

Corridor 27-41

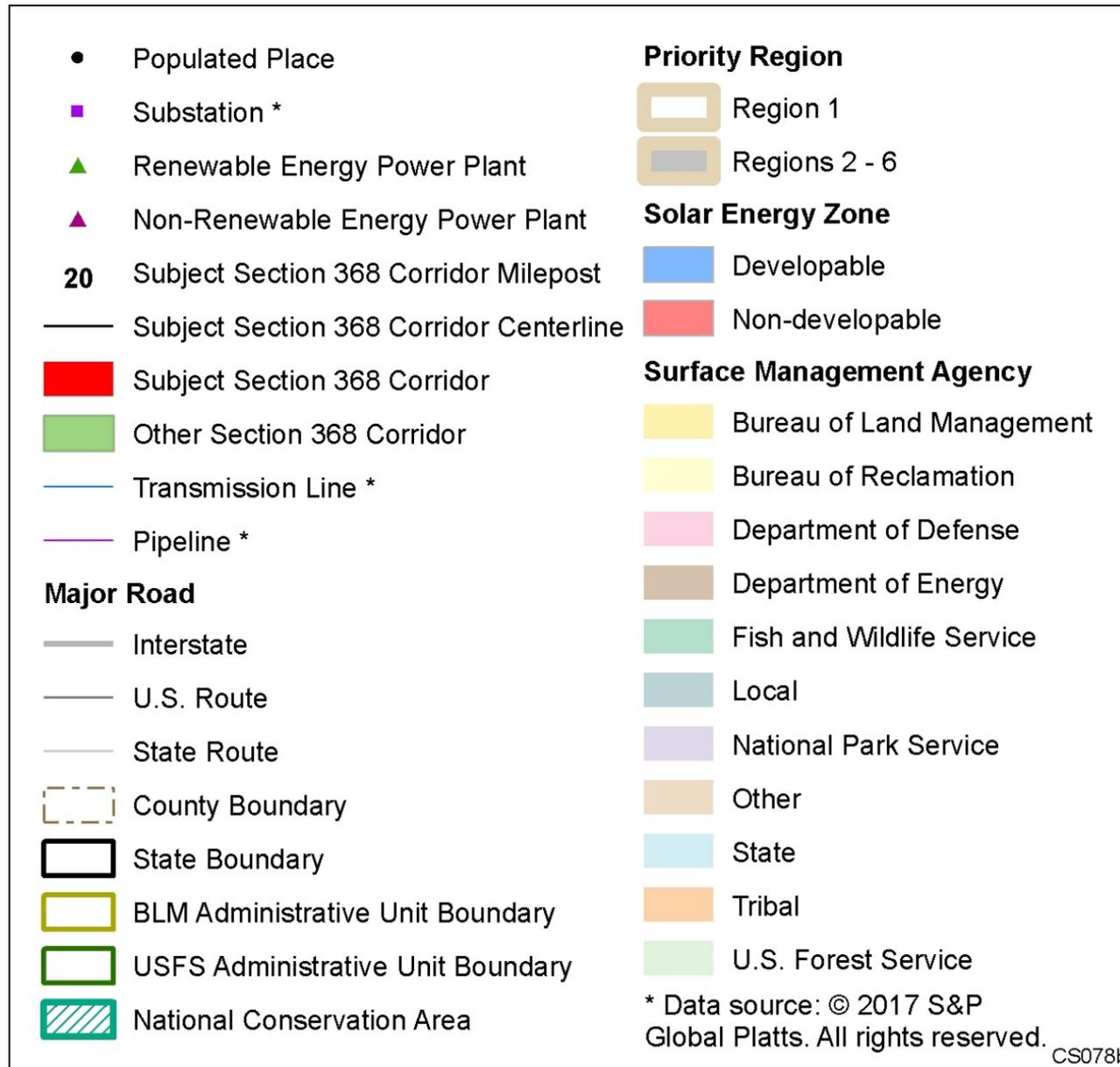
Daggett – Bullhead City

Introduction

Corridor 27-41 (Figures 1 and 2) extends generally east from the junction of Corridors 27-225 and 27-266 near Daggett, CA, north of Twentynine Palms Marine Corps Base and south of Mojave National Preserve, to the California-Nevada state line, west of Bullhead City, NV, where Corridors 41-46 and 41-47 converge. Federally designated portions of this corridor are entirely on BLM-administered land, with a 10,560-ft width throughout, consistent with existing plans, except for a 3,500-ft-wide segment from MP 138.8 to MP 148.2. This portion of the corridor was not previously designated and, as a new section, has the default 3500-ft width used in the WWEC PEIS. Corridor 27-41 is designated as multimodal and can therefore accommodate both electrical transmission and pipeline projects. The corridor spans a 148.2-mile distance, with 117.6 miles designated on BLM-administered lands. The corridor's area is 138,631 acres or 216.6 square miles. This corridor is entirely in San Bernardino County, California under the jurisdiction of the BLM Barstow and Needles Field Offices in California. It is entirely in Region 1.



Figure 1. Corridor 27-41



Key

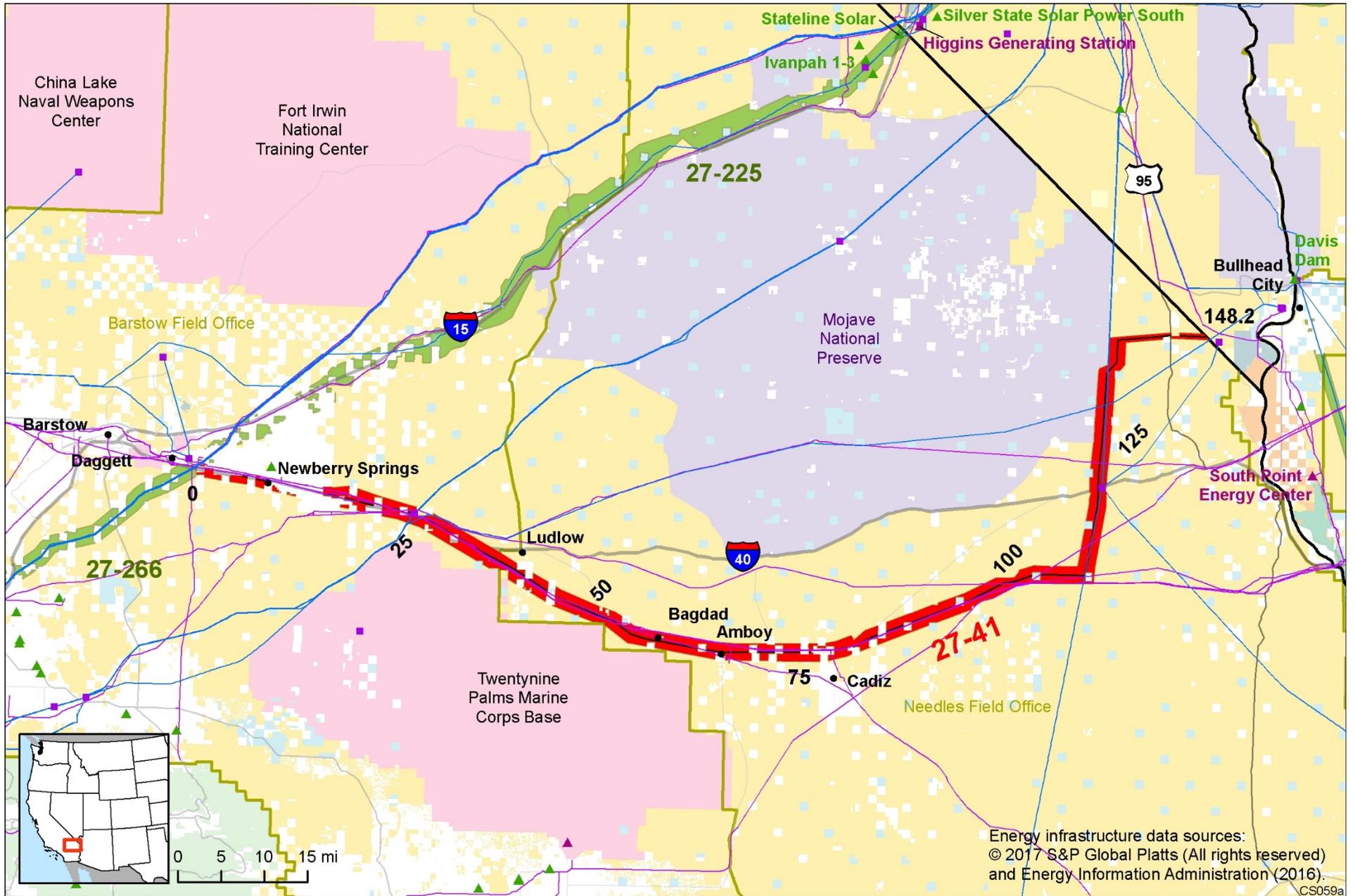


Figure 2. Corridor 27-41, Including Existing Energy Infrastructure

Corridor Rationale

During scoping for the WWEC PEIS, routes generally following this corridor were suggested by the American Wind Energy Association; New Mexico Energy, Minerals, and Natural Resources Department; Pacific Gas and Electric Company; and the Western Utility Group. The 10,560-ft wide portion of the corridor was designated in resource management plans prior to being designated as a Section 368 corridor. The corridor was designated as a Section 368 energy corridor to support existing and future infrastructure and to provide future connectivity to existing energy infrastructure near Laughlin, NV, while avoiding the Havasu NWR.

Existing Infrastructure: From MP 0 to 110.0, the corridor follows multiple natural gas pipelines, including Mojave Pipeline Operating Company, Pacific Gas and Electric Company, SCE, and El Paso Natural Gas Company. It then turns north, following Metropolitan Water District (230-kV) and Imperial Irrigation District (69-kV) transmission lines from MP 110.0 to MP 137.9, then east to the California-Nevada border. It also follows I-40 from MP 0 to 36.4 and is crossed by several other transmission lines and pipelines.

Potential for Future Development: Previously proposed and aborted projects near this corridor include a two new 500-kV lines and one 500-kV substation upgrade. During interviews for the Corridor Study, the Barstow FO indicated there may be interest for one or more new projects in this corridor, and the Needles FO indicated several existing ROWs are in the corridor with no applications pending. No planned projects are shown in the Platts transmission line data using the corridor, but one diagrammatic route crosses it at MP 32.3, described as a planned 1,000-kV “inland line” with an undetermined location. Two solar power plants are near the western end of the corridor. SCE indicated that there is 3,041 MW of CAISO-queued generation nearby, or that could use the corridor. SCE indicated that the corridor could help support interconnection for out-of-state projects (Southwest Intertie Project, TransWest Express, and Zephyr), but upgrades would likely be needed and out-of-state projects would likely trigger large and expensive transmission facilities in this corridor. This corridor could provide a new diverse transmission ROW between two SCE existing substations. A portion of the corridor is near the RETI 2.0 Victorville/Barstow TAFE; a portion of the corridor is within and/or adjacent to a DFA, and another portion is about 1.5 miles north of a large DFA block, both of which are designated for all energy development technologies. The DFAs and TAFE provide opportunity for the corridor to accommodate transmission tied to renewable energy development.

Corridor of Concern Status

This corridor was not identified in the Settlement Agreement as a corridor of concern.

Corridor Abstract Update

New data have been added to the Section 368 Energy Corridor Mapping Tool since the release of the draft abstracts in September 2016, including updated information made available in the ROD for the DRECP released later in September. A GIS view identifying high-, medium-, and low-conflict areas consistent with the definition of screening criteria described in 43 CFR 2804.35(a)-(c) has also been added to the mapping tool. A complete description of the mapping tool; a description of the high-, medium-, and low-conflict areas; and a list of the GIS data sources are included in the corridor report for the Region 1 Regional Review.

Additions to the corridor analysis table, based on input from stakeholders and additional review by the Agencies, include WWEC purpose, appropriate and acceptable uses, capacity opportunities, alignment and spacing, military aviation, ecology, lands with wilderness characteristics, specially designated areas, and visual resources.

Revision, deletions, and additions to Section 368 energy corridors would be made only during the land-use planning process through a plan amendment for an individual project or a plan revision. However, the Settlement Agreement sets forth a systematic process for the Agencies to review Section 368 energy corridors

and provide recommendations for revisions, deletions, or additions to the corridors. There were stakeholder recommendations in the 2014 RFI to reroute this corridor to avoid siting new facilities in TCAs without existing transmission and to realign the corridor with I-40 to avoid critical habitat. Suggestions for corridor revisions, deletions, or additions in response to the release of the draft abstracts included the following: delete corridor to avoid impacts on desert tortoise habitat, ACECs, cultural sites along Route 66, and national monuments; take into account many corridor revision suggestions to avoid impacts on desert tortoise habitat; realign corridor to follow existing routes of travel, including I-40, Route 66, and California State Route 95; and reduce corridor width to avoid impacts on ACECs, desert tortoise, and historic resources. In addition, one stakeholder suggested extension of the corridor to include substations across the state line into Nevada. Although desert tortoise habitat and a wildlife linkage are present in the corridor, mapping of potential conflict areas indicates there is no previously disturbed alternate route in the vicinity of the corridor that would avoid these areas. Based on Agency analysis, as well as input provided by stakeholders, an additional corridor segment is recommended for Corridor 27-41. The Agencies should consider a corridor extension to connect Corridor 27-41 in California to Corridors 41-46 and 41-47 in Arizona. The most feasible alternative appears to be through southern Nevada near MP 148 (for approximately 12 miles). Jurisdictional issues and sensitive resources may preclude a viable option; however, existing infrastructure is present along several potential east-west pathways.

Corridor Analysis

The corridor analysis table below identifies concerns affecting Corridor 27-41, the location of the concerns within the corridor, and the results of the analysis of the concerns by the Agencies. Concerns are checked if they are known to apply to the corridor.

Energy Planning Opportunities

- Appropriate and acceptable uses
- WWEC purpose
(e.g., renewable energy)
- Transmission and pipeline capacity opportunity

Energy Planning Concerns

- Physical barrier
- Jurisdictional concern
- Corridor alignment and spacing
- Transmission and pipeline capacity concern

Land Management Responsibilities and Environmental Concerns

- Acoustics
- Air quality
- Climate change
- Cultural resources
- Ecological resources
- Environmental justice
- Hydrological resources
- Lands and realty
- Lands with wilderness characteristics

- Livestock grazing
- Paleontology
- Public access and recreation
- Socioeconomics
- Soils/erosion
- Specially designated areas
- Tribal concerns
- Visual resources
- Wild horses and burros
- Interagency Operating Procedures**

REGION 1 – CORRIDOR 27-41 – ANALYSIS TABLE

| ID | Agency | Agency Jurisdiction | County | Primary Concern/ Opportunity | Corridor Location (by Milepost [MP]) | Source: Context | Agency Review and Analysis |
|--------------------------------------|--------|------------------------|---------------------------|--|--|---|--|
| ENERGY PLANNING OPPORTUNITIES | | | | | | | |
| <i>WWEC Purpose</i> | | | | | | | |
| 27-41 .001 | BLM | Barstow FO, Needles FO | San Bernardino County, CA | Renewable energy | Not specified | RFI: renewable energy needs to be transmitted to the southern California market; however, an alternative east-west corridor alignment would be preferable to the one chosen via the WWEC process. Eliminate the current Route 66 alignment and replace it with the east-west alignment of the existing corridor in the land-use plan to the north that largely parallels Interstate 40. This alignment is preferable to the existing Route 66 corridor, as it avoids much of the route, except for the section between Newberry Springs and Ludlow, and the important Desert tortoise habitat east of the Mojave Preserve (TWS and Partners). | BLM will consider additional corridor options through the Regional Review. Standard procedures for processing applications include developing alternate routes for consideration and analysis. |
| 27-41 .new1 | BLM | Barstow FO | San Bernardino County, CA | RETI 2.0 Victorville/Barstow TAFE | Not specified | Comment on corridor abstract: a portion of the corridor is near a RETI 2.0 TAFE. | The TAFE provides an opportunity for the corridor to accommodate transmission tied to renewable energy development. |
| 27-41 .new2 | BLM | Needles FO | San Bernardino County, CA | DLA, i.e., DRECP DFA: variance process lands | MP 64.2 to MP 77.3 | GIS Analysis: A portion of the corridor is 1.5 miles or more north of a large DRECP-established DFA. | The DFA provides an opportunity for the corridor to accommodate transmission tied to renewable energy development. |
| 7-41 .new3 | BLM | Barstow FO | San Bernardino County, CA | DLA, i.e., DRECP DFA: all technologies | MP 0 to MP 2.2, MP 8.1 to MP 8.7, MP 9.2 to MP 9.8, MP 15.1, MP 18.2 | GIS Analysis. | The DFA provides an opportunity for the corridor to accommodate transmission tied to renewable energy development. |

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|---|--------|---------------------|-----------------------|------------------------------|--------------------------------------|--|--|
| Transmission and Pipeline Capacity Opportunities | | | | | | | |
| 7-41 .new4 | BLM | Las Vegas FO | Clark County, NV | Extend corridor | East of MP 148 | BLM should consider extending Corridor 27-41 approximately 10 miles roughly east-northeast to include SCE's substation just outside Laughlin to allow for new transmission ROW between existing substations. | Future land-use planning should consider extending Corridor 27-41 from east California through southern Nevada at MP 148. |
| ENERGY PLANNING CONCERNS | | | | | | | |
| Location-Specific Physical Barrier | | | | | | | |
| 27-41 .003 | BLM | Needles FO | San Bernardino County | Connectivity | After final MP 148.19 | BLM CA State Office review of GIS and portal data: No connectivity is apparent after state line to AZ corridors. | Corridor stops at the California state line. The two nearest corridors are on the other side of Bullhead City from this corridor. Future RMPs could consider a new corridor or corridors to achieve connectivity on public land between Bullhead City and the California state line. |
| Corridor Alignment and Spacing | | | | | | | |
| 27-41 .004 | BLM | Needles FO | San Bernardino, CA | Existing pipelines | MP 53.6 to MP 67.9 | GIS Analysis: pipelines intersect corridor at angles. | Proposed project siting and collocation alternatives to address impacts would be analyzed as part of the project-specific environmental analysis required under NEPA and other Federal laws. |
| 27-41 .005 | BLM | Needles FO | San Bernardino, CA | Existing pipelines | MP 97.7 to MP 106.4 | GIS Analysis: pipelines intersect corridor at angles. | Proposed project siting and collocation alternatives to address impacts would be analyzed as part of the project-specific environmental analysis required under NEPA and other Federal laws. |
| 27-41 .006 | BLM | Needles FO | San Bernardino, CA | Existing transmission lines | MP 116.2 to MP 120.8 | GIS Analysis: transmission lines follow and intersect corridor at angles. | Proposed project siting and collocation alternatives to address impacts would be analyzed as part of the project-specific environmental |

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| | | | | | | | analysis required under NEPA and other Federal laws. |
| 27-41 .002 | BLM | Barstow FO | San Bernardino County, CA | Multiple pipelines and transmission lines | MP 15.2 to MP 30.2 | GIS Analysis: multiple pipelines and transmission lines follow and cross the corridor. | The corridor is 2 miles wide and has capacity for future projects. Proposed project siting and collocation alternatives to address impacts would be analyzed as part of the project-specific environmental analysis required under NEPA and other Federal laws. The number and collocation of potential additional pipelines and transmission lines would depend on such factors as location, voltage, and safety requirements. Installation and operation of high-voltage electric transmission lines and pipelines in the same corridor must adhere to established collocation protocol. |
| 27-41 .new4 | BLM | Barstow FO, Needles FO | San Bernardino County, CA | Pipeline | MP 0 to MP 100 | Comment on abstract: provide background analyses, including potential impacts of pipeline development, that helped identify the pipelines that currently follow or intersect the corridor. Mixed use of the corridor for pipelines and transmission may increase cumulative impacts and result in significant safety and environmental risks. | The environmental analysis documents used to implement specific existing projects are a matter of public record and can be requested at any BLM office. Multiple use is part of BLM’s mission. The safety and environmental risks of collocating projects are analyzed during project implementation. Proposed project siting and collocation alternatives to address impacts would be analyzed as part of the project-specific environmental analysis required under NEPA and other Federal laws. |

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| LAND MANAGEMENT RESPONSIBILITIES AND ENVIRONMENTAL CONCERNS | | | | | | | |
| <i>Cultural Resources</i> | | | | | | | |
| 27-41 .007 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Important historical, cultural and natural values | MP 0 to MP 148, MP 125 to MP 148.2 | RFI: due to the important historical, cultural, and natural values in this region (along Route 66), this corridor needs to be eliminated and another east-west alternative selected, if feasible. | Impacts would be analyzed and mitigated as part of the project-specific environmental analysis required under the NHPA and NEPA. Consider additional corridor options during regional review. |
| 27-41 .new | BLM | Barstow FO, Needles FO | San Bernardino, CA | Serrano Ancestral Territory | Entire corridor | Comment on corridor abstract: corridor exists within Serrano ancestral territory and is of interest to the San Manuel Band of Mission Indians. | The Agencies would consult with the San Manuel Band of Mission Indians, as well as other California tribes, as required for any proposed project in the corridor. |
| <i>Ecology: Special Status Animal Species</i> | | | | | | | |
| 27-41 .008 | BLM | Barstow FO, Needles FOs | San Bernardino, CA | Desert Tortoise critical habitat; TCAs; Priority 1 and 2 Habitat; and connectivity habitat (least-cost corridor for tortoise connectivity [USFWS 2012]) | Critical Habitat: MP 0 to MP 22.3, MP 81 to MP 148.2 TCAs: MP 0 to MP 9.3, MP 11.3 to MP 12.5, MP 15.5 to MP 22.4, MP 80.3 to MP 148.2 Priority 1 and 2 habitat: MP 0 to MP 5.2 Connectivity habitat: MP 0 to MP 5, MP 14.8 to MP 44.2. | RFI: desert tortoise critical habitat (the Piute-Fenner Critical Habitat Unit and the corresponding BLM ACEC for tortoise conservation). "It would be best to have this proposed corridor alignment removed, and especially the segment to the east that appears to cut across the Piute Valley, an area known for high density of Desert tortoise." Reroute to avoid siting new facilities in TCAs without existing transmission; minimize additional transmission siting in these areas; and realign corridor with I- 40 to avoid critical habitat. Reduce corridor width from 10,560 ft to no more than 3,500 ft. If there are | While desert tortoise habitat and a wildlife linkage are present throughout the corridor, there is no alternative route in the vicinity of the corridor that would avoid these areas. The DRECP has specific CMAs to address impacts on desert tortoise. The information in the DRECP would be used in any project implementation. Impacts on habitat and habitat connectivity may be avoided, minimized, or mitigated through activities identified and implemented in consultation with the USFWS under ESA Section 7. Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |

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| | | | | | | <p>facilities in place in areas designated as critical habitat for Agassiz’s Desert Tortoise (that crosses east-west through the Piute Valley), reduce the width to 1,320 ft.</p> <p>Reroute to the north of I-40 to avoid adverse modification of critical habitat. Do not construct new transmission lines or pipelines within a 27-mile reach located north and south of I-40 (MP 110.0 to MP 137.9).</p> <p>Address concern for the eastern approximate 56-mile portion of the corridor that departs from Route 66 at approximately MP 80 and proceeds cross-country to the east, bisecting the Chemehuevi Desert Tortoise CHU located south of I-40, and then heads north to MP 138 bisecting the Piute-Eldorado Desert Tortoise CHU located north of I-40.</p> <p>Realign corridor to follow existing routes of travel, including I-40, Route 66, and CA State Route 95.</p> <p>Keep Corridor 27-41 in its entire length along I-40 to CA State Route 95, and then proceed northward to the current proposed location at MP 148.</p> <p>Restrict the approximate 33-</p> | |

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| | | | | | | <p>mile length of this new corridor, coinciding with the southern boundary of the Mojave National Preserve to the southern side of I-40. Keep Corridor 27-41 along Route 66 from MP 75, through Essex, to I-40; then follow I-40 east to CA State Route 95; follow this route north to the junction at MP 143 and then proceed east to MP 148. Delete corridor.</p> <p>GIS Analysis: critical habitat is in undesignated gaps (MP 0.0 to MP 22.3) and intersects the corridor (MP 81.0 to 148.2) where corridor makes an abrupt northward turn from its east-west trajectory near State Route 66 (east of Essex), jogs along the southeastern border of the Mojave National Preserve, and then turns eastward into Nevada.</p> | |
| Ecology: Wildlife | | | | | | | |
| 27-41 .new5 | | | | Southern California Wildlands Linkage | Not specified | RFI: Corridor intersects a Southern California Wildlands Linkage. Reroute to avoid "very high" risk to permeability. Work closely with state and federal wildlife and science agencies to ensure that connectivity is maintained. | Impacts on habitat and habitat connectivity would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |

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|---|--------|---------------------------|--------------------|--|---|--|--|
| Hydrology: Surface Water | | | | | | | |
| 27-41 .009 | BLM | Needles FO | San Bernardino, CA | Intermittent stream | MP 88.1 | GIS Analysis. | Linear ROWs can either span intermittent streams or be buried underneath them. Impacts would be analyzed and mitigated as part of the project-specific environmental analysis required under NEPA and other Federal laws. |
| Lands and Realty: Rights-of-Way and General Land Use | | | | | | | |
| 27-41 .010 | BLM | Needles FO | San Bernardino, CA | Land ownership | Scattered through corridor, but large parcel at MP 75.2 to MP 148.3 | GIS Analysis: 641 acres, which were originally designated as part of this corridor, are on private land according to the 5/12/15 version of Surface Management Agency data. | BLM would consider adjusting corridor designation in future land-use plans to current jurisdiction, possibly through a plan amendment during future project implementation. |
| 27-41 .011 | BLM | Barstow FO | San Bernardino, CA | Land ownership | MP 4.5 to MP 6.3 | GIS Analysis: 71 acres which were originally designated as part of this corridor are on state land according to the 5/12/15 version of Surface Management Agency data. | BLM would consider adjusting corridor designation in future land-use plans to current jurisdiction, possibly through a plan amendment during future project implementation. |
| Lands and Realty: Military and Civilian Aviation | | | | | | | |
| 27-41 .012 | BLM | Needles FO | San Bernardino, CA | Camino Airstrip | MP 119.5 to MP 119.8 | GIS Analysis: Camino Airstrip intersects the corridor. | Impacts would be analyzed and mitigated as part of the project-specific environmental analysis required under NEPA and other Federal laws. |
| 27-41 .013 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Military Training Route – Visual Route | MP 11 to MP 16, MP 101 to MP 107, MP 114 to MP 121, MP 133 to MP 137 | GIS Analysis. Comment on abstract: military training route (VR-1265) with floor of 200-ft AGL. Potential for an obstruction in airspace used for high-speed, low-altitude military aircraft operations, which presents a potential safety risk. | DoD recommends structures remain below 200-ft AGL. Taller structures will require further analysis for operational and safety impacts. Adherence to IOP 1 under Project Planning in the WWEC PEIS Records of Decision regarding coordination with DoD would be required. |

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| 27-41 .014 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Military Training Route – Instrument Route | MP 13 to MP 29, MP 108 to MP 128, MP 135 to MP 148 | GIS Analysis. Comment on corridor abstract: military training route (IR-212) (IR-217) with floor of 200-ft AGL. Potential for an obstruction in airspace used for high-speed, low-altitude military aircraft operations, which presents a potential safety risk. | DoD recommends structures remain below 200-ft AGL. Taller structures will require further analysis for operational and safety impacts. Adherence to IOP 1 under Project Planning in the WWEC PEIS Records of Decision regarding coordination with DoD would be required. |
| 27-41 .new6 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Military Training Route – Instrument Route | MP 74 to MP 78, MP 79 to MP 83, MP 84 to MP 93, MP 94 to MP 99 | Comment on corridor abstract: military training route (IR-250) (IR-252) with floor of “SURFACE.” Potential for an obstruction in airspace used for high-speed, low-altitude military aircraft operations, which presents a potential safety risk. | DoD recommends structures remain below existing structures. Structures taller than 200-ft AGL will require further analysis for operational and safety impacts. Adherence to IOP 1 under Project Planning in the WWEC PEIS Records of Decision regarding coordination with DoD would be required. |
| 27-41 .new7 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Military Training Route – Instrument Route | MP 38 to MP 51 | Comment on corridor abstract: FAA designated Special Use Airspace (R-2501N) with floor of “SURFACE.” Potential for an obstruction in airspace used for high-speed, low-altitude military aircraft operations, which presents a potential safety risk. | DoD recommends structures remain below existing structures. Structures taller than 200 ft AGL will require further analysis for operational and safety impacts. Adherence to IOP 1 under Project Planning in the WWEC PEIS Records of Decision regarding coordination with DoD would be required. |
| Lands and Realty: Transportation | | | | | | | |
| 27-41 .015 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Interstate 40 | MP 0.0 to MP 36.2, MP 119.8 to MP 120.4 | GIS Analysis. | Consistent with BLM ROW regulations, notification to adjacent ROW holders would be provided. |
| 27-41 .016 | BLM | Needles FO | San Bernardino, CA | U.S. Highway 95 | MP 144.0 | GIS Analysis. | Consistent with BLM ROW regulations, notification to adjacent ROW holders would be provided. |

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| 27-41 .017 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Railroad | MP 0 to MP 37.5, MP 50.7 to MP 67.5, MP 87.2 to MP 89.5, MP 125.3 | GIS Analysis. | Consistent with BLM ROW regulations, notification to adjacent ROW holders would be provided. |
| Lands with Wilderness Characteristics | | | | | | | |
| 27-41 .new8 | | | | Citizen-inventoried lands with wilderness characteristics | MP 0 to MP 3 | Comment on corridor abstract: area overlaps with citizen-inventoried lands with wilderness characteristics. Corridors should be excluded from the Newberry Mountains Additions unit. Identify lands with wilderness characteristics as a constraint and ensure that their recommendations for corridor revisions, deletions, additions and mitigation measures address them. | There are extensive CMAs for addressing wilderness characteristics during project implementation in the DRECP. |
| 27-41 .new9 | | | | Citizen-inventoried lands with wilderness characteristics | MP 25 to MP 32, MP 32 to MP 40, and MP 32 to MP 50 | Comment on corridor abstract: corridor should be excluded from the following lands with wilderness characteristics that is deemed inappropriate for transmission and pipeline development: Argos unit - 10,000 acres Ash Hill unit- 19,155 acres, and Ragtown unit (21,182 acres). Identify lands with wilderness characteristics as a constraint and ensure that their recommendations for corridor revisions, deletions, additions, and mitigation measures address them. | There are extensive CMAs for addressing wilderness characteristics during project implementation in the DRECP. |

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| 27-41 .new10 | BLM | Barstow FO, Needles FO | San Bernardino, CA | DRECP Lands with Wilderness Characteristics | MP 2.2 to MP 6.2, MP 16.0 to MP 28.2, MP 83.3 to MP 89.9, MP 99.3 to MP 110.4, MP 119.3 to MP 130.5 | GIS Analysis. Comment on corridor abstract: wilderness areas adjacent to or near Mojave National Preserve and the corridor: Bristol Mountains Wilderness, Trilobite Wilderness, Clipper Mountain Wilderness, Piute Mountains Wilderness, and Dead Mountains Wilderness, and the Mojave Wilderness within the Mojave National Preserve. Consider the potential impacts on wilderness characteristics of these areas. A proposed 10,560-ft width and 3,500-ft-wide corridors will potentially allow development of multiple transmission corridors in this area, which is noted for the qualities of wilderness character, including being untrammled, undeveloped, natural, and presenting an opportunity for solitude or primitive and unconfined recreation. | There are extensive CMAs for addressing wilderness characteristics during project implementation in the DRECP. |
| <i>Specially Designated Areas</i> | | | | | | | |
| 27-41 .018 | BLM | Needles FO | San Bernardino, CA | Piute Valley and Sacramento Mountains DRECP National Conservation Lands ¹ | MP 134.4 to MP 148.2 | GIS Analysis. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 27-41 .new11 | BLM | Barstow FO | San Bernardino, CA | Pinto Lucerne Valley and Eastern Slopes | MP 7.0 to MP 7.3, MP 8.0 to MP 9.4 | GIS Analysis. | Impacts would be analyzed and mitigated as part of the project-specific environmental review |

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| | | | | DRECP National Conservation Lands ¹ | | | required under NEPA and other Federal laws. |
| 27-41 .new12 | BLM | Barstow FO, Needles FO | San Bernardino, CA | South Mojave-Amboy DRECP National Conservation Lands ¹ | MP 16.8 to MP 23.6, MP 26.2 to MP 43.1, MP 45.8 to MP 135.1 | GIS Analysis. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 27-41 .new13 | BLM | Barstow FO | San Bernardino, CA | Mojave and Silurian Valley DRECP National Conservation Lands ¹ | MP 0.1 to MP 8.2, MP 11.4 to MP 12.4, MP 16.0 to MP 19.1 | GIS Analysis. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 27-41 .019 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Wilderness Areas | MP 0.0 to MP 9.2, MP 70.2 to MP 83.8, MP 87.5 to MP 122.3, MP 137.8, MP 148.2 | GIS Analysis: corridor is adjacent to several wilderness areas to the north and south (e.g., Newberry Mountains, Trilobite, Old Woman Mountains, Piute Mountains, Bigelow Cholla Garden, Mojave, Dead Mountains). | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 27-41 .020 | BLM | Barstow FO | San Bernardino, CA | Dagget Ridge Monkey Flower ACEC | MP 0 to MP 0.1 | GIS Analysis. Comment on corridor abstract: delete corridor because of impacts on ACECs. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. Energy corridors are specifically identified in the DRECP, especially where they overlap ACECs. |
| 27-41 .021 | BLM | Barstow FO | San Bernardino, CA | Ord-Rodman ACEC | MP 0 to MP 22.3 | GIS Analysis. Comment on corridor abstract: eliminate the polygons located south of I-40 at the western end of the corridor, which coincides with the Ord-Rodman desert tortoise CHU. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. Energy corridors are specifically identified in the DRECP, especially where they overlap ACECs. |

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|------------|--------|------------------------|--------------------|--|--|--|---|
| | | | | | | Delete corridor because of impacts to ACECs. | |
| 27-41 .022 | BLM | Barstow FO | San Bernardino, CA | Pisgah ACEC | MP 16.3 to MP 34.3, MP 26.3 to MP 34.3 MP 25.0 to MP 32.0 | GIS Analysis. Comment on corridor abstract: it was also designated through BLM's 2016 DRECP LUPA as a unit of the CDNCL. Land-use activities must be compatible with the protection of nationally significant values. A surface disturbance limit of 1.0 percent has been established for this ACEC through BLM's 2016 DRECP LUPA. Reduce corridor width to conform to the location of existing facilities and disturbed areas in the Pisgah Research Natural Area ACEC. Delete corridor because of impacts to ACECs. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. Disturbance caps are in place in this area to limit, offset, and address ground disturbance to acceptable levels (or with acceptable mitigation) to meet conservation goals in ACECs and other conservation allocations in the DRECP area. Disturbance cap thresholds (and whether the cap will be reached by the proposed action) are determined at the time of new project consideration and analysis (DRECP LUPA, Section II.2, p. 31, BLM 2016). Energy corridors are specifically identified in the DRECP, especially where they overlap ACECs. |
| 27-41 .023 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Mojave Trails National Monument (MTNM) | MP 27.0 to MP 148.2 | GIS Analysis: reduce corridor width to conform to the location of existing facilities and disturbed areas in the MTNM. Delete corridor. | The proclamation that establishes the monument does not preclude or interfere with the operation or maintenance of existing utility and pipeline facilities. In addition, new facilities may be constructed within the monument, provided it is consistent with the care of the resources identified in the proclamation. This would be analyzed and mitigated as part of the project-specific environmental |

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|------------|--------|---------------------|--------------------|--|--------------------------------------|--|--|
| | | | | | | | review required under NEPA and other Federal laws. |
| 27-41 .024 | BLM | Needles FO | San Bernardino, CA | Amboy Crater ACEC | MP 62.8 to MP 63.8 | GIS Analysis. Comment on corridor abstract: corridor is adjacent to Amboy Crater ACEC, which is located entirely within the MTNM. Surface disturbance cap is 1.0 percent. Consider the unusual varieties of plants and animals that are the subject of academic research into species adaptation supported by the unique geological formations consisting of lava flows and pockets of wind-blown sand. Reduce corridor width within the Amboy Crater ACEC from 10,560 ft to no more than 3,500 ft or to a width that conforms to the location of existing facilities. Delete corridor because of impacts to ACECs. | Corridor is not within the ACEC. Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. Disturbance caps are in place in this area to limit/offset/address ground disturbance to acceptable levels (or with acceptable mitigation) to meet conservation goals in ACECs and other conservation allocations in the DRECP plan area. The corridor is not constrained, as long as the DRECP CMAs/disturbance caps, etc., are addressed/met in project implementation. Disturbance cap thresholds (and whether the cap will be reached or not by the proposed action) are determined at the time of new project consideration and analysis (DRECP LUPA Section II.2, p. 31). |
| 27-41 .025 | BLM | Needles FO | San Bernardino, CA | Amboy Crater National Natural Landmark | MP 80.3 to MP 120.5 | GIS Analysis: corridor is adjacent to Amboy Crater National Natural Landmark. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 27-41 .026 | BLM | Needles FO | San Bernardino, CA | Chemehuevi ACEC | | GIS Analysis. Comment on corridor abstract: appropriate multiple land uses are allowed, provided they are consistent with the management goals established | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |

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|------------|--------|---------------------|--------------------|------------------------------|--------------------------------------|---|--|
| | | | | | | to maintain nationally significant values. Any multiple uses that could conflict with management goals are to be prohibited. A surface disturbance limit of 1.0 percent has been adopted for this ACEC. Reduce corridor width to conform to the location of existing facilities and disturbed areas in the Chemehuevi ACEC. Delete corridor because of impacts to ACECs. | Energy corridors are specifically identified in the DRECP, especially where they overlap ACECs. |
| 27-41 .027 | BLM | Needles FO | San Bernardino, CA | Piute-Fenner ACEC | MP 20.0 to MP 148.1 | GIS Analysis. Comment on corridor abstract: designated as a unit of the CDNCL in BLM's 2016 DRECP LUPA. Multiple uses are only to be allowed if they are consistent with the goals and objectives adopted to protect ACEC values. Proposed land uses that would impair these ACEC values are prohibited. The surface disturbance limit adopted for this ACEC through BLM's 2016 DRECP LUPA ranges from 0.5 to 1.0 percent. Delete corridor because of impacts to ACECs. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. Energy corridors are specifically identified in the DRECP, especially where they overlap ACECs. |
| 27-41 .028 | BLM | Needles FO | San Bernardino, CA | Mojave National Preserve | MP 125.4 to MP 137.8 | GIS Analysis: corridor is located near the southern boundary and directly along portions of the eastern boundary of the Mojave National Preserve. Reconsider placement of the | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |

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| | | | | | | corridor segment from MP 125 adjacent to the Mojave National Preserve boundary. Realign corridor to avoid encroaching into Mojave National Preserve. There was concern about visual impacts on the Mojave National Preserve. Delete corridor. | |
| 27-41 .new14 | BLM | Needles FO | San Bernardino, CA | Old Spanish National Historic Trail (OSNHT) | MP 138 to MP 141 | Comment on corridor abstract: OSNHT is located within the corridor at the northeast end of the corridor. Conduct analysis to determine potential effect of additional infrastructure on the view-shed of the OSNHT. | The Agencies have identified the need for an IOP to address development in Section 368 energy corridors while protecting values in congressionally designated NHTs. The National Trail administering agency or trail administrator; regional or State program leader; and a primary National Trail partner organization representative (in accordance with applicable law) will be advised and invited to attend pre-authorization or pre-application meetings, as applicable. Agencies may not permit proposed uses along congressionally designated National Scenic or Historic Trails [National Trails System Act (NTSA) Sec. 5(a)], which will substantially interfere with the nature and purposes of the trail, and shall make efforts, to the extent practicable, to avoid authorizing activities that are incompatible with the purposes for which such trails were established [NTSA Sec. 7(c)]. While easements |

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| | | | | | | | and rights-of-way may be granted, conditions shall be related to the policy and purposes of the National Trails Systems Act [NTSA Sec. 9(a)]. |
| 27-41 .new15 | BLM | Barstow FO, Needles FO | San Bernardino, CA | Bristol Mountains ACEC | MP 32.8 to MP 63.0 | GIS Analysis. Comment on corridor abstract: designated through the 2016 DRECP LUPA to protect public lands that form a broad habitat linkage between the Cady Mountains Wilderness Study Area, Pisgah ACEC, Bristol Mountains, Mojave National Preserve, and desert tortoise critical habitats in the western and eastern Mojave Desert. This area is also designated as a CDNCL unit. A surface disturbance limit of 0.5 to 1.0 percent has been adopted. Land-use activities that would adversely impact its nationally significant values are prohibited. Do not allow activities that would impair wildlife habitat connectivity and movements. Delete corridor because of impacts to ACECs. | Energy corridors are specifically identified in the DRECP, especially where they overlap ACECs. |
| 27-41 .new16 | BLM | Needles FO | San Bernardino, CA | Dead Mountains ACEC | MP 148.1 to MP 148.2 | GIS Analysis: delete corridor because of impacts to ACECs. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |

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|--|--------|---------------------|--------------------|---|--|-----------------|---|
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| | | | | | | | Energy corridors are specifically identified in the DRECP, especially where they overlap ACECs. |
| 27-41 .new17 | BLM | Needles FO | San Bernardino, CA | Ward Valley Extensive Recreation Management Areas | MP 98.9 to MP 120.1 | GIS Analysis. | Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 27-41 .new18 | BLM | Needles FO | San Bernardino, CA | DRECP National Trails SRMA | MP 37.7 to MP 99.2, MP 119.9 to MP 148.2 | GIS Analysis. | <p>Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws.</p> <p>The National Trail administering agency or trail administrator; regional or State program leader; and a primary National Trail partner organization representative (in accordance with applicable law) will be advised and invited to attend pre-authorization or pre-application meetings, as applicable. Agencies may not permit proposed uses along congressionally designated National Scenic or Historic Trails [National Trails System Act (NTSA) Sec. 5(a)], which will substantially interfere with the nature and purposes of the trail, and shall make efforts, to the extent practicable, to avoid authorizing activities that are incompatible with the purposes for which such trails were established [NTSA Sec. 7(c)]. While easements and rights-of-way may be granted, conditions shall be related to the</p> |

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| | | | | | | | policy and purposes of the National Trails Systems Act [NTSA Sec. 9(a)]. |
| 27-41 .new19 | | | | Route 66 | | RFI: corridor parallels Route 66 and is inconsistent with the BLM's Route 66 Management Plan. Reroute so that corridor is aligned with I-40 and the CA BLM's designated utility corridors per the CDCA plan. Realign corridor to avoid impacts on historic resources, like Route 66. Delete corridor. | The Agencies would need to review the Arizona Department of Transportation Route 66 Corridor Management Plan as part of project-specific environmental review. |
| Visual Resources | | | | | | | |
| 27-41 .new20 | BLM | Needles FO | San Bernardino, CA | VRM Class I | MP 79.3 to MP 79.6, MP 81.3 to MP 83.2, MP 99.6 to MP 102.4, MP 105.7 to MP 106.4, MP 112.7 to MP 120.4 | GIS Analysis. VRM Class I areas are adjacent to corridor. | The corridor does not intersect VRM Class I or II areas. Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 27-41 .029 | BLM | Barstow FO, Needles FO | San Bernardino, CA | VRM Class II | MP 18.9 to MP 19.6, MP 26.8 to MP 29.4, MP 33.8 to MP 34.1, MP 35.8 to MP 36.8, MP 51.2 to MP 95.6, MP 98.5 to MP 108.7, MP 109.9, MP 134.7 to MP 138.9 | GIS Analysis. VRM Class II areas are adjacent to corridor. | |

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| 27-41 .new21 | BLM | Needles FO | San Bernardino, CA | VRM Class II | MP 138.9 to MP 148.1 | GIS Analysis. Comment on corridor abstract: account for the value of the shared scenic landscapes and protect them for future generations. Scenic views, including those that extend beyond park boundaries, are an important component of the visitor experience to units of the National Park system. The breadth of these views is inspirational and iconic to the American spirit, and these views are often an important reason why people visit parks and trails. The resources associated with Mojave National Preserve are considered unique and are so identified in the California Desert Protection Act. | VRM class objectives are binding land use plan decisions. Transmission facilities must demonstrate that they will conform to the VRM decisions in the land use plan through a hard-look visual impacts analysis outlined in BLM VRM Contrast Rating Handbook H 8431-1 (VRM Manual Section (MS) 8400, BLM 1986). Minimizing visual contrast remains a requirement of applicable VRM class objectives even when the proposed action is in conformance with these VRM class objectives (VRM MS-8400). There are extensive CMAs for addressing VRM during project implementation in the DRECP. Evaluate options for moving the corridor away from the visually sensitive area or out of the sensitive |
| 27-41 .030 | BLM | Barstow FO, Needles FO | San Bernardino, CA | VRM Class III | MP 0 to MP 3.1, MP 4.1 to MP 6.1, MP 7.2 to MP 8.1, MP 9.2 to MP 10.2, MP 11.2 to MP 12.0, MP 17.3 to MP 43.1, MP 46.0 to MP 138.8 | GIS Analysis. | viewshed. Additional development in the corridor may not meet the VRM Class II or III management objectives. |
| 27-41 .new22 | BLM | Barstow FO, Needles FO | San Bernardino, CA | VRM Class IV | MP 0 to MP 11.4, MP 15.2 to MP 18.3, MP 22.2 to MP 27.0, | GIS Analysis. | While VRM Class IV objectives allow for major modification to occur and management activities may dominate the view, minimizing visual |

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| | | | | | MP 37.6 to MP 46.4, MP 129.7 to MP 132.6 | | contrast remains a requirement of these VRM class objectives. Ratings are required in areas of high sensitivity or high impact (VRM MS-8400). |
| Other Issues | | | | | | | |
| 27-41 .new23 | | | | | | One stakeholder requested that the Agencies update the maps and abstracts to portray existing and pending ROWs. There were concerns about the appropriate use of pipelines alongside transmission lines and about the Piute-Fenner ACEC and Chemehuevi ACEC. One stakeholder suggested that the Agencies not postpone revision or deletion of potential corridors until project-specific NEPA and NHPA analysis has been conducted. Last, input was provided clarifying existing capacity and potential for new capacity. | GIS layers have been added to the mapping tool that show locations of existing and planned infrastructure and these data have been incorporated into the maps. The colocation of pipelines and transmission lines is subject to safety requirements. Installation and operation of high-voltage electric transmission lines and pipelines in the same corridor must adhere to established colocation protocol. The regional review process is not a NEPA process; the corridor considerations resulting from the regional reviews will be used within subsequent NEPA scoping for land use planning or project-specific planning and will be analyzed with any newer information that may become available. The input provided by stakeholders regarding existing capacity and potential for future capacity has been added to the corridor abstracts and has been considered in the Agencies' analysis. |

Abbreviations: ACEC = Area of Critical Environmental Concern; AGL = above ground level; BLM = Bureau of Land Management; CDCA = California Desert Conservation Area; CDNCL = California Desert National Conservation Lands; CFR = Code of Federal Regulations; CHU = critical habitat units; CMA = Conservation and Management Action; DFA = Development Focus Area; DLA = Designated Leasing Area; DoD = Department of Defense; DRECP = Desert Renewable Energy Conservation Plan; ESA = Endangered Species Act; FAA = Federal Aviation Administration; FO = Field Office; GIS = geographic information system; IOP = Interagency Operating Procedures; LUPA = Land Use Plan Amendment;

MP = milepost; MTNM = Mojave Trails National Monument; NEPA = National Environmental Policy Act; OSNHT = Old Spanish National Historic Trail; PEIS = Programmatic Environmental Impact Statement; RETI = Renewable Energy Transmission Initiative; RFI = Request for Information; ROW = right-of-way; SCE = Southern California Edison Co.; SRMA = Sierra Resource Management Area; TAFA = transmission assessment focus area; TCA = Tortoise Conservation Area; USFWS = U.S. Fish and Wildlife Service; VRM = Visual Resource Management; WWEC = West-wide Energy Corridor.

¹ California Desert Conservation Area replaced by DRECP National Conservation Lands.