,000 [II] 61,000 [III] 27,000 [IV]	0 [I] 4,000 [II] 8,000 [III] 7,000 [IV]
VRM [Class]	0 [I] 0 [II] 0 [III] 106,000 [IV]	0 [I] 0 [II] 0 [III] 19,000 [IV]
National Scenic Byways	0	0
National Scenic and Historic Trails	1 mi.	2 mi.
California State Parks	0	0
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Visual Resource Elements Within 5 miles of Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	366,000 [I] 389,000 [II] 731,000 [III] 709,000 [IV]	160,000 [I] 303,000 [II] 509,000 [III] 478,000 [IV]
VRM [Class]	366,000 [I] 515,000 [II] 555,000 [III] 694,000 [IV]	160,000 [I] 285,000 [II] 516,000 [III] 466,000 [IV]
National Scenic Byways	13 mi.	7 mi.
National Parks and Preserves	15,000	15,000

**Table IV.20-5
Affected Visual Resources – Preferred Alternative Compared to Alternative 1**

	Preferred Alternative	Alternative 1
National Scenic and Historic Trails	350 mi.	212 mi.
Trail Management Corridors	659,000	40,000
California State Parks	108,000	104,000
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Reserve Design Lands (Conservation Lands) (acres)</i>		
Reserve Design Lands	14,920,000	15,037,000

Note: The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.3.1 Plan-wide Impacts of Implementing the DRECP: Alternative 1

IV.20.3.3.1.1 Plan-wide Impacts and Mitigation Measures from Renewable Energy and Transmission Development

Impact Assessment

Under Alternative 1, renewable energy related activities covered by the Plan would be confined to just more than 1 million acres of DFAs, resulting in 148,000 acres of long-term disturbance (see Table IV.1-1). This represents approximately 3,000 acres more long-term disturbance than could occur under the Preferred Alternative.

The DFAs in Alternative 1 are focused in the Imperial Valley, Lucerne Valley, and Barstow area. Alternative 1 has fewer DFAs in eastern Riverside and the Tehachapi area and very small DFAs along the U.S. 395 corridor.

Approximately 1,070,000 acres would be within DFAs under Alternative 1 compared with 2,024,000 acres under the Preferred Alternative, representing a more confined area in which visual impacts would occur. Alternative 1 would affect primarily three ecoregion subareas, compared to five under the Preferred Alternative.

- Visual impacts from solar development would be concentrated in three ecoregion subareas: (1) Imperial Borrego Valley, (2) Pinto Lucerne Valley and Eastern Slopes, and (3) West Mojave and Eastern Slopes.
- Visual impacts from wind energy development would be in two ecoregion subareas: (1) West Mojave and Eastern Slopes and (2) Pinto Lucerne Valley and Eastern Slopes.

- Visual impacts from geothermal energy would occur in the Imperial Borrego Valley ecoregion subarea, whereas in the Preferred Alternative they would be in the Imperial Borrego Valley and the Owens River Valley ecoregion subareas.

The following summarizes the key points in comparing the visual impacts from renewable energy and transmission development under Alternative 1 with those of the Preferred Alternative (see Appendix R2, Table R2.20-9 for detailed, quantitative data and analysis):

- **VRI Classes:** Under Alternative 1, there would be no VRI Class I lands, 4,000 acres of VRI Class II lands, 8,000 acres of VRI Class III lands, and 7,000 acres of VRI Class IV lands within DFAs. Per the CMAs for visual resources, these 12,000 acres of VRI Class II and III lands within DFAs would be managed as VRM Class IV and thereby sustain a potential degradation of underlying scenic values. Approximately 12,000 acres of transmission would occur on inventoried lands, compared with 13,000 acres under the Preferred Alternative.

A much larger amount of VRI Class II and III lands within DFAs would be managed as VRM IV under the Preferred Alternative than under Alternative 1. This reflects a potential degradation of underlying scenic values under Alternative 1 but to a lesser extent than under the Preferred Alternative.

- **VRM Classes:** As with the Preferred Alternative, there would be no VRM Class I, II, or III lands in DFAs under Alternative 1 (Figure IV.20-3, Proposed BLM VRM Classifications, Alternative 1). This is because all DFAs would be managed as VRM IV under all action alternatives. Approximately 12,000 acres of transmission would occur on VRM-classified lands, compared with a slightly larger amount of 13,000 acres under the Preferred Alternative.
- **National Parks and Preserves:** These lands would not be within the DFA footprint under Alternative 1 or the Preferred Alternative. Although the footprint of renewable energy projects would not directly affect these lands, project facilities and activities that are visible from National Parks and Preserves would diminish scenic quality for viewers in those conservation areas, where expectations for scenic quality are typically high.
- **National Scenic Byways:** No segments of the Bradshaw Trail National Back Country Byway would be within DFAs under either Alternative 1 or the Preferred Alternative.
- **National Scenic and Historic Trails:** Approximately 2 miles of the Old Spanish National Historic Trail alignment would be within DFAs under both Alternative 1 and the Preferred Alternative.

- **State Scenic Highways:** No segments of State Scenic Highways would be within DFAs under Alternative 1 or the Preferred Alternative.
- **Wild and Scenic Rivers:** 100% of the designated Amargosa Wild and Scenic River corridor as well as the eligible Surprise Canyon Creek and Mojave River segments would be within the reserve design under both Alternative 1 and the Preferred Alternative.
- **Proximity of Visual Resources to DFAs.** Table IV.20-5 shows that Alternative 1 has generally fewer visual resource elements within 5 miles of DFAs than the Preferred Alternative. One example of this is the area of VRI Class I: there are 366,000 acres under the Preferred Alternative compared with 160,000 acres under Alternative 1. For Trail Management Corridors, there would be more than 15 times as many acres within this 5-mile distance under the Preferred Alternative than there would be under Alternative 1.

The visual impacts resulting from Alternative 1 are:

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Preconstruction activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include road upgrading, damage to or removal of native vegetation, construction of meteorological towers, drilling of temperature gradient wells, vehicles, and lighting.

During construction and decommissioning, activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include dust and exhaust emissions, removal of vegetation during site clearing, contouring and grading, presence of vehicles and equipment, mobilization and demobilization activities, material delivery and staging, assembly of components, site lighting, and construction of and later removal of structures.

Impact VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

The continued presence of equipment, structures, fencing, roads and other elements required to operate a facility would have a long-term adverse effect on the visible landscape. Areas of persistent surface and vegetation disturbance and the presence of structures would create visual contrast in form, line, color, and texture compared with pre-project conditions. Depending on viewer location, physical elements introduced by a project could block views or create skylining. Even after project removal and site reclamation are completed, visual contrast would remain. Restoring the natural, pre-disturbance visual

character of a desert environment is extremely difficult, can take decades, and often is unsuccessful. Therefore, surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes.

The structure, size, and industrial character of utility-scale renewable energy and transmission facilities during their operation and maintenance—as well as any associated glare, reflectivity, and lighting—would visually contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Impacts in Study Area Lands

Study Area Lands refer to three categories of lands shown on alternative maps: Future Assessment Areas (FAAs), Special Analysis Areas (SAAs) and DRECP Variance Lands.

Future Assessment Areas (FAAs). Alternative 1 has no FAAs identified, therefore there would be no associated impacts to visual resources.

Special Analysis Areas (SAAs). There are two areas defined as SAAs, representing areas subject to ongoing analysis. These areas (located in the Silurian Valley and just west of U.S. 395 in Kern County) have high value for renewable energy development, ecological and cultural conservation, and recreation. SAA lands are expected to be designated in the Final EIR/EIS as DFAs or included in the Reserve Design/Conservation Designation.

Under Alternative 1, the SAAs would be designated as conservation, which would be generally beneficial to visual resources. Impacts would be the same as those explained for the Plan-wide reserve design in Section IV.20.3.2.1.2, Impacts of the Reserve Design.

DRECP Variance Lands. DRECP Variance Lands represent the BLM Solar PEIS Variance Lands as screened for the DRECP and EIR/EIS based on BLM screening criteria. Covered Activities could be permitted for NCCP purposes only through an NCCP plan amendment. However, development of renewable energy on Variance Lands would not require a BLM LUPA; so the environmental review process would be somewhat simpler than if the location were left undesignated.

Under Alternative 1, Variance Lands include 37,000 acres, development of which would conform to the visual management objectives of VRM Class II.

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Impact Reduction Strategies and Mitigation

The implementation of Alternative 1 would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The visual impacts of the renewable energy development covered by the Plan would be lessened in several ways. The Plan incorporates CMAs for each alternative, including specific biological reserve design components and LUPA components. In addition, the implementation of existing laws, orders, regulations, and standards would reduce the impacts of project development.

Conservation and Management Actions

The conservation strategy for Alternative 1 (presented in Volume II, Section II.3.1.1) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes a definition of the reserve design and specific CMAs for the Preferred Alternative. While the CMAs were developed for BLM lands only, this analysis assumes that all CMAs would be applied also to nonfederal lands.

Specific visual resource CMAs have been developed and apply to the Preferred Alternative and all action alternatives. They are summarized in Section IV.20.3.2.1.1, Plan-wide Impacts and Mitigation Measures from Renewable Energy and Transmission Development. These CMAs for VRM include measures that apply Plan-wide, measures specific to DFAs and Study Area Lands, and a detailed set of visual resource BMPs that apply to all action alternatives. The BMPs incorporate the measures identified in *Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*. These visual resource CMAs provide a comprehensive framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Laws and Regulations

Similar to the No Action Alternative, existing laws and regulations will reduce certain impacts of Plan implementation under Alternative 1. Relevant regulations are presented in the Regulatory Setting in Volume III. The requirements of relevant laws and regulations as related to impact reduction are summarized in Section IV.20.3.1.1.1.

Mitigation Measures

The visual impact avoidance and reduction strategies in existing guidance, such *Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*, are detailed and comprehensive. The CMAs proposed under the DRECP (see Appendix H) provide additional

detail and direction. These represent state-of-the-art visual impact mitigation as it applies to the Plan Area; no additional mitigation is feasible.

IV.20.3.3.1.2 Impacts from Reserve Design

There would be approximately 15 million acres of Reserve Design Lands under both Alternative 1 and the Preferred Alternative. In general, visual resource elements would benefit from the conservation policies and requirements of these lands. Alternative 1 has approximately the same amount of BLM LUPA Conservation Designations as the Preferred Alternative, with an emphasis on ACECs and wildlife allocations.

The following summarizes the key points in visual impacts of the reserve design for Alternative 1 compared with those of the Preferred Alternative (see Appendix R2, Table R2.20-10 for detailed data):

- **VRI Classes:** Alternative 1 would have 100% of VRI Class I lands, 74% of VRI Class II lands, 67% of VRI Class III lands, and 71% of VRI Class IV lands in Reserve Design Lands, compared to similar amounts (100%, 74%, 67%, and 72% respectively) under the Preferred Alternative.
- **VRM Classes:** 100% of VRM Class I lands, 81% of VRM Class II lands, 65% of VRM Class III lands, and 66% of the VRM Class IV lands would be in the Reserve Design Lands under Alternative 1, compared with 100% of VRM Class I lands, 83% of VRM Class II lands, 79% of VRM Class III lands, and 38% of VRM Class IV lands under the Preferred Alternative.
- **National Parks and Preserves:** The National Parks and Preserves would have 100% of their land areas in the reserve design under Alternative 1 and under the Preferred Alternative.
- **National Scenic Byways:** Under Alternative 1, approximately 50% of the Bradshaw Trail National Back Country Byway and 11% of SR 190 would be in the Reserve Design. This provides a similar level of protection of visual and scenic values as would occur under the Preferred Alternative (51% and 15% respectively).
- **National Scenic and Historic Trails:** Under Alternative 1, approximately 54% of the Juan Bautista de Anza National Historic Trail, 58% of the Old Spanish National Historic Trail, and 41% of the Pacific Crest National Scenic Trail alignments in the Plan Area would be in the Reserve Design.

Under the Preferred Alternative, approximately 4% of the Juan Bautista de Anza National Historic Trail, 58% of the Old Spanish National Historic Trail, and 40% of the Pacific Crest National Scenic Trail alignments would be in conservation.

- **California State Parks:** As with the Preferred Alternative, most California State Park lands would be in Reserve Design Lands under Alternative 1. This would vary by individual park or preserve; but most parks would have more than 90% in either existing conservation areas, BLM LUPA designations, or CPAs. Exceptions are the (1) Desert Cahuilla/Freeman Project (4%), (2) Picacho SRA (78%), and (3) Salton Sea SRA (86%). Similar amounts and percentages of California State Park lands would be in Reserve Design Lands under the Preferred Alternative.
- **State Scenic Highways:** Approximately 16% of SR 190 but no portion of the SR 78 and U.S. 395 alignments would be in Reserve Design Lands, compared with similar portions under the Preferred Alternative.
- **Wild and Scenic Rivers:** 100% of the Amargosa Wild and Scenic River, and all eligible segments of Surprise Canyon Creek and the Mojave River, would be within the reserve design under Alternative 1 and the Preferred Alternative.

IV.20.3.3.2 Impacts of DRECP Land Use Plan Amendment on BLM Land: Alternative 1

This section addresses two components of effects of the BLM LUPA: the streamlined development of renewable energy and transmission on BLM land under the LUPA, and the impacts of the amended land use plans themselves.

IV.20.3.3.2.1 Impacts from Renewable Energy and Transmission Development on BLM Land

The visual impacts of DFAs on VRI and VRM lands for Alternative 1 would be the same as those defined in Section IV.20.3.3.1 for the Plan-wide analysis. VRM Class I lands would not exist within DFAs. However, renewable energy development on DFA lands would be visible to viewers on adjacent lands outside of DFAs.

IV.20.3.3.2.2 Impacts of Changes to BLM Land Designations

The DRECP LUPA for Alternative 1 would establish VRM classes for all lands in the CDCA. (Currently, only the Bishop RMP and the Imperial Sand Dunes RAMP have VRM Classes designated. In accordance with BLM policy, all wilderness areas and WSAs are managed as VRM Class I.) It also would (1) designate new NLCS lands; (2) designate new ACECs and expand and reduce existing ACECs; (3) designate new SRMAs and expand and reduce existing SRMAs; (4) create management corridors along National Scenic and Historic Trails; (5) manage lands with wilderness characteristics to protect those characteristics; and, (6) designate new wildlife allocations. The BLM LUPA would also replace the existing multiple-use classes.

The VRM Classes and other BLM land designations proposed under Alternative 1 would extend protective measures to these areas that would avoid or reduce visual impacts. As with the Preferred Alternative, CMAs for visual resources would be established and implemented. The BLM-specific CMAs proposed under the Preferred Alternative would be the same for all action Alternatives. Together, these visual resource CMAs and the restrictions and protective measures of the land designations provide a mutually supportive framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Under Alternative 1, Trail Management Corridors would be established along National Scenic and Historic Trails, at a width of generally 0.25 miles from the centerline of the trail, for a total width of 0.5 miles (compared with the 20 times greater total width of 10 miles under the Preferred Alternative). As discussed in Volume II, Section II.3.2.2.2, these Trail Management Corridors would be managed as components of the BLM's NLCS. Where National Trails overlap other NLCS lands, the more protective CMAs or land use allocations would apply. All Trail Management Corridors would be designated as VRM Class II, except within approved transmission corridors (VRM Class III) and DFAs (VRM Class IV). However, state-of-the-art VRM BMPs for renewable energy would be employed commensurate with the protection of nationally significant scenic resources and cultural landscapes to minimize the level of intrusion and protect trail settings.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements under Alternative 1 (see Appendix R2, Table R2.20-11 for detailed, quantitative data and analysis):

- **SRMAs:** There would be the potential for recreational activities or facilities allowed in SRMAs to affect scenic values, particularly those of the VRI Class I and II lands with which they coincide (approximately 285,000 acres, similar to the Preferred Alternative).
- **NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality, particularly to the VRI Class I, II, III, and IV lands with which they coincide (1.5 million acres, compared to 3.6 million acres under the Preferred Alternative).
- **ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRI Class II, III, and IV lands with which they coincide (2.8 million acres, compared with 1.4 million acres under the Preferred Alternative).

- **Wildlife Allocation Areas:** The management of these areas must be compatible with protection and enhancement of wildlife and plant habitat and would generally benefit visual resources, particularly the VRI Class III and IV lands with which they coincide (approximately 528,000 acres, compared with a much smaller area of 18,000 acres under the Preferred Alternative).
- **Lands Managed for Wilderness Characteristics:** No lands managed for wilderness characteristics would be managed to protect wilderness characteristics under Alternative 1. Under the Preferred Alternative, these lands would be managed as VRM Class II. Other management strategies to protect the wilderness characteristics of these lands would benefit visual resources, particularly the VRI Class II, III, and IV lands with which they coincide (approximately 299,000 acres).
- **Trail Management Corridors:** The primary effect of these 0.5-mile wide corridors under Alternative 1 would be to provide a consistent framework for protecting and managing scenic values along National Scenic Trails within National and California State park lands. As with the Preferred Alternative, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II.

Alternative 1 would assign VRM classes to all BLM lands within the Plan Area. Generally, a low correlation between the VRM classes and the underlying VRI classes would result in greater adverse impacts to visual quality (e.g., VRI Class II or III lands managed to meet the objectives of a VRM Class IV). Conversely, impacts would most likely be minimized by alternatives proposing visual management that either closely corresponds to the VRI classes, or proposing a more restrictive (higher) class designation (e.g., VRM Class II proposed for VRI Class III lands).

Under Alternative 1, VRI Class lands within the proposed VRM Classes on BLM LUPA lands would be as indicated in Table IV.20-6. Key points of the effects of VRM classifications on VRI lands under Alternative 1 are summarized here:

- **VRM designations:** As with the Preferred Alternative, the majority of lands would be designated as VRM Class I, II, or III; and approximately 15% would be designated as VRM Class IV.
- **VRI Class I:** As with the Preferred Alternative, 100% VRI Class I lands would be managed as VRM Class I, reflecting a high level of management protection.
- **VRI Class II:** As with the Preferred Alternative, more than 75% of VRI Class II lands would be managed as VRM Class II or I, reflecting a moderately high level of management protection. Approximately 22% would be managed as VRM Class III or IV, which allows for more visual contrast and impact than the VRM Class II objectives allow over the affected acres.

- VRI Class III: Nearly 91% of VRI Class III lands would be managed as VRM Class III, II, or I, reflecting a high correlation and level of management protection. Approximately 35% would be managed to meet VRM Class II objectives, which restrict visual contrast and impact more than VRM Class III. Approximately 9% would be managed as VRM Class IV, which allows for more visual contrast and impact than the VRM Class III objectives allow.
- VRI Class IV: Approximately 43% of VRI Class IV lands would be managed as VRM Class III, II, or I, reflecting more restrictive management than the VRM Class IV objectives allow; and approximately 57% would be managed as VRM Class IV.
- Compared with the Preferred Alternative, Alternative 1 would result in a similar but somewhat higher level of correlation between VRI values and the proposed VRM Classes. Overall, visual resource protection would benefit under Alternative 1 by the designation of VRM Classes throughout the CDCA.
- Under the proposed CMAs, all DFAs would be managed as VRM Class IV lands to allow for utility-scale development. In those cases, implementation or incorporation of BMPs would still be required to reduce the visual contrast levels of proposed facilities to the extent practicable.

IV.20.3.3.3 Impacts of Natural Community Conservation Plan: Alternative 1

- The impacts of the NCCP for Alternative 1 would be the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis.

IV.20.3.3.4 Impacts of General Conservation Plan

- The visual impacts of the GCP for Alternative 1 would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.3.5 Impacts Outside the Plan Area

IV.20.3.3.5.1 Impacts of Transmission Outside the Plan Area

- The impacts of transmission outside the Plan Area would be the same under all alternatives. These are as described for the No Action Alternative in Section IV.20.3.1.5.1.

Table IV.20-6
VRI Classes Within Proposed VRM Classes on BLM LUPA Lands – Alternative 1
(all ecoregion subareas, acres and percentage)

LUPA-Proposed VRM Class Designations	Existing Visual Resource Inventory Classes								Total
	VRI Class I		VRI Class II		VRI Class III		VRI Class IV		
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
VRM Class I	3,842,000	100%	7,000	0%	3,000	0%	700	0%	3,852,700
VRM Class II	0	0%	1,680,000	78%	955,000	35%	274,000	14%	2,909,000
VRM Class III	0	0%	415,000	19%	1,548,000	56%	567,000	29%	2,530,000
VRM Class IV	0	0%	56,000	3%	251,000	9%	1,128,000	57%	1,435,000
Total	3,842,000	100%	2,158,000	100%	2,757,000	100%	1,969,700	100%	10,726,700

Note: VRI Class I represents the highest level of inventoried visual resource values; VRM Class I represents the most restrictive visual management objectives. Acres above include CDCA outside the Plan Area. The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.3.5.2 Impacts of BLM LUPA Decisions Outside the Plan Area

Under the proposed BLM LUPA, the changes outside the Plan Area would include the designation of NLCS lands, ACECs, National Scenic and Historic Trails Management Corridors, VMR Classes, and new land allocations to replace multiple-use classes on CDCA lands.

The VRM Classes and other BLM land designations proposed under Alternative 1 would extend protective measures that would avoid or reduce visual impacts. CMAs for visual resources would be established and implemented. The BLM-specific CMAs for Alternative 1 would be the same as for all action alternatives. These visual resource CMAs and the restrictions and protective measures of the land designations provide a framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements, outside the Plan Area, under Alternative 1 (see Appendix R2, Table R2.20-12 for detailed, quantitative data and analysis):

- **Proposed NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality.
- **Existing and Proposed ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRM Class II, III, and IV lands with which they coincide (approximately 123,000 acres, compared with a larger area of 207,000 acres under the Preferred Alternative).
- **Trail Management Corridors:** The primary effect of these 0.5-mile-wide corridors would be to provide a consistent framework for protecting and managing scenic values along National Scenic and Historic Trails within National and California State park lands. As with the Preferred Alternative, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II.

IV.20.3.3.6 CEQA Significance Determination for Alternative 1

The visual impacts and their associated significance determinations for Alternative 1 are as follows:

VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality. Activities and equipment visible from residences, public roads, and public preserves would result in short-term

diminished scenic quality for viewers. This would be less than significant with implementation of appropriate CMAs.

VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Long-term impacts to visual resources for Alternative 1 would be significant and unavoidable, as described in detail for the No Action Alternative in Section IV.20.3.1.6. Impacts would be significant because of the changes in line, form, and color introduced by large-scale development and the contrast of any such development with surrounding conditions. The CMAs relevant to Alternative 1 would reduce the impact on visual resources but not to a less than significant level.

IV.20.3.3.7 Comparison of Alternative 1 with the Preferred Alternative

Chapter IV.27 presents a comparison of all action alternatives and the No Action Alternative across all disciplines. This section summarizes the comparison of Alternative 1 with the Preferred Alternative.

IV.20.3.3.7.1 Alternative 1 Compared with Preferred Alternative for Plan-wide DRECP

Although similar visual impacts would occur under both Alternative 1 and the Preferred Alternative, based on the assumption that California's renewable energy goals would be achieved in any case, the impacts would vary in key ways:

Geographic Distribution. As with the DFAs of the Preferred Alternative, the DFAs under Alternative 1 are restricted in distribution and concentrated in areas considered less environmentally sensitive. DFAs under Alternative 1 are focused in the Imperial Valley, Lucerne Valley, and Barstow area. Alternative 1 has fewer DFAs in eastern Riverside and the Tehachapi area than the Preferred Alternative and very small DFAs along the U.S. 395 corridor.

The severity of visual impacts depends partly on the number of potential viewers. Alternative 1 has a smaller DFA in the more populated West Mojave area. As a result, less new development would be added to the existing visual disturbance experienced by residents in the Mojave, Lancaster, and Palmdale areas due to extensive wind and solar development in those areas.

The severity of visual impacts also relates to expectations of viewers for pristine desert vistas. The eastern and northeastern parts of the Plan Area are sensitive because they contain the Mojave National Preserve, Death Valley National Monument, and several BLM Wilderness Areas. Alternative 1 completely avoids development in these areas, and does not include SAAs or FAAs near these LLPAs.

Extent of Potential Renewable Energy Development. Although the geographic distribution of DFAs is generally similar under Alternative 1 and the Preferred Alternative, the scale and extent of the DFAs vary. The DFAs under the Preferred Alternative are nearly twice as large as those of Alternative 1 (2,024,000 acres of DFAs for the Preferred Alternative compared with 1,070,000 acres for Alternative 1). The smaller DFAs would result in more concentrated development under Alternative 1, with renewable energy projects being visible from far fewer areas than with the Preferred Alternative.

Conservation. Alternative 1 has slightly more acreage in the reserve design than the Preferred Alternative, and slightly less land in CPAs. The conservation strategy emphasizes avoidance of impacts to visually sensitive areas.

In summary, the composition and structure of Alternative 1 would provide greater opportunities for the avoidance, reduction, and minimization of visual impacts from renewable energy development but would result in greater impacts from transmission corridors, compared with the Preferred Alternative.

IV.20.3.3.7.2 Alternative 1 Compared with Preferred Alternative for the BLM Land Use Plan Amendment

The BLM LUPA under Alternative 1 would assign VRM Classes to all BLM lands within the CDCA, including those outside the Plan Area, as would the Preferred Alternative. For both alternatives, this would provide a unifying framework and an established system for addressing visual resources.

The key difference is that Alternative 1 would have far fewer VRI Class II and III lands (12,000 acres) in DFAs than would the Preferred Alternative (78,000 acres). This difference in the potential area of land disturbance impacts would result in a much smaller area of land potentially subject to visual impacts under Alternative 1 than under the Preferred Alternative. However, because Alternative 1 proposes 0.5-mile-wide Trail Management Corridors, compared with the much greater 10-mile-wide corridors under the Preferred Alternative, the scenic values and viewer experience along National Scenic and Historic Trails would have a lower level of protection under Alternative 1 than under the Preferred Alternative.

IV.20.3.3.7.3 Alternative 1 Compared with Preferred Alternative for NCCP

The visual impacts of the NCCP for Alternative 1 are the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis. As a result, the comparison of Alternative 1 with the Preferred Alternative for the NCCP is the same as described for Plan-wide DRECP.

IV.20.3.3.7.4 Alternative 1 Compared with Preferred Alternative for the GCP

The visual impacts of the GCP for Alternative 1 and the Preferred Alternative would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.4 Alternative 2

Alternative 2 includes 2,473,000 acres of DFAs and 15,085,000 acres of Reserve Design Lands. For reference, Table IV.20-7 compares the Preferred Alternative to Alternative 2 for key visual elements.

**Table IV.20-7
Affected Visual Resources – Preferred Alternative Compared to Alternative 2**

	Preferred Alternative	Alternative 2
<i>Development Areas (acres)</i>		
DFAs	2,024,000	2,473,000
<i>Visual Resource Elements Within Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	0 [I] 17,000 [II] 61,000 [III] 27,000 [IV]	0 [I] 39,000 [II] 89,000 [III] 66,000 [IV]
VRM [Class]	0 [I] 0 [II] 0 [III] 106,000 [IV]	0 [I] 0 [II] 0 [III] 191,000 [IV]
National Scenic Byways	0	0
National Scenic and Historic Trails	1 mi.	6 mi.
California State Parks	0	0
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Visual Resource Elements Within 5 miles of Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	366,000 [I] 389,000 [II] 731,000 [III] 709,000 [IV]	686,000 [I] 691,000 [II] 1,133,000 [III] 941,000 [IV]
VRM [Class]	366,000 [I] 515,000 [II] 555,000 [III] 694,000 [IV]	686,000 [I] 1,088,000 [II] 859,000 [III] 759,000 [IV]
National Scenic Byways	13 mi.	13 mi.

**Table IV.20-7
Affected Visual Resources – Preferred Alternative Compared to Alternative 2**

	Preferred Alternative	Alternative 2
National Parks and Preserves	15,000	33,000
National Scenic and Historic Trails	350 mi.	395 mi.
Trail Management Corridors	659,000	1,586,000
California State Parks	108,000	121,000
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Reserve Design Lands (Conservation Lands) (acres)</i>		
Reserve Design Lands	14,920,000	15,085,000

Note: The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.4.1 Plan-wide Impacts of Implementing the DRECP: Alternative 2

IV.20.3.4.1.1 Plan-wide Impacts and Mitigation Measures from Renewable Energy and Transmission Development

Impact Assessment

Under Alternative 2, renewable energy related activities covered by the Plan are confined to 2.5 million acres of DFAs, resulting in 134,000 acres of long-term disturbance (see Volume IV, Table IV.1-1). This represents approximately 11,000 more acres of long-term disturbance than could occur under the Preferred Alternative.

The DFAs are geographically dispersed in the Imperial Valley including areas south of Chocolate Mountains, eastern Riverside, the Lucerne Valley, the Barstow area, the Tehachapi area, along the U.S. 395 corridor, the Silurian Valley, and near Hidden Hills.

Transmission development and operation activities would be permitted both inside and outside of the DFAs.

Approximately 2,473,000 acres would be within DFAs under Alternative 2, compared with 2,024,000 acres under the Preferred Alternative. This larger area of land within DFAs (approximately 450,000 acres more) represents a higher potential for visual impacts under Alternative 2 than under the Preferred Alternative.

Visual impacts from solar and wind development would be dispersed, with expanded wind opportunities.

Visual impacts from geothermal energy would occur in the Imperial Borrego Valley and Owens River Valley ecoregion subareas, as they would under the Preferred Alternative.

The following summarizes the key points in comparing the visual impacts from renewable energy and transmission development under Alternative 2 to those of the Preferred Alternative (see Appendix R2, Table R2.20-13 for detailed data):

- **VRI Classes:** There would approximately 39,000 acres of VRI Class II lands, 89,000 VRI Class III lands, and no VRI Class I lands within DFAs under Alternative 2. Per the CMAs for visual resources, these 128,000 acres of VRI Class II and III lands within DFAs would be managed as VRM IV and thereby sustain a potential degradation of underlying scenic values. Approximately 12,000 acres of transmission would occur on inventoried lands, compared with 13,000 acres under the Preferred Alternative.

A smaller amount of VRI Class II and III lands within DFAs would be managed as VRM IV under the Preferred Alternative (78,000 acres) than under Alternative 2 (128,000 acres). This reflects a greater potential for degradation of underlying scenic values under Alternative 2 than under the Preferred Alternative.

- **VRM Classes:** As with the Preferred Alternative, there would be no VRM Class I, II, or III lands in DFAs under Alternative 2 (Figure IV.20-4, Proposed BLM VRM Classifications, Alternative 2).
- **National Parks and Preserves:** These lands would not be within the DFA footprint under Alternative 2 or the Preferred Alternative. Although the footprint of renewable energy projects would not directly affect these lands, project facilities and activities that are visible from National Parks and Preserves would diminish scenic quality for viewers in those conservation areas, where expectations for scenic quality are typically high.
- **National Scenic Byways:** No segments of the Bradshaw Trail National Back Country Byway would be within DFAs under either Alternative 2 or the Preferred Alternative.
- **National Scenic and Historic Trails:** Approximately 6 miles of the Old Spanish National Historic Trail alignment would be within DFAs under Alternative 2, as compared with 2 miles under Preferred Alternative.
- **California State Parks:** As with the Preferred Alternative, no California State Park lands would be within DFAs under Alternative 2. Approximately 160 acres of transmission would occur on these lands, as compared with 180 acres under the Preferred Alternative.

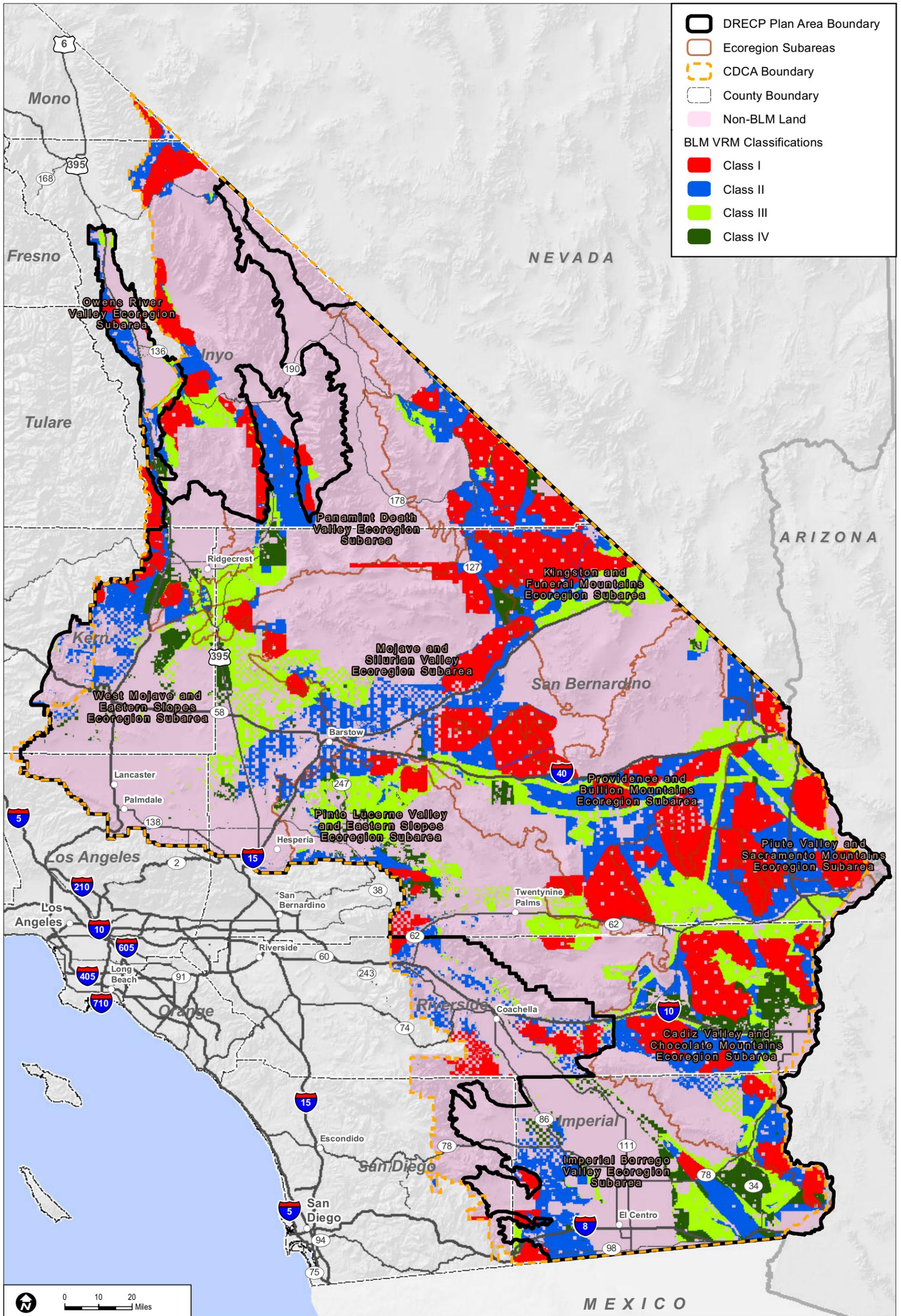
- **State Scenic Highways:** No segments of State Scenic Highways would be within DFAs under Alternative 2 or the Preferred Alternative.
- **Wild and Scenic Rivers:** No portion of designated or eligible Wild and Scenic Rivers would be within DFAs under Alternative 2 or the Preferred Alternative.
- **Proximity of Visual Resources to DFAs.** Under Alternative 2, visual resource elements within 5 miles of proposed DFAs can be compared with those under the Preferred Alternative, as summarized in Table IV.20-7. Alternative 2 has generally more visual resource elements within 5 miles of DFAs than the Preferred Alternative. One example of this is the acres of VRI Class I: 366,000 acres under the Preferred Alternative compared with 686,000 acres under Alternative 2. For Trail Management Corridors, there are more than twice as many acres in this proximity under Alternative 2 than there would be under the Preferred Alternative.

The visual impacts resulting from Alternative 2 are:

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Preconstruction activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include road upgrading, damage to or removal of native vegetation, construction of meteorological towers, drilling of temperature gradient wells, vehicles, and lighting.

During construction and decommissioning, activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include dust and exhaust emissions, removal of vegetation during site clearing, contouring and grading, presence of vehicles and equipment, mobilization and demobilization activities, material delivery and staging, assembly of components, site lighting, and construction of and later removal of structures.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

FIGURE IV.20-4

Proposed BLM Visual Resource Management Classifications, Alternative 2

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Impact VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

The continued presence of equipment, structures, fencing, roads and other elements required to operate a facility would have a long-term adverse effect on the visible landscape. Areas of persistent surface and vegetation disturbance and the presence of structures would create visual contrast in form, line, color, and texture as compared with pre-project conditions. Depending on viewer location, physical elements introduced by a project could block views or create skylining. Even after project removal and site reclamation are completed, visual contrast would remain. Restoring the natural, pre-disturbance visual character of a desert environment is extremely difficult, can take decades, and often is unsuccessful. Therefore, surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes.

The structure, size, and industrial character of utility-scale renewable energy and transmission facilities during their operation and maintenance—as well as any associated glare, reflectivity, and lighting—would visually contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Impacts in Study Area Lands

Study Area Lands refer to three categories of lands shown on alternative maps: Assessment Areas (FAAs), Special Analysis Areas (SAAs) and DRECP Variance Lands.

Future Assessment Areas (FAAs). Lands within FAAs are neither reserve lands nor DFAs; they are simply areas that are deferred for future assessment. The future assessment will determine their suitability for renewable energy development or ecological conservation. If renewable energy development occurs on FAA lands, a BLM LUPA would not be required. FAAs for each alternative are included and located as shown in Table IV.1-2 and Figure II.5-1. The FAAs represent areas where renewable energy development or inclusion in the reserve design could be implemented through an amendment to the DRECP, but additional assessment would be needed.

Because most of the FAAs are presented as “undesigned areas” in the action alternatives, there would be no difference between the FAAs in the Preferred Alternative except that renewable development in an FAA would not require a BLM LUPA; so the environmental review process would be somewhat simpler than if the location were left undesignated. Development of the 109,000 acres of FAAs under Alternative 2 would be subject to all visual resource CMAs identified by the Preferred Alternative and would be required to meet the visual management objectives of the underlying VRM Class. The exception is the

FAA south of the Imperial Sand Dunes, which would become a DFA under this alternative and would be managed as VRM Class IV accordingly.

Special Analysis Areas (SAAs). Designating the SAAs as DFAs would result in impacts similar to those identified for the DFAs for the Plan-wide impacts, all of which would be managed to meet VRM Class IV objectives.

DRECP Variance Lands. There would be no DRECP Variance Lands under Alternative 2.

Impact Reduction Strategies and Mitigation

The implementation of the Plan would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Plan would be lessened in several ways. First, the Plan incorporates CMAs for each alternative, including specific biological reserve design components and LUPA components. In addition, the implementation of existing laws, orders, regulations, and standards would reduce the impacts of project development.

Conservation and Management Actions

The conservation strategy (presented in Volume II, Section II.3.1.1) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes a definition of the reserve design and specific CMAs for the Preferred Alternative. While the CMAs were developed for BLM lands only, this analysis assumes that all CMAs would be applied also to nonfederal lands.

BLM-specific CMAs for VRM include measures that apply Plan-wide, measures specific to DFAs and Plan Areas, and a detailed set of visual resource BMPs that apply to all action alternatives. The BMPs incorporate the measures identified in *Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*. Together, these visual resource CMAs provide a comprehensive framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Laws and Regulations

Similar to the No Action Alternative, existing laws and regulations will reduce certain impacts of Plan implementation. Relevant regulations are presented in the Regulatory Setting in Volume III. The requirements of relevant laws and regulations are summarized in Section IV.20.3.1.1.1.

Mitigation Measures

The visual impact avoidance and reduction strategies in existing guidance, such as Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands, are detailed and comprehensive. The CMAs proposed under the DRECP (see Appendix H) provide additional detail and direction. These represent state-of-the-art visual impact mitigation as it applies to the Plan Area; no additional mitigation is feasible.

IV.20.3.4.1.2 Impacts from Reserve Design

There would be 15 million acres of Reserve Design Lands under Alternative 2 and under the Preferred Alternative. This represents a generally equivalent level of conservation to the Preferred Alternative. In general, visual resource elements would benefit from the conservation policies and requirements applicable to these lands. Alternative 2 has slightly more acres of BLM LUPA Conservation Designations than the Preferred Alternative and the most acres of NLCS, SRMAs, and National Scenic and Historic Trail corridors of all action alternatives.

The following summarizes the key points in visual impacts of the reserve design for Alternative 2 compared with those of the Preferred Alternative (see Appendix R2, Table R2.20-14 for detailed data):

- **VRI Classes:** Alternative 2 would have 100% of VRI Class I lands, 79% of VRI Class II lands, 73% of VRI Class III lands, and 73% of VRI Class IV lands in Reserve Design Lands, compared with similar amounts (100%, 74%, 67%, and 72%, respectively) under the Preferred Alternative.
- **VRM Classes:** 100% of VRM Class I lands, 86% of VRM Class II lands, 87% of VRM Class III lands, and 1% of the VRM Class IV lands would be in the Reserve Design Lands under Alternative 2, compared with 100% of VRM Class I lands, 83% of VRM Class II lands, 79% of VRM Class III lands, and 38% of VRM Class IV lands under the Preferred Alternative. Alternative 2 would have a much smaller amount of VRM Class IV lands in the reserve design than the Preferred Alternative.
- **National Parks and Preserves:** The National Parks and Preserves would have 100% of their land areas in the reserve design under Alternative 1 and under the Preferred Alternative.
- **National Scenic Byways:** Under Alternative 2, approximately 51% of the Bradshaw Trail National Back Country Byway and 15% of SR 190 would be in the Reserve Design. This provides the same level of protection of visual and scenic values as would occur under the Preferred Alternative.
- **National Scenic and Historic Trails:** Under Alternative 2, approximately 4% of the Juan Bautista de Anza National Historic Trail, 58% of the Old Spanish National His-

toric Trail, and 51% of the Pacific Crest National Scenic Trail alignments in the Plan Area would be in the Reserve Design. This provides a similar level of protection of visual and scenic values as would occur under the Preferred Alternative (4%, 58%, and 40%, respectively).

- **California State Parks:** Under Alternative 2, most California State Park lands would be in Reserve Design Lands. This would vary by individual park or preserve; but most parks would have more than 90% in existing conservation areas, BLM LUPA designations, or CPAs. Exceptions are the (1) Desert Cahuilla/Freeman Project (4%), (2) Picacho SRA (78%), and (3) Salton Sea SRA (86%). Similar but slightly smaller amounts and percentages of California State Park lands would be in Reserve Design Lands under the Preferred Alternative.
- **State Scenic Highways:** Approximately 15% of SR 190 but no portion of the SR 78 and U.S. 395 alignments would be in Reserve Design Lands, compared with similar portions under the Preferred Alternative.
- **Wild and Scenic Rivers:** 100% of the Amargosa Wild and Scenic River, and all eligible segments of Surprise Canyon Creek and the Mojave River, would be within the reserve design under Alternative 2 and the Preferred Alternative.

IV.20.3.4.2 Impacts of DRECP Land Use Plan Amendment on BLM Land: Alternative 2

This section addresses two components of effects of the BLM LUPA: the streamlined development of renewable energy and transmission on BLM land under the LUPA, and the impacts of the amended land use plans themselves.

IV.20.3.4.2.1 Impacts from Renewable Energy and Transmission Development on BLM Land

The visual impacts of DFAs on VRI and VRM lands for Alternative 2 would be the same as those defined in Section IV.20.3.4.1, Plan-wide Impacts of Implementing the DRECP: Alternative 2, for the Plan-wide analysis.

IV.20.3.4.2.2 Impacts of Changes to BLM Land Designations

The DRECP LUPA for Alternative 2 would establish VRM classes for all lands in the CDCA. (Currently, only the Bishop RMP and the Imperial Sand Dunes RAMP have VRM Classes designated. In accordance with BLM policy, all wilderness areas and WSAs are managed as VRM Class I). It would also (1) designate new NLCS lands, (2) designate new ACECs and expand and reduce existing ACECs, (3) designate new SRMAs and expand and reduce existing SRMAs, (4) create buffer corridors along National Scenic and Historic Trails, and (5) manage lands with wilderness characteristics to protect those characteristics. The BLM LUPA would also replace the multiple-use classes.

The VRM Classes and other BLM land designations proposed under Alternative 2 would offer protective measures that would avoid or reduce visual impacts. As with the Preferred Alternative, CMAs for visual resources would be established and implemented. The BLM-specific CMAs proposed under the Preferred Alternative would be the same for all action alternatives. Together, these visual resource CMAs and the restrictions and protective measures of the land designations provide a framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Under Alternative 2, Trail Management Corridors would be established along National Scenic and Historic Trails, at a width of generally 10 miles from the centerline of the trail, for a total width of 20 miles (compared with a narrower 10 miles total width under the Preferred Alternative). These Trail Management Corridors would be managed as components of the BLM's NLCS. Where National Trails overlap other NLCS lands, the more protective CMAs or land use allocations would apply. All Trail Management Corridors would be designated as VRM Class II, except within approved transmission corridors (VRM Class III) and DFAs (VRM Class IV). However, state-of-the-art VRM BMPs for renewable energy would be employed commensurate with the protection of nationally significant scenic resources and cultural landscapes to minimize the level of intrusion and protect trail settings.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements under Alternative 2 (see Appendix R2, Table R2.20-15 for detailed, quantitative data and analysis):

- **SRMAs:** There would be the potential for recreational activities or facilities allowed in SRMAs to affect scenic values, particularly those of the VRI Class I and II lands with which they coincide (approximately 251,000 acres, compared with a slightly larger amount of 274,000 acres under the Preferred Alternative).
- **NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality, particularly to the VRI Class I, II, III, and IV lands (5.3 million acres, compared with a smaller amount of 3.6 million acres under the Preferred Alternative) with which they coincide.
- **ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRI Class II, III, and IV lands with which they coincide (approximately 115,000 acres, compared with a much larger area of 1.4 million acres under the Preferred Alternative).
- **Wildlife Allocation Areas:** The management of these areas must be compatible with protection and enhancement of wildlife and plant habitat and would generally benefit visual resources, particularly the VRI Class III and IV lands with which they

coincide (approximately 204,000 acres, as compared with a much smaller area of 18,000 acres under the Preferred Alternative).

- **Lands Managed for Wilderness Characteristics:** Under Alternative 2 and all other action alternatives, these lands would be managed as VRM Class II. Other management strategies to protect the wilderness characteristics of lands would benefit visual resources, particularly the VRI Class II, III, and IV lands with which they coincide (approximately 317,000 acres, compared with 299,000 acres under the Preferred Alternative).
- **Trail Management Corridors:** As with the Preferred Alternative, under Alternative 2 the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II. The primary effect of the 20-mile wide corridors under Alternative 2 would be to provide a consistent framework for protecting and managing scenic values along National Scenic and Historic Trails within National and California State park lands.

Alternative 2 would assign VRM classes to all BLM lands within the Plan Area. Generally, a low correlation between the VRM classes and the VRI classes would result in greater adverse impacts to visual quality (e.g., VRI Class II or III lands being managed as VRM Class IV). Conversely, impacts would most likely be minimized by alternatives proposing visual management that either closely corresponds to the VRI classes or proposes a more restrictive (higher) class designation (e.g., VRM Class II proposed for VRI Class III lands).

Under Alternative 2, VRI Class lands within the proposed VRM Classes on BLM LUPA lands would be as indicated in Table IV.20-8.

Table IV.20-8
VRI Classes Within Proposed VRM Classes on BLM LUPA Lands – Alternative 2

LUPA-Proposed VRM Class Designations	Existing Visual Resource Inventory Classes								Total
	VRI Class I		VRI Class II		VRI Class III		VRI Class IV		
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
VRM Class I	3,842,000	100%	5,000	0%	2,000	0%	700	0%	3,849,700
VRM Class II	0	0%	1,695,000	78%	1,168,000	35%	700,000	14%	3,563,000
VRM Class III	0	0%	344,000	19%	1,239,000	56%	971,000	29%	2,554,000
VRM Class IV	0	0%	118,000	3%	353,000	9%	305,000	57%	776,000
Total	3,842,000	100%	2,162,000	100%	2,762,000	100%	1,976,700	100%	10,742,700

Note: VRI Class I represents the highest level of inventoried visual resource values; VRM Class I represents the most restrictive visual management objectives. Acres above include CDCA outside the Plan Area. The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

Key points of the effects of VRM classification on VRI lands under Alternative 2 are summarized here:

- **VRM designations:** The majority of lands would be designated as VRM Class I, II, or III. Less than 10% would be designated as VRM Class IV.
- **VRI Class I:** As with the Preferred Alternative, all VRI Class I lands would be managed as VRM Class I, reflecting a high level of management protection.
- **VRI Class II:** As with the Preferred Alternative, more than 75% of VRI Class II lands would be managed as VRM Class II or I, reflecting a moderately high level of management protection. Approximately 22% would be managed as VRM Class III or IV, which allows for more visual contrast and impact than the VRM Class II objectives allow.
- **VRI Class III:** More than 90% of VRI Class III lands would be managed as VRM Class III, II, or I, reflecting a high correlation and level of management protection. Approximately 35% would be managed to meet VRM Class II objectives, which restrict visual contrast and impact more than VRM Class III. Approximately 9% would be managed as VRM Class IV, which allows for more visual contrast and impact than the VRM Class III objectives allow.
- **VRI Class IV:** Approximately 43% of VRI Class IV lands would be managed as VRM Class III, II, or I; 57% would be managed as VRI Class IV.

Compared with the Preferred Alternative, Alternative 2 would result in a similar but somewhat higher level of correlation between VRI values and the proposed VRM Classes, resulting in a similar potential for retaining the integrity of the inventoried visual resource values. Overall, visual resource protection would benefit under Alternative 2 by the designation of VRM Classes throughout the CDCA.

Under the proposed CMAs, all DFAs would be managed as VRM Class IV lands to allow for utility-scale development. In those cases, implementation or incorporation of BMPs would still be required to reduce the visual contrast levels of proposed facilities to the extent practicable.

IV.20.3.4.3 Impacts of Natural Community Conservation Plan: Alternative 2

The impacts of the NCCP for Alternative 2 would be the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis.

IV.20.3.4.4 Impacts of General Conservation Plan

The impacts of the GCP for Alternative 2 would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.4.5 Impacts Outside the Plan Area

IV.20.3.4.5.1 Impacts of Transmission Outside the Plan Area

The impacts of transmission outside the Plan Area would be the same under all alternatives. These are as described for the No Action Alternative in Section IV.20.3.1.5.1.

IV.20.3.4.5.2 Impacts of BLM LUPA Decisions Outside the Plan Area

Under the proposed BLM LUPA, the changes outside the Plan Area would include the designation of NLCS lands, ACECs, National Scenic and Historic Trails Management Corridors, VRM classes, and new land allocations to replace multiple-use classes on CDCA lands.

The VRM Classes and other BLM land designations proposed under Alternative 2 would extend protective measures to these areas that would avoid or reduce visual impacts. CMAs for visual resources would be established and implemented. The BLM-specific CMAs for Alternative 2 would be the same as for all action alternatives. These visual resource CMAs and the restrictions and protective measures of the land designations provide a framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements, outside the Plan Area, under Alternative 2 (see Appendix R2, Table R2.20-16 for detailed, quantitative data and analysis):

- **Proposed NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality.
- **Existing and Proposed ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRM Class II, III, and IV lands with which they coincide (approximately 203,000 acres, compared to a similar amount of area under the Preferred Alternative).
- **Trail Management Corridors:** The primary effect of these 20-mile-wide corridors would be to provide a consistent framework for protecting and managing scenic values along National Scenic and Historic Trails within National and California State park lands. As with the Preferred Alternative, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II.

IV.20.3.4.6 CEQA Significance Determination for Alternative 2

The significance determinations for short-term and long-term impacts are described in Section IV.20.3.1.1.1 for the No Action Alternative. Section IV.20.1.2 identifies four criteria to apply when determining if there are significant impacts from a project under CEQA. These criteria are included as part of the more general impacts identified in this section as VR-1 and VR-2.

The visual impacts and their associated significance determinations for Alternative 2 are as follows:

VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality. Activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. This would be less than significant with implementation of appropriate CMAs.

VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality. Long-term impacts to visual resources for Alternative 2 would be significant and unavoidable, as described in detail for the No Action Alternative (Section IV.20.3.1.6). Impacts would be significant because of the changes in line, form, and color introduced by large-scale development and the contrast of any such development with surrounding conditions. Although the CMAs for Alternative 2 would reduce the impact on visual resources, they would not reduce it to a less than significant level.

IV.20.3.4.7 Comparison of Alternative 2 with Preferred Alternative

Chapter IV.27 presents a comparison of all action alternatives and the No Action Alternative across all disciplines. This section summarizes the comparison of Alternative 2 with the Preferred Alternative.

IV.20.3.4.7.1 Alternative 2 Compared with Preferred Alternative for Plan-wide DRECP

Although similar visual impacts would occur under both Alternative 2 and the Preferred Alternative, the impacts would vary in key ways:

Geographic Distribution. As with the DFAs of the Preferred Alternative, the DFAs under Alternative 2 are restricted in distribution and concentrated in areas considered less environmentally sensitive. DFAs under Alternative 2 are geographically dispersed in the Imperial Valley including south of Chocolate Mountains, eastern Riverside, the Lucerne Valley, the Barstow area, the Tehachapi area, the U.S. 395 corridor, the Silurian Valley, and near

Hidden Hills. A greater proportion of wind energy would be developed, solar and wind would be dispersed, and geothermal development would occur in the Imperial Borrego Valley ecoregion subarea. There would be less protection of Fremont Valley, Ridgecrest, Silurian Valley, and south of Chocolate Mountains than in the alternative-specific reserve design for the Preferred Alternative.

The severity of visual impacts depends partly on the number of potential viewers. Alternative 2 has larger DFAs than the Preferred Alternative in and near the populated West Mojave area. As a result, greater amounts of wind and solar development would be added to the existing visual disturbance experienced by residents in the Mojave, Lancaster, and Palmdale areas due to extensive wind and solar development in those areas. Alternative 2 also includes DFAs similar to those of the Preferred Alternative in the areas surrounding Victorville, Adelanto, and Lucerne Valley.

The severity of visual impacts also relates to expectations of viewers for pristine desert vistas. The eastern and northeastern parts of the Plan Area are sensitive because they contain the Mojave National Preserve, Death Valley National Monument, and several BLM Wilderness Areas. Alternative 2 DFAs would encourage development in the Pahrump Valley and the Silurian Valley, both of which offer currently undeveloped approaches to Death Valley. The large DFA in the East Riverside area (close to Joshua Tree National Park and BLM Wilderness Areas) is the same as in the Preferred Alternative.

Extent of Potential Renewable Energy Development. Although the geographic distribution of DFAs is similar under Alternative 2 and the Preferred Alternative, the total size of the DFAs varies. The DFAs would be approximately 450,000 acres smaller under the Preferred Alternative (2,024,000 acres compared with 2,473,000 acres for Alternative 2). The larger DFAs in Alternative 2 would result in renewable projects being visible to more viewers than those of the Preferred Alternative.

Conservation. Alternative 2 has a similar amount of land in the reserve design and in CPAs as the Preferred Alternative. The conservation strategy emphasizes compensation.

In summary, the composition and structure of Alternative 2 would provide similar opportunities for the avoidance, reduction, and minimization of visual impacts from renewable energy development, including those from transmission corridors, compared with the Preferred Alternative. The 20-mile width of Trail Management Corridors under Alternative 2 is twice that of the Preferred Alternative and therefore would better protect views and visitor experience along National Scenic and Historic Trails.

IV.20.3.4.7.2 Alternative 2 Compared With Preferred Alternative for the BLM Land Use Plan Amendment

The BLM LUPA under Alternative 2 would assign VRM Classes to all BLM lands within the CDCA, as would the Preferred Alternative. For both alternatives, this would provide a unifying framework and an established system for addressing visual resources.

The key difference is that Alternative 2 would have more acres of VRI Class II and III lands (approximately 128,000 acres) in DFAs than would the Preferred Alternative (78,000 acres). This difference in the potential area of land disturbance impacts is critical and would result in a larger amount of land potentially subject to visual impacts under Alternative 2 than under the Preferred Alternative. However, because Alternative 2 proposes 20-mile-wide Trail Management Corridors compared with the smaller 10-mile-wide corridors under the Preferred Alternative, the scenic values and viewer experience along National Scenic and Historic Trails would have a greater level of protection under Alternative 2.

IV.20.3.4.7.3 Alternative 2 Compared with Preferred Alternative for NCCP

The impacts of the NCCP for Alternative 2 are the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis. As a result, the comparison of Alternative 2 with the Preferred Alternative for the NCCP is the same as described above for Plan-wide DRECP.

IV.20.3.4.7.4 Alternative 2 Compared with Preferred Alternative for the GCP

The visual impacts of the GCP for Alternative 2 and the Preferred Alternative would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.5 Alternative 3

Alternative 3 includes 1,406,000 acres of DFAs and 15,159,000 acres of Reserve Design Lands. For reference, Table IV.20-9 compares the Preferred Alternative to Alternative 3 for key visual elements.

**Table IV.20-9
Affected Visual Resources – Preferred Alternative Compared to Alternative 3**

	Preferred Alternative	Alternative 3
<i>Development Areas (acres)</i>		
DFA's	2,024,000	1,406,000
<i>Visual Resource Elements Within Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	0 [I] 17,000 [II] 61,000 [III] 27,000 [IV]	0 [I] 5,000 [II] 20,000 [III] 25,000 [IV]
VRM [Class]	0 [I] 0 [II] 0 [III] 106,000 [IV]	0 [I] 0 [II] 0 [III] 50,000 [IV]
National Scenic Byways	0	0
National Scenic and Historic Trails	1 mi.	2 mi.
California State Parks	0	0
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Visual Resource Elements Within 5 miles of Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	366,000 [I] 389,000 [II] 731,000 [III] 709,000 [IV]	206,000 [I] 406,000 [II] 715,000 [III] 701,000 [IV]
VRM [Class]	366,000 [I] 515,000 [II] 555,000 [III] 694,000 [IV]	191,000 [I] 652,000 [II] 696,000 [III] 434,000 [IV]
National Scenic Byways	13 mi.	7 mi.
National Parks and Preserves	15,000	15,000
National Scenic and Historic Trails	350 mi.	295 mi.
Trail Management Corridors	659,000	525,000
California State Parks	108,000	108,000
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Reserve Design Lands (Conservation Lands) (acres)</i>		
Reserve Design Lands	14,920,000	15,159,000

Note: The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.5.1 Plan-wide Impacts of Implementing the DRECP: Alternative 3

IV.20.3.5.1.1 Plan-wide Impacts and Mitigation Measures from Renewable Energy and Transmission Development

Impact Assessment

Under Alternative 3, renewable energy related activities covered by the Plan are confined to 1.4 million acres of DFAs, resulting in 150,000 acres of long-term disturbance (see Volume IV, Table IV.1-1). This represents approximately 5,000 more acres of long-term disturbance than could occur under the Preferred Alternative.

The DFAs are focused in the Imperial Valley, Lucerne Valley, Barstow area, and Tehachapi area. It has fewer DFAs in eastern Riverside and small DFAs along the U.S. 395 corridor and near Searles Lake.

Transmission development and operation activities would be permitted both inside and outside of the DFAs.

Approximately 1,406,00 acres would be within DFAs under Alternative 3, compared with 2,024,000 acres under the Preferred Alternative. This smaller area of land within DFAs (approximately 600,000 acres fewer) represents a much lower potential for visual impacts under Alternative 3 than under the Preferred Alternative.

Alternative 3 would primarily affect four ecoregion subareas, compared with five under the Preferred Alternative.

- Visual impacts from solar development would be dispersed, with emphasis in the Imperial Borrego Valley and the West Mojave and Eastern Slopes ecoregion subareas.
- Visual impacts from wind development would be primarily in the Pinto Lucerne Valley and Eastern Slopes and the West Mojave and Eastern Slopes ecoregion subareas.
- Visual impacts from geothermal energy would occur in the Imperial Borrego Valley and Owens River Valley ecoregion subareas, the same as under the Preferred Alternative.

The following summarizes the key points in comparing the visual impacts from renewable energy and transmission development under Alternative 3 with those of the Preferred Alternative (see Appendix R2. Table R2.20-17 for detailed data):

- **VRI Classes:** There would be no VRI Class I lands, 5,000 acres of VRI Class II lands, 20,000 acres of VRI Class III lands, and 7,000 acres of VRI Class IV lands within DFAs under Alternative 3. Per the CMAs for visual resources, these 25,000 acres of VRI

Class II and III lands within DFAs would be managed as VRM Class IV and thereby sustain a potential degradation of underlying scenic values.

A much larger amount of VRI Class II and III lands within DFAs would be managed as VRM Class IV under the Preferred Alternative than under Alternative 3. This reflects a potential for degradation of underlying scenic values under Alternative 3, but to a lesser extent than under the Preferred Alternative.

- **VRM Classes:** As with the Preferred Alternative, there would be no VRM Class I, II, or III lands in DFAs under Alternative 3 (Figure IV.20-5, Proposed BLM VRM Classifications, Alternative 3). Approximately 12,000 acres of transmission would occur on VRM Classified lands compared with a slightly larger amount of 13,000 acres under the Preferred Alternative.
- **National Parks and Preserves:** These lands would not be within the DFA footprint under Alternative 3 or the Preferred Alternative. Although the footprint of renewable energy projects would not directly affect these lands, project facilities and activities that are visible from National Parks and Preserves would diminish scenic quality for viewers in those conservation areas, where expectations for scenic quality are typically high.
- **National Scenic Byways:** No segments of the Bradshaw Trail National Back Country Byway would be within DFAs under either Alternative 3 or the Preferred Alternative.
- **National Scenic and Historic Trails:** Approximately 2 miles of the Old Spanish National Historic Trail alignment would be within DFAs under Alternative 3 compared with 1 mile under the Preferred Alternative.
- **California State Parks:** As with the Preferred Alternative, no California State Park lands would be within DFAs under Alternative 3. Approximately 230 acres of transmission would occur on these lands, compared with 180 acres under the Preferred Alternative.
- **State Scenic Highways:** No segments of State Scenic Highways would be within DFAs under Alternative 1 or the Preferred Alternative.
- **Wild and Scenic Rivers:** No portion of designated or eligible Wild and Scenic Rivers would be within DFAs under Alternative 3 or the Preferred Alternative.
- **Proximity of Visual Resources to DFAs.** Under Alternative 3, visual resource elements within 5 miles of proposed DFAs can be compared with those under the Preferred Alternative, as summarized in Table IV.20-9. Alternative 3 has generally fewer visual resource elements within 5 miles of DFAs than the Preferred Alternative. One example of this is the acres of VRI Class I: 366,000 acres under the Preferred Alter-

native compared with 306,000 acres under Alternative 3. For Trail Management Corridors, there is a similarly sized area within this 5-mile proximity under the Preferred Alternative as under Alternative 3.

The visual impacts resulting from Alternative 3 are numbered and summarized here:

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Preconstruction activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include road upgrading, damage to or removal of native vegetation, construction of meteorological towers, drilling of temperature gradient wells, vehicles, and lighting.

During construction and decommissioning, activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include dust and exhaust emissions, removal of vegetation during site clearing, contouring and grading, presence of vehicles and equipment, mobilization and demobilization activities, material delivery and staging, assembly of components, site lighting, and construction of and later removal of structures.

Impact VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

The continued presence of equipment, structures, fencing, roads, and other elements required to operate a facility would have a long-term adverse effect on the visible landscape. Areas of persistent surface and vegetation disturbance and the presence of structures would create visual contrast in form, line, color, and texture as compared with pre-project conditions. Depending on viewer location, physical elements introduced by a project could block views or create skylining. Even after project removal and site reclamation are completed, visual contrast would remain. Restoring the natural, pre-disturbance visual character of a desert environment is extremely difficult, can take decades, and often is unsuccessful. Therefore, surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes.

The structure, size, and industrial character of utility-scale renewable energy and transmission facilities during their operation and maintenance—as well as any associated glare, reflectivity, and lighting—would visually contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

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Impacts in Study Area Lands

Study Area Lands refer to three categories of lands shown on alternative maps: Future Assessment Areas (FAAs), Special Analysis Areas (SAAs) and DRECP Variance Lands.

- **Future Assessment Areas (FAAs).** Lands within FAAs are neither reserve lands nor DFAs; they are simply areas that are deferred for future assessment. The future assessment will determine their suitability for renewable energy development or ecological conservation. If renewable energy development occurs on FAA lands, a BLM LUPA would not be required. FAAs for each alternative are included and located as shown in Table IV.1-2 and Figure II.6-1. The FAAs represent areas where renewable energy development or inclusion to the reserve design could be implemented through an amendment to the DRECP, but additional assessment would be needed.

Because most of the FAAs are presented as “undesigned areas” in the action alternatives, there would be no difference between the FAAs in the Preferred Alternative except that renewable development in an FAA would not require a BLM LUPA, so the environmental review process would be somewhat simpler than if the location were left undesigned.

Development of the 11,000 acres of FAAs under Alternative 3 would be subject to all visual resource CMAs identified by the Preferred Alternative and would be required to meet the visual management objectives of the underlying VRM Class. The exception is the FAA south of the Imperial Sand Dunes, which would become a DFA under Alternative 3 and would be managed as VRM Class IV accordingly.

Special Analysis Areas (SAAs). Under Alternative 3, the SAAs would be designated as conservation, which would be generally beneficial to visual resources. Impacts would be the same as those explained for the Plan-wide reserve design in Section IV.20.3.2.1.2, Impacts of the Reserve Design.

DRECP Variance Lands. There would be no DRECP Variance Lands under Alternative 3.

Impact Reduction Strategies and Mitigation

The implementation of Alternative 3 would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of renewable energy development covered by the Plan would be lessened in several ways. First, the Plan incorporates CMAs for each alternative, including specific biological reserve design components and LUPA components. In addition, the implementation of existing laws, orders, regulations, and standards would reduce the impacts of project development.

Conservation and Management Actions

The conservation strategy for Alternative 3 (presented in Volume II, Section II.3.1.1) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes a definition of the reserve design and specific CMAs for the Preferred Alternative. While the CMAs were developed for BLM lands only, this analysis assumes that all CMAs would be applied also to nonfederal lands.

Specific visual resource CMAs have been developed and apply to the Preferred Alternative and all action alternatives. They are summarized in Section IV.20.3.2.1.1.

Laws and Regulations

Similar to the No Action Alternative, existing laws and regulations will reduce certain impacts of Plan implementation. Relevant regulations are presented in the Regulatory Setting in Volume III. The requirements of relevant laws and regulations are summarized in Section IV.20.3.1.1.1.

Mitigation Measures

The visual impact avoidance and reduction strategies in existing guidance, such *Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*, are detailed and comprehensive. The CMAs proposed under the DRECP (see Appendix H) provide additional detail and direction. These represent state-of-the-art visual impact mitigation as it applies to the Plan Area; no additional mitigation is feasible.

IV.20.3.5.1.2 Impacts from Reserve Design

There would be approximately 15 million acres of Reserve Design Lands under Alternative 3 and under the Preferred Alternative. This represents a generally equivalent level of conservation to the Preferred Alternative. In general, visual resource elements would be beneficially affected by the conservation policies and requirements of these lands. Alternative 3 has more acres of BLM LUPA Conservation Designations than the Preferred Alternative and has the least number of acres of SRMAs of all action alternatives.

The following summarizes the key points in comparing Alternative 3 visual impacts of the reserve design with those of the Preferred Alternative (see Appendix R2, Table R2.20-18 for detailed, quantitative data and analysis):

- **VRI Classes:** Alternative 3 would have 100% of VRI Class I lands, 74% of VRI Class II lands, 71% of VRI Class III lands, and 73% of VRI Class IV lands in the Reserve

Design Lands, compared to similar amounts (95%, 80%, 72%, and 74%, respectively) under the Preferred Alternative.

- **VRM Classes:** 100% of VRM Class I lands, 85% of VRM Class II lands, 79% of VRM Class III lands, and 8% of the VRM Class IV lands would be in the Reserve Design Lands under Alternative 3, compared with 100% of VRM Class I lands, 83% of VRM Class II lands, 79% of VRM Class III lands, and 38% VRM Class IV lands under the Preferred Alternative.
- **National Parks and Preserves:** The National Parks and Preserves would have 100% of their land areas in the reserve design under Alternative 3 and under the Preferred Alternative.
- **National Scenic Byways:** Under Alternative 3, approximately 46% of the Bradshaw Trail National Back Country Byway and 11% of SR 190 would be in the Reserve Design. This provides a lower level of protection of visual and scenic values than would occur under the Preferred Alternative (51% and 15% respectively).
- **National Scenic and Historic Trails:** Under Alternative 3, approximately 53% of the Juan Bautista de Anza National Historic Trail, 58% of the Old Spanish National Historic Trail, and 41% of the Pacific Crest National Scenic Trail alignments would be in the Reserve Design.

Under the Preferred Alternative, approximately 4% of the Juan Bautista de Anza National Historic Trail, 58% of the Old Spanish National Historic Trail, and 40% of the Pacific Crest National Scenic Trail alignments would be in conservation.

- **California State Parks:** As with the Preferred Alternative, most California State Park lands would be in Reserve Design Lands under Alternative 3. This would vary by individual park or preserve; but most parks would have more than 90% in existing conservation areas, BLM LUPA designations, or CPAs. Exceptions are the (1) Desert Cahuilla/Freeman Project (4%), (2) Picacho SRA (78%), and (3) Salton Sea SRA (86%). Similar amounts and percentages of California State Park lands would be in Reserve Design Lands under the Preferred Alternative.
- **State Scenic Highways:** Approximately 16% of SR 190 but no portion of the SR 78 and U.S. 395 alignments would be in Reserve Design Lands, compared to similar portions under the Preferred Alternative.
- **Wild and Scenic Rivers:** 100% of the Amargosa Wild and Scenic River and 100% of the eligible segments of Surprise Canyon Creek and the Mojave River would be within the reserve design under Alternative 3 and the Preferred Alternative.

IV.20.3.5.2 Impacts of DRECP Land Use Plan Amendment on BLM Land: Alternative 3

This section addresses two components of effects of the BLM LUPA: the streamlined development of renewable energy and transmission on BLM land under the LUPA, and the impacts of the amended land use plans themselves.

IV.20.3.5.2.1 Impacts from Renewable Energy and Transmission Development on BLM Land

The visual impacts of DFAs on VRI and VRM lands for Alternative 3 would be the same as those defined in Section IV.20.3.5.1, Plan-wide Impacts of Implementing the DRECP: Alternative 3, for the Plan-wide analysis.

IV.20.3.5.2.2 Impacts of Changes to BLM Land Designations

The DRECP LUPA Alternative 3 would establish VRM classes for all lands in the CDCA. (Currently, only the Bishop RMP and the Imperial Sand Dunes RAMP have VRM Classes designated. In accordance with BLM policy, all wilderness areas and WSAs are managed as VRM Class I.) It would also (1) designate new NLCS lands, (2) designate new ACECs and expand and reduce existing ACECs, (3) designate new SRMAs and expand and reduce existing SRMAs, (4) create buffer corridors along National Scenic and Historic Trails, and (5) manage lands with wilderness characteristics to protect those characteristics. The BLM LUPA would also replace the multiple-use classes.

The VRM Classes and other BLM land designations proposed under Alternative 3 would benefit visual resources to the extent that they offer protective measures that would avoid or reduce visual impacts. As with the Preferred Alternative, CMAs for visual resources would be established and implemented. The BLM-specific CMAs proposed under the Preferred Alternative would be the same as for all action alternatives. These visual resource CMAs and the restrictions and protective measures of the land designations provide a mutually supportive framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Under Alternative 3, Trail Management Corridors would be established along National Scenic and Historic Trails, at a width of generally 5 miles from the centerline of the trail, for a total width of 10 miles (compared to the same total width of 10 miles under the Preferred Alternative). As discussed in Volume II, Section II.3.2.2.2, these Trail Management Corridors would be managed as components of the BLM's NLCS. Where National Trails overlap other NLCS lands, the more protective CMAs or land use allocations would apply. All Trail Management Corridors would be designated as VRM Class II, except within approved transmission corridors (VRM Class III) and DFAs (VRM Class IV). However, state-of-the-art VRM BMPs for renewable energy would be employed commensurate with the protection of

nationally significant scenic resources and cultural landscapes to minimize the level of intrusion and protect trail settings.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements under Alternative 3 (see Appendix R2, Table R2.20-19 for detailed, quantitative data and analysis):

- **SRMAs:** There would be the potential for recreational activities or facilities allowed in SRMAs to affect scenic values, particularly those of the VRI Class I and II lands with which they coincide (approximately 280,000 acres, compared to the same amount under the Preferred Alternative).
- **NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality, particularly to the VRI Class I, II, III, and IV lands with which they coincide (3.5 million acres, compared to a similar amount of 3.6 million acres under the Preferred Alternative).
- **ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRI Class II, III, and IV lands with which they coincide (approximately 1.7 million acres, compared with a smaller area of 1.4 million acres under the Preferred Alternative).
- **Wildlife Allocation Areas:** The management of these areas must be compatible with protection and enhancement of wildlife and plant habitat and would generally benefit visual resources, particularly the VRI Class III and IV lands with which they coincide (approximately 13,000 acres, compared with a larger amount of 18,000 acres under the Preferred Alternative).
- **Lands Managed for Wilderness Characteristics:** Under Alternative 3 and all other action alternatives, these lands would be managed as VRM Class II. Other management strategies to protect the wilderness characteristics of lands would benefit visual resources, particularly the VRI Class II and IV lands with which they coincide (approximately 375,000 acres, compared with 299,000 acres under the Preferred Alternative).
- **Trail Management Corridors:** As with the Preferred Alternative, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II under Alternative 3. The primary effect of these 10-mile-wide corridors would be to provide a higher level of protection (VRM Class II objectives) to approximately 332,000 acres of VRM Class III and IV lands that would otherwise be managed under less restrictive visual management objectives

Alternative 3 would assign VRM classes to all BLM lands within the Plan Area. The relationship between the proposed management classes and the underlying existing inventory classes is discussed in this section.

Under Alternative 3, VRI Class lands within the proposed VRM Classes on BLM LUPA lands would be as indicated in Table IV.20-10.

Key points of the effects of VRM classifications on VRI lands under Alternative 3 are summarized here:

- **VRM designations:** The majority of lands would be designated as VRM Class I, II, or III. Less than 10% would be designated as VRM Class IV.
- **VRI Class I:** All of VRI Class I lands would be managed as VRM Class I, reflecting a high level of management protection.
- **VRI Class II:** As with the Preferred Alternative, more than 75% of VRI Class II lands would be managed as VRM Class II or I, reflecting a moderately high level of management protection. Approximately 24% would be managed as VRM Class III or IV, which allows for more visual contrast and impact than the VRM Class II objectives allow.
- **VRI Class III:** Approximately 88% of VRI Class III lands would be managed as VRM Class III or II, reflecting a high correlation and level of management protection. Approximately 39% would be managed to meet VRM Class II objectives, which restrict visual contrast and impact more than VRM Class III. Approximately 12% would be managed as VRM Class IV, which allows for more visual contrast and impact than the VRM Class III objectives allow.
- **VRI Class IV:** Approximately 85% of VRI Class IV lands would be managed as VRM Class III, II, or I; 15% would be VRM Class IV.

Compared to the Preferred Alternative, Alternative 3 would result in a similar level of correlation between VRI values and the proposed VRM Classes. An exception to this is the management of VRI Class IV lands. A higher percentage of these areas would be managed as VRM Class III, II, or I under Alternative 3 than under the Preferred Alternative. Overall, visual resource protection would benefit under Alternative 3 by the designation of VRM Classes throughout the CDCA.

Under the proposed CMAs, all DFAs would be managed as VRM Class IV lands to allow for industrial-scale development. In those cases, implementation or incorporation of BMPs would still be required to reduce the visual contrast levels of proposed facilities to the extent practicable.

Table IV.20-10
VRI Classes Within Proposed VRM Classes on BLM LUPA Lands – Alternative 3

LUPA-Proposed VRM Class Designations	Existing Visual Resource Inventory Classes								Total
	VRI Class I		VRI Class II		VRI Class III		VRI Class IV		
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
VRM Class I	3,842,000	100%	11,000	1%	7,000	0%	700	0%	3,860,700
VRM Class II	0	0%	1,628,000	75%	1,087,000	39%	566,000	29%	3,281,000
VRM Class III	0	0%	433,000	20%	1,348,000	49%	1,112,000	56%	2,893,000
VRM Class IV	0	0%	87,000	4%	320,000	12%	297,000	15%	704,000
Total	3,842,000	100%	2,159,000	100%	2,762,000	100%	1,975,700	100%	10,738,700

Note: VRI Class I represents the highest level of inventoried visual resource values; VRM Class I represents the most restrictive visual management objectives. Acres above include CDCA Outside the Plan Area. The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.5.3 Impacts of Natural Community Conservation Plan: Alternative 3

The impacts of the NCCP for Alternative 3 would be the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis.

IV.20.3.5.4 Impacts of General Conservation Plan: Alternative 3

The impacts of the GCP for Alternative 3 would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.5.5 Impacts Outside the Plan Area

IV.20.3.5.5.1 Impacts of Transmission Outside the Plan Area

The impacts of out of Plan Area transmission would be the same under all alternatives. These are as described for the No Action Alternative in Section IV.20.3.1.5.1.

IV.20.3.5.5.2 Impacts of BLM LUPA Decisions Outside the Plan Area

Under the proposed BLM LUPA, the changes outside the Plan Area would include the designation of NLCS lands, ACECs, National Scenic and Historic Trails Management Corridors, VRM Classes, and new land allocations to replace multiple-use classes on CDCA lands.

The VRM Classes and other BLM land designations proposed under Alternative 3 would extend protective measures to these areas that would avoid or reduce visual impacts. CMAs for visual resources would be established and implemented. The BLM-specific CMAs for Alternative 3 would be the same as for all action alternatives. Together, these visual resource CMAs and the restrictions and protective measures of the land designations provide a framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements, outside the Plan Area, under Alternative 3 (see Appendix R2, Table R2.20-20 for detailed, quantitative data and analysis):

- **Proposed NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality.
- **Existing and Proposed ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRM Class II, III, and IV lands with which they coincide (approximately 202,000 acres, compared to a similar area of 210,000 acres under the Preferred Alternative).

- **Trail Management Corridors:** The primary effect of 10-mile-wide corridors under Alternative 3 would be to provide a consistent framework for protecting and managing scenic values along National Scenic Trails within National and California State park lands. As with the Preferred Alternative, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II.

IV.20.3.5.6 CEQA Significance Determination for Alternative 3

The significance determinations for short-term and long-term impacts are described in Section IV.20.3.1.1.1 for the No Action Alternative. Section IV.20.1.2 identifies four criteria to apply when determining if there are significant impacts from a project under CEQA. These criteria are included as part of the more general impacts identified in this section as VR-1 and VR-2.

The visual impacts and their associated significance determinations for Alternative 3 are as follows:

VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality. Activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. This would be less than significant with implementation of appropriate CMAs.

VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality. Long-term impacts to visual resources for Alternative 3 would be significant and unavoidable, as described in detail for the No Action Alternative (Section IV.20.3.1.6). Impacts would be significant because of the changes in line, form, and color introduced by large-scale development and the contrast of any such development with surrounding conditions. Although the CMAs relevant to Alternative 3 would reduce the impact on visual resources, they would not reduce it to a less than significant level.

IV.20.3.5.7 Comparison of Alternative 3 with Preferred Alternative

Chapter IV.27 presents a comparison of all action alternatives and the No Action Alternative across all disciplines. This section compares Alternative 3 with the Preferred Alternative.

IV.20.3.5.7.1 Alternative 3 Compared with Preferred Alternative for Plan-wide DRECP

Although similar visual impacts would occur under both Alternative 3 and the Preferred Alternative, the impacts would vary in key ways:

Geographic Distribution. As with the DFAs of the Preferred Alternative, the DFAs under Alternative 3 are restricted in distribution and concentrated in areas considered less envi-

ronmentally sensitive. Similar to the Preferred Alternative, DFAs under Alternative 3 are focused in the Imperial Valley, Lucerne Valley, Barstow area, and Tehachapi area. Alternative 3 has fewer DFAs in eastern Riverside and very small DFAs along the U.S. 395 corridor and near Searles Lake.

The severity of visual impacts depends partly on the number of potential viewers. Alternative 3 has smaller DFAs than the Preferred Alternative in and near the populated West Mojave area. As a result, somewhat reduced amounts of wind and solar development would be expected by residents in the Mojave, Lancaster, and Palmdale areas. Alternative 3 also includes DFAs similar to those of the Preferred Alternative in the areas surrounding Victorville, Adelanto, and Lucerne Valley.

The severity of visual impacts also relates to expectations of viewers seeking pristine desert vistas. The eastern and northeastern parts of the Plan Area are sensitive because they contain the Mojave National Preserve, Death Valley National Monument, and several BLM Wilderness Areas. Alternative 3 has no DFAs in these areas. The Preferred Alternative's large DFA in the East Riverside area (close to Joshua Tree National Park and BLM Wilderness Areas) is substantially smaller under Alternative 3.

Extent of Potential Renewable Energy Development. Although the geographic distribution of DFAs is generally similar under Alternative 3 and the Preferred Alternative, the size of the DFAs varies among these alternatives. The DFAs are 620,000 acres larger under the Preferred Alternative (2,024,000 acres of DFAs versus 1,406,000 acres under Alternative 3). Because the Preferred Alternative has larger areas of DFAs within which development could be located, these projects could be visible from more areas of the desert than under Alternative 3.

Conservation. Alternative 3 has slightly more acreage in the reserve design than the Preferred Alternative and more land identified in CPAs. Thus, Alternative 3 could provide more land in conservation than the Preferred Alternative. These would be lands in which scenic values would benefit from the management and restrictions that would apply to those conserved areas. The conservation strategy is similar to that of the Preferred Alternative with emphasis on avoidance and compensation.

In summary, the composition and structure of Alternative 3 would provide greater opportunities for the avoidance, reduction, and minimization of visual impacts from renewable energy development.

IV.20.3.5.7.2 Alternative 3 Compared With Preferred Alternative for the BLM Land Use Plan Amendment

The BLM LUPA under Alternative 3 would assign VRM Classes to all BLM lands within the CDCA, including those outside the Plan Area, as would the Preferred Alternative. For both alternatives, this would provide a unifying framework and an established system for addressing visual resources.

The key difference is that Alternative 3 would have a smaller amount of VRI Class II and III lands (approximately 25,000 acres) in DFAs than would the Preferred Alternative (78,000 acres). This difference in the potential area of land disturbance impacts would result in fewer areas potentially subject to visual impacts under Alternative 3 than under the Preferred Alternative. Because Alternative 3 and the Preferred Alternative both propose 10-mile-wide Trail Management Corridors, the scenic values and viewer experience along National Scenic and Historic Trails would have a similar level of protection under each alternative.

IV.20.3.5.7.3 Alternative 3 Compared With Preferred Alternative for NCCP

The impacts of the NCCP for Alternative 3 are the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis. As a result, the comparison of Alternative 3 with the Preferred Alternative for the NCCP is the same as described for Plan-wide DRECP.

IV.20.3.5.7.4 Alternative 3 Compared With Preferred Alternative for the GCP

The visual impacts of the GCP for Alternative 3 and the Preferred Alternative would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.6 Alternative 4

Alternative 4 includes 1,608,000 acres of DFAs and 14,476,000 acres of Reserve Design Lands. For reference, Table IV.20-11 compares the Preferred Alternative to Alternative 4 for key visual elements.

**Table IV.20-11
 Affected Visual Resources – Preferred Alternative Compared to Alternative 4**

	Preferred Alternative	Alternative 4
<i>Development Areas (acres)</i>		
DFAs	2,024,000	1,608,000

Table IV.20-11
Affected Visual Resources – Preferred Alternative Compared to Alternative 4

	Preferred Alternative	Alternative 4
<i>Visual Resource Elements Within Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	0 [I] 17,000 [II] 61,000 [III] 27,000 [IV]	0 [I] 200[II] 3,000 [III] 2,000 [IV]
VRM [Class]	0 [I] 0 [II] 0 [III] 106,000 [IV]	0 [I] 0 [II] 0 [III] 5,000 [IV]
National Scenic Byways	0	0
National Scenic and Historic Trails	1 mi.	1 mi.
California State Parks	0	0
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Visual Resource Elements Within 5 miles of Development Areas (acres unless otherwise indicated)</i>		
VRI [Class]	366,000 [I] 389,000 [II] 731,000 [III] 709,000 [IV]	346,000 [I] 386,000 [II] 711,000 [III] 706,000 [IV]
VRM [Class]	366,000 [I] 515,000 [II] 555,000 [III] 694,000 [IV]	330,000 [I] 396,000 [II] 808,000 [III] 585,000 [IV]
National Scenic Byways	13 mi.	13 mi.
National Parks and Preserves	15,000	16,000
National Scenic and Historic Trails	350 mi.	329 mi.
Trail Management Corridors	659,000	193,000
California State Parks	108,000	108,000
State Scenic Highways	0	0
Wild and Scenic Rivers	0	0
<i>Reserve Design Lands (Conservation Lands) (acres)</i>		
Reserve Design Lands	14,920,000	14,476,000

Note: The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.6.1 Plan-wide Impacts of Implementing the DRECP: Alternative 4

IV.20.3.6.1.1 Plan-wide Impacts and Mitigation Measures from Renewable Energy and Transmission Development

Impact Assessment

Under Alternative 4, renewable energy related activities covered by the Plan are confined to 1.6 million acres of DFAs, resulting in 148,000 acres of long-term disturbance (see Table IV.1-1). This represents a slightly larger amount of long-term disturbance than could occur under the Preferred Alternative.

The DFAs are focused in the Imperial Valley, Lucerne Valley, Barstow area, and Tehachapi area. It has fewer DFAs in eastern Riverside and very small DFAs along the U.S. 395 corridor and near Searles Lake.

Approximately 1,608,000 acres would be within DFAs under Alternative 4, as compared with 2,024,000 acres under the Preferred Alternative. This smaller area of land within Alternative 4 DFAs (approximately 400,000 acres less) means that development would be more concentrated in a smaller area, so the visual impacts of renewable energy projects would be less widespread than under the Preferred Alternative.

Alternative 4 would primarily affect four ecoregion subareas, compared with five under the Preferred Alternative.

- Visual impacts from solar development would be dispersed, with emphasis in two ecoregion subareas: (1) Imperial Borrego Valley and (2) West Mojave and Eastern Slopes.
- Visual impacts from wind development would be in two ecoregion subareas: (1) Pinto Lucerne Valley and Eastern Slopes and (2) West Mojave and Eastern Slopes.
- Visual impacts from geothermal energy would occur in two ecoregion subareas: (1) Imperial Borrego Valley and (2) Owens River Valley, the same as under the Preferred Alternative.

The following summarizes the key points in comparing the visual impacts from renewable energy and transmission development under Alternative 4 to those of the Preferred Alternative (see Appendix R2, Table R2.20-21 for detailed, quantitative data and analysis):

- **VRI Classes:** There would be approximately 200 acres of VRI Class II lands, 3,000 acres of VRI Class III lands, 2,000 acres of VRI Class IV lands, and no VRI Class I lands within DFAs under Alternative 4. Per the CMAs for visual resources, these 3,200 acres of VRI Class II and III lands within DFAs would be managed as VRM Class IV and thereby sustain a potential degradation of underlying scenic values. Approxi-

mately 14,000 acres of transmission would occur on inventoried lands, compared with 13,000 acres under the Preferred Alternative.

A much smaller amount of VRI Class II and III lands within DFAs would be managed as VRM Class IV under Alternative 4 (3,200 acres) than under the Preferred Alternative (78,000 acres). This reflects a potential for degradation of underlying scenic values under Alternative 4 but to a far lesser extent than under the Preferred Alternative.

- **VRM Classes:** As with the Preferred Alternative, there would be no VRM Class I, II, or III lands in DFAs under Alternative 4 (Figure IV.20-6, Proposed BLM VRM Classifications, Alternative 4). Approximately 14,000 acres of transmission would occur on VRM lands, compared with a smaller amount of 13,000 acres under the Preferred Alternative.
- **National Parks and Preserves:** These lands would not be within the DFA footprint under Alternative 4 or the Preferred Alternative. Although the footprint of renewable energy projects would not directly affect these lands, project facilities and activities that are visible from National Parks and Preserves would diminish scenic quality for viewers in those conservation areas, where expectations for scenic quality are typically high.
- **National Scenic Byways:** No segments of the Bradshaw Trail National Back Country Byway would be within DFAs under either Alternative 4 or the Preferred Alternative.
- **National Scenic and Historic Trails:** Approximately 1 mile of the Old Spanish National Historic Trail would be within DFAs under both Alternative 4 and the Preferred Alternative.
- **California State Parks:** As with the Preferred Alternative, no California State Park lands would be within DFAs under Alternative 4. Approximately 160 acres of transmission would occur on these lands, compared with 180 acres under the Preferred Alternative.
- **State Scenic Highways:** No segments of State Scenic Highways would be within DFAs under Alternative 4 or the Preferred Alternative.
- **Wild and Scenic Rivers:** No portion of designated or eligible Wild and Scenic Rivers would be within DFAs under Alternative 4 or the Preferred Alternative.
- Under Alternative 4, approximately 690,000 of DFA lands occur within 5 miles of Legislatively and Legally Protected Areas in the Plan Area, compared with approximately 883,000 acres of DFA lands under the Preferred Alternative.
- **Proximity of Visual Resources to DFAs.** Under Alternative 4, visual resource elements within 5 miles of proposed DFAs can be compared with those under the Preferred Alternative, as summarized in Table IV.20-11. Alternative 4 has similar

amounts of visual resource elements within 5 miles of DFAs as the Preferred Alternative. An exception is Trail Management Corridors. There is less than one-third the acres of corridors under Alternative 4 compared with the acres under the Preferred Alternative.

The visual impacts resulting from Alternative 4 are:

Impact VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality.

Preconstruction activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include road upgrading, damage to or removal of native vegetation, construction of meteorological towers, drilling of temperature gradient wells, vehicles, and lighting.

During construction and decommissioning, activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. Examples include dust and exhaust emissions, removal of vegetation during site clearing, contouring and grading, presence of vehicles and equipment, mobilization and demobilization activities, material delivery and staging, assembly of components, site lighting, and construction of and later removal of structures.

Impact VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

The continued presence of equipment, structures, fencing, roads, and other elements required to operate a facility would have a long-term adverse effect on the visible landscape. Areas of persistent surface and vegetation disturbance and the presence of structures would create visual contrast in form, line, color, and texture compared to pre-project conditions. Depending on viewer location, physical elements introduced by a project could block views or create skylining. Even after project removal and site reclamation are completed, visual contrast would remain. Restoring the natural, pre-disturbance visual character of a desert environment is extremely difficult, can take decades, and often is unsuccessful. Therefore, surface and vegetation disturbance would create long-term visual impacts due to the persistence of scars in arid and semi-arid landscapes.

The structure, size, and industrial character of utility-scale renewable energy and transmission facilities during their operation and maintenance—as well as any associated glare, reflectivity, and lighting—would visually contrast with surrounding undeveloped land and result in long-term diminished scenic quality.

Impacts in Study Area Lands

Study Area Lands refer to three categories of lands shown on alternative maps: Assessment Areas (FAAs), Special Analysis Areas (SAAs) and DRECP Variance Lands.

Future Assessment Areas (FAAs). Alternative 4 has no FAAs identified, therefore there would be no associated impacts to visual resources.

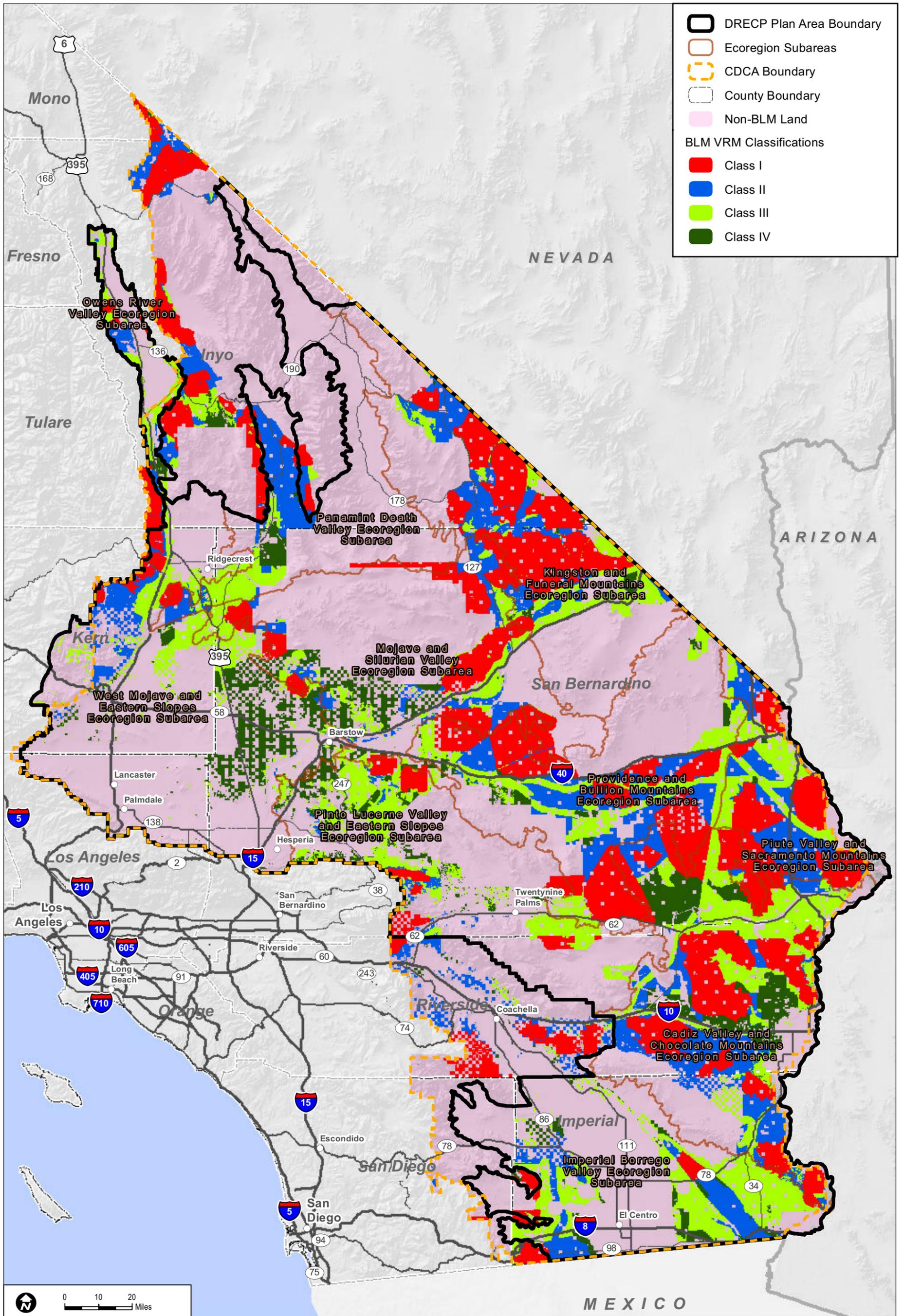
Special Analysis Areas (SAAs). Designating the SAAs as conservation would have no impact to this resource. Impacts would be the same as those explained for the Plan-wide reserve design in Section IV.20.3.2.1.2, Impacts of the Reserve Design. Portions of the SAAs are shown as DRECP Variance Lands in Alternative 4, but the majority of these areas would be conservation lands (near U.S. 395) and undesignated areas (near Fort Irwin).

DRECP Variance Lands. DRECP Variance Lands represent the BLM Solar PEIS Variance Lands as screened for the DRECP and EIR/EIS based on BLM screening criteria. Covered Activities could be permitted for NCCP purposes only through an NCCP plan amendment. However, development of renewable energy on Variance Lands would not require a BLM LUPA; so the environmental review process would be somewhat simpler than if the location were left undesignated.

Under Alternative 4, Variance Lands include 588,000 acres, development of which would conform to the visual management objectives of VRM Class II.

Impact Reduction Strategies and Mitigation

The implementation of Alternative 4 would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Plan would be lessened in several ways. First, the Plan incorporates CMAs for each alternative, including specific biological reserve design components and LUPA components. In addition, the implementation of existing laws, orders, regulations, and standards would reduce the impacts of project development.



Sources: ESRI (2014); CEC (2013); BLM (2013); CDFW (2013); USFWS (2013)

FIGURE IV.20-6

Proposed BLM Visual Resource Management Classifications, Alternative 4

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Conservation and Management Actions

The conservation strategy for Alternative 4 (presented in Volume II, Section II.3.1.1) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes definition of the reserve design and specific CMAs for the Preferred Alternative. While the CMAs were developed for BLM lands only, this analysis assumes that all CMAs would be applied also to nonfederal lands.

Specific visual resource CMAs have been developed and apply to the Preferred Alternative and all action alternatives. They are summarized in Section IV.20.3.2.1.1. These CMAs for VRM include measures that apply Plan-wide, measures specific to DFAs and Study Area Lands, and a detailed set of visual resource BMPs that apply to all action alternatives. The BMPs incorporate the measures identified in *Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*. These visual resource CMAs provide a comprehensive framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Laws and Regulations

Similar to the No Action Alternative, existing laws and regulations will reduce certain impacts of Plan implementation. Relevant regulations are presented in the Regulatory Setting in Volume III. The requirements of relevant laws and regulations that would reduce the severity of visual impacts are summarized in Section IV.20.3.1.1.1.

Mitigation Measures

The visual impact avoidance and reduction strategies in existing guidance, such *Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands*, are detailed and comprehensive. The CMAs proposed under the DRECP (see Appendix H) provide additional detail and direction. These represent state-of-the-art visual impact mitigation as it applies to the Plan Area; no additional mitigation is feasible.

IV.20.3.6.1.2 Impacts from Reserve Design

The following summarizes the key points in comparing Alternative 4 visual impacts of the reserve design to those of the Preferred Alternative (see Appendix R2, Table R2.20-22 for detailed, quantitative data and analysis):

- **VRI Classes:** Alternative 4 would have 100% of VRI Class I lands, 66% of VRI Class II lands, 62% of VRI Class III lands, and 65% of VRI Class IV lands in the Reserve

Design Lands, compared with slightly larger amounts (100%, 74%, 67%, and 72% respectively), under the Preferred Alternative.

- **VRM Classes:** 100% of VRM Class I lands, 81% of VRM Class II lands, 59% of VRM Class III lands, and 54% of the VRM Class IV lands would be in the Reserve Design Lands under Alternative 4, compared with 100% of VRM Class I lands, 83% of VRM Class II lands, 79% of VRM Class III lands, and 38% of VRM Class IV lands under the Preferred Alternative.
- **National Parks and Preserves:** The National Parks and Preserves would have 100% of their land areas in the reserve design under Alternative 4 and under the Preferred Alternative.
- **National Scenic Byways:** Under Alternative 4, approximately 39% of the Bradshaw Trail National Back Country Byway and 15% of SR 190 would be in the Reserve Design. This provides a similar or slightly lower level of protection of visual and scenic values than would occur under the Preferred Alternative (51% and 15% respectively).
- **National Scenic and Historic Trails:** Under Alternative 4, approximately 53% of the Juan Bautista de Anza National Historic Trail, 55% of the Old Spanish National Historic Trail, and 41% of the Pacific Crest National Scenic Trail alignments would be in the Reserve Design. This provides a similar or higher level of protection of visual and scenic values than would occur under the Preferred Alternative (4%, 58%, and 40%, respectively).
- **California State Parks:** As with the Preferred Alternative, most California State Park lands would be in Reserve Design Lands under Alternative 4. This would vary by individual park or preserve; but most parks would have more than 95% in existing conservation areas, BLM LUPA designations, or CPAs. Exceptions are the (1) Desert Cahuilla/Freeman Project (4%), (2) Picacho SRA (74%), and (3) Salton Sea SRA (86%). Similar amounts and percentages of California State Park lands would be in Reserve Design Lands under the Preferred Alternative.
- **State Scenic Highways:** Approximately 15% of SR 190 but no portion of the SR 78 or U.S. 395 alignments would be in Reserve Design Lands, compared to similar portions under the Preferred Alternative.
- **Wild and Scenic Rivers:** 100% of the Amargosa Wild and Scenic River corridor as well as the eligible Surprise Canyon Creek and Mojave River segments would be within the reserve design under Alternative 4 and the Preferred Alternative.

IV.20.3.6.2 Impacts of DRECP Land Use Plan Amendment on BLM Land: Alternative 4

This section addresses two components of effects of the BLM LUPA: the streamlined development of renewable energy and transmission on BLM land under the LUPA and the impacts of the amended land use plans themselves.

IV.20.3.6.2.1 Impacts from Renewable Energy and Transmission Development on BLM Land

The visual impacts of DFAs on VRI and VRM lands for Alternative 4 would be the same as those defined in Section IV.20.3.6.1, Plan-wide Impacts of Implementing the DRECP: Alternative 4, for the Plan-wide analysis.

IV.20.3.6.2.2 Impacts of Changes to BLM Land Designations

The DRECP LUPA Alternative 4 would establish VRM Classes for all lands in the CDCA. (Currently, only the Bishop RMP and the Imperial Sand Dunes RAMP have VRM Classes designated. In accordance with BLM policy, all wilderness areas and WSAs are managed as VRM Class I.) It would also (1) designate new NLCS lands; (2) designate new ACECs and expand and reduce existing ACECs; (3) designate new SRMAs and expand and reduce existing SRMAs; and (4) create buffer corridors along National Scenic and Historic Trails. The BLM LUPA would also replace the multiple-use classes.

The VRM Classes and other BLM land designations proposed under Alternative 4 would offer protective measures that would avoid or reduce visual impacts. As with the Preferred Alternative, CMAs for visual resources would be established and implemented. The BLM-specific CMAs proposed for the Preferred Alternative would be the same as for all action alternatives. These visual resource CMAs and the restrictions and protective measures of the land designations provide a framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

Under Alternative 4, Trail Management Corridors would be established along National Scenic and Historic Trails, at a width of generally 1 mile from the centerline of the trail, for a total width of 2 miles (as compared to a much larger total width of 10 miles under the Preferred Alternative). As discussed in Volume II, Volume II, Section II.3.2.2.2, these Trail Management Corridors would be managed as components of the BLM's NLCS. Where National Trails overlap other NLCS lands, the more protective CMAs or land use allocations would apply. All Trail Management Corridors would be designated as VRM Class II, except within approved transmission corridors (VRM Class III) and DFAs (VRM Class IV). However, state-of-the-art VRM BMPs for renewable energy would be employed commensurate

with the protection of nationally significant scenic resources and cultural landscapes to minimize the level of intrusion and protect trail settings.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements under Alternative 4 (see Appendix R2, Table R2.20-23 for detailed, quantitative data and analysis):

- **SRMAs:** There would be the potential for recreational activities or facilities allowed in SRMAs to affect scenic values, particularly those of the VRI Class I and II lands with which they coincide (approximately 310,000 acres, similar to the area under the Preferred Alternative).
- **NLCS:** The management of these lands that have nationally significant ecological, cultural and scientific values would offer additional protection of intactness and scenic quality, particularly to the VRI Class I, II, III, and IV lands with which they coincide (approximately 2.7 million acres, compared with a larger area of 3.6 million acres under the Preferred Alternative).
- **ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally benefit visual resources, particularly the VRI Class II, III, and IV lands with which they coincide (approximately 1.6 million acres, compared with a smaller amount of 1.4 million acres under the Preferred Alternative).
- **Wildlife Allocation Areas:** The management of these areas must be compatible with protection and enhancement of wildlife and plant habitat and would generally benefit visual resources, particularly the VRI Class III and IV lands with which they coincide (approximately 267,000 acres, compared with a smaller amount of 18,000 acres under the Preferred Alternative).
- **Lands Managed for Wilderness Characteristics:** These lands would be managed as VRM Class II. Other management strategies to protect the wilderness characteristics of these lands would benefit visual resources, particularly the VRI Class II, III, and IV lands with which they coincide (approximately 255,000 acres under Alternative 4, compared with a much smaller area of 18,000 acres under the Preferred Alternative).
- **Trail Management Corridors:** The primary effect of the 2-mile-wide corridors under Alternative 4 would be to provide a consistent framework for protecting and managing scenic values along National Scenic Trails within National and California State park lands. As with the Preferred Alternative, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II.

Alternative 4 would assign VRM classes to all BLM lands within the Plan Area. Under Alternative 4, VRI Class lands within the proposed VRM Classes on BLM LUPA lands would be as indicated in Table IV.20-12.

The following summarizes the key points of the effects of VRM classifications on VRI lands under Alternative 4:

- **VRM designations:** The majority of lands would be designated as VRM Class I, II, or III, and 11% would be designated as VRM Class IV.
- **VRI Class I:** As with the Preferred Alternative, 100% of VRI Class I lands would be managed as VRM Class I, reflecting the highest level of management and visual resource protection.
- **VRI Class II:** As with the Preferred Alternative, more than 70% of VRI Class II lands would be managed as VRM Class II or I, reflecting a moderately high level of management protection. Approximately 29% would be managed as VRM Class III or IV, which allows for more visual contrast and impact than the VRM Class II objectives allow.
- **VRI Class III:** Approximately 89% of VRI Class III lands would be managed as VRM Class III, II, or I, reflecting a high correlation and level of management protection. Approximately 25% would be managed to meet VRM Class II objectives, which restrict visual contrast and impact more than VRM Class III does. Approximately 10% would be managed as VRM Class IV, which allows for more visual contrast and impact than the VRM Class III objectives.
- **VRI Class IV:** More than 58% of VRI Class IV lands would be managed as VRM Class III, II, or I; 42% would be VRM Class IV.

Compared to the Preferred Alternative, Alternative 4 would result in a similar level of correlation between VRI values and the proposed VRM Classes. An exception to this is the management of VRI Class III lands. A higher percentage of these areas would be managed as VRM Class III, II, or I under Alternative 4 than under the Preferred Alternative. The designation of VRM Classes throughout the CDCA would have the value of providing the level of visual change allowed prior to an area being considered for actions that would introduce change. Currently, VRM Classes are designated only for the Bishop Field Office and the Imperial Sand Dunes RAMP.

Under the proposed CMAs, all DFAs would be managed as VRM Class IV lands, to allow for utility-scale development. In those cases, implementation or incorporation of BMPs would still be required to reduce the visual contrast levels of proposed facilities to the extent practicable.

Table IV.20-12
VRI Classes Within Proposed VRM Classes on BLM LUPA Lands – Alternative 4

LUPA-Proposed VRM Class Designations	Existing Visual Resource Inventory Classes								Total
	VRI Class I		VRI Class II		VRI Class III		VRI Class IV		
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
VRM Class I	3,842,000	100%	6,000	0%	3,000	0%	1,000	0%	3,852,000
VRM Class II	—	0%	1,532,000	71%	696,000	25%	272,000	14%	2,500,000
VRM Class III	—	0%	534,000	25%	1,775,000	64%	867,000	44%	3,176,000
VRM Class IV	—	0%	87,000	4%	286,000	10%	837,000	42%	1,210,000
Total	3,842,000	100%	2,159,000	100%	2,760,000	100%	1,977,000	100%	10,738,000

Note: VRI Class I represents the highest level of inventoried visual resource values; VRM Class I represents the most restrictive visual management objectives. Acres above include CDCA outside the Plan Area. The following general rounding rules were applied to calculated values: values greater than 1,000 were rounded to nearest 1,000; values less than 1,000 and greater than 100 were rounded to the nearest 100; values of 100 or less were rounded to the nearest 10, and therefore totals may not sum due to rounding. In cases where subtotals are provided, the subtotals and the totals are individually rounded. The totals are not a sum of the rounded subtotals; therefore the subtotals may not sum to the total within the table.

IV.20.3.6.3 Impacts of Natural Community Conservation Plan: Alternative 4

The impacts of the NCCP for Alternative 4 would be the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis.

IV.20.3.6.4 Impacts of General Conservation Plan: Alternative 4

The impacts of the GCP for Alternative 4 would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.

IV.20.3.6.5 Impacts Outside the Plan Area

IV.20.3.6.5.1 Impacts of Transmission Outside the Plan Area

The impacts of transmission outside the Plan Area would be the same under all alternatives. These are as described for the No Action Alternative in Section IV.20.3.1.5.1.

IV.20.3.6.5.2 Impacts of BLM LUPA Decisions Outside the Plan Area

Under the proposed BLM LUPA, the changes outside the Plan Area would include the designation of NLCS lands, ACECs, National Scenic and Historic Trails Management Corridors, VRM Classes, and new land allocations to replace multiple-use classes on CDCA lands.

The VRM Classes and other BLM land designations proposed under Alternative 4 would extend protective measures to these areas that would avoid or reduce visual impacts. CMAs for visual resources would be established and implemented. The BLM-specific CMAs for Alternative 4 would be the same as for all action alternatives. These VRM CMAs and the restrictions and protective measures of the land designations provide a framework of guidelines and specifications through which visual impacts would be avoided where possible, minimized, and/or mitigated to the extent practicable.

The following summarizes the key points of the impacts of changes to BLM land designations on visual resource elements, outside the Plan Area, under Alternative 4 (see Appendix R2, Table R2.20-24 for detailed, quantitative data and analysis):

- **Proposed NLCS:** The management of these lands that have nationally significant ecological, cultural, and scientific values would offer additional protection of intactness and scenic quality, particularly the VRM Class II, III, and IV lands with which they coincide (approximately 162,000 acres, compared with a larger area of 215,000 acres under the Preferred Alternative).
- **Existing and Proposed ACECs:** The special management measures given to protect the important historic, cultural, and scenic values of these areas would generally

benefit visual resources, particularly the VRM Class II, III, and IV lands with which they coincide (approximately 203,000 acres, compared to a similar amount of 207,000 acres under the Preferred Alternative).

- **Trail Management Corridors:** The primary effect of these 2-mile-wide corridors under Alternative 4 would be to provide a consistent framework for protecting and managing scenic values along National Scenic Trails within National and California State park lands. As with the Preferred Alternative, the Trail Management Corridors would be managed to meet the visual management objectives of VRM Class II.

IV.20.3.6.6 CEQA Significance Determination for Alternative 4

The significance determinations for short-term and long-term impacts are described in Section IV.20.3.1.1.1 for the No Action Alternative. Section IV.20.1.2 identifies four criteria to apply when determining if there are significant impacts from a project under CEQA. These criteria are included as part of the more general impacts identified in this section as VR-1 and VR-2. The visual impacts and their associated significance determinations for Alternative 4 are as follows:

VR-1: Visibility of activities, materials, equipment, dust, and construction night lighting would result in short-term diminished scenic quality. Activities and equipment visible from residences, public roads, and public preserves would result in short-term diminished scenic quality for viewers. This would be less than significant with implementation of appropriate CMAs.

VR-2: The presence of plan components would create long-term visual contrast with surrounding undeveloped land and result in long-term diminished scenic quality. Long-term impacts to visual resources for Alternative 4 would be significant and unavoidable, as described in detail for the No Action Alternative (Section IV.20.3.1.6). Impacts would be significant because of the changes in line, form, and color introduced by large-scale development and the contrast of any such development with surrounding conditions. Although the CMAs relevant to Alternative 4 would reduce the impact on visual resources, they would not reduce it to a less than significant level.

IV.20.3.6.7 Comparison of Alternative 4 with Preferred Alternative

Chapter IV.27 presents a comparison of all action alternatives and the No Action Alternative across all disciplines. This section summarizes the comparison of Alternative 4 with the Preferred Alternative.

IV.20.3.6.7.1 Alternative 4 Compared with Preferred Alternative for Plan-wide DRECP

Although similar visual impacts would occur under both Alternative 4 and the Preferred Alternative, based on the assumption that California's renewable energy goals would be achieved in any case, the impacts would vary in key ways:

Geographic Distribution. As with the Preferred Alternative, visual impacts of DFAs under Alternative 4 would be concentrated in areas considered less environmentally sensitive. DFAs under Alternative 4 would be geographically dispersed on public and private lands with an assumption of somewhat more solar and less wind project development than the Preferred Alternative. Solar energy development would be concentrated in one ecoregion subarea, the Cadiz Valley and Chocolate Mountains, as opposed to two under the Preferred Alternative; and there would be less development overall in the Imperial Borrego Valley ecoregion subarea.

The severity of visual impacts depends partly on the number of potential viewers. Alternative 4 has DFAs similar to the Preferred Alternative in and near the populated West Mojave area. Alternative 4 also includes DFAs similar to those of the Preferred Alternative in the areas surrounding Victorville, Adelanto, and Lucerne Valley.

The severity of visual impacts also relates to expectations of viewers seeking pristine desert vistas. The eastern and northeastern parts of the Plan Area are sensitive because they contain the Mojave National Preserve, Death Valley National Monument, and several BLM Wilderness Areas. Alternative 4 includes the Pahrump Valley DFA, but not the SAA and FAA that are near the Mojave National Preserve. Both the Preferred Alternative and Alternative 4 have a large DFA in the East Riverside area (close to Joshua Tree National Park and BLM Wilderness Areas). Alternative 4 also includes DRECP Variance Lands, primarily in the eastern part of the Plan Area.

Extent of Potential Renewable Energy Development. Although the geographic distribution of DFAs would be generally similar under both Alternative 4 and the Preferred Alternative, the scale and extent of the DFAs vary. DFAs are approximately 400,000 larger under the Preferred Alternative (2,024,000 acres of DFAs) than under Alternative 4 (1,608,000 acres of DFAs). This smaller area within which development could occur would result in fewer areas potentially subject to visual impacts under Alternative 4 than under the Preferred Alternative.

Conservation. Alternative 4 has a similar amount of land in the reserve design as the Preferred Alternative, and more land identified in CPAs. Thus, Alternative 4 would potentially provide similar amounts of land in conservation as the Preferred Alternative, lands in which scenic values would benefit from the management and restrictions that

would apply to those conserved areas. An exception is that Alternative 4 would provide less than one-third the amount of land in Trail Management Corridors as compared with the Preferred Alternative.

In summary, the composition and structure of Alternative 4 would provide similar opportunities for the avoidance of, and compensation for, visual impacts from renewable energy development but would result in greater impacts from transmission corridors compared with the Preferred Alternative.

IV.20.3.6.7.2 Alternative 4 Compared with Preferred Alternative for the BLM Land Use Plan Amendment

The BLM LUPA under Alternative 4 would assign VRM Classes to all BLM lands within the CDCA, including those outside the Plan Area, as would the Preferred Alternative. For both alternatives, this would provide a unifying framework and an established system for addressing visual resources.

Alternative 4 would have far fewer acres of VRI Class II and III lands in DFAs (approximately 3,200 acres) compared with the Preferred Alternative (78,000 acres). This would result in a lower potential for visual impacts under Alternative 4 than under the Preferred Alternative. A key difference is that Alternative 4 proposes 2-mile-wide Trail Management Corridors compared with the much greater 10-mile-wide corridors under the Preferred Alternative. In this regard, the scenic values and viewer experience along National Scenic Trails would have a greater level of protection under the Preferred Alternative than under Alternative 4.

IV.20.3.6.7.3 Alternative 4 Compared with Preferred Alternative for NCCP

The impacts of the NCCP for Alternative 4 are the same as those defined in Section IV.20.3.2.1 for the Plan-wide analysis. As a result, the comparison of Alternative 4 with the Preferred Alternative for the NCCP is the same as described for Plan-wide DRECP.

IV.20.3.6.7.4 Alternative 4 Compared with Preferred Alternative for the GCP

The visual impacts of the GCP for Alternative 4 and the Preferred Alternative would be similar to those defined in Section IV.20.3.2.1 for the Plan-wide analysis, but they would occur on nonfederal lands only.