

Corridor 46-269
Region 1 Review

Corridor 46-269

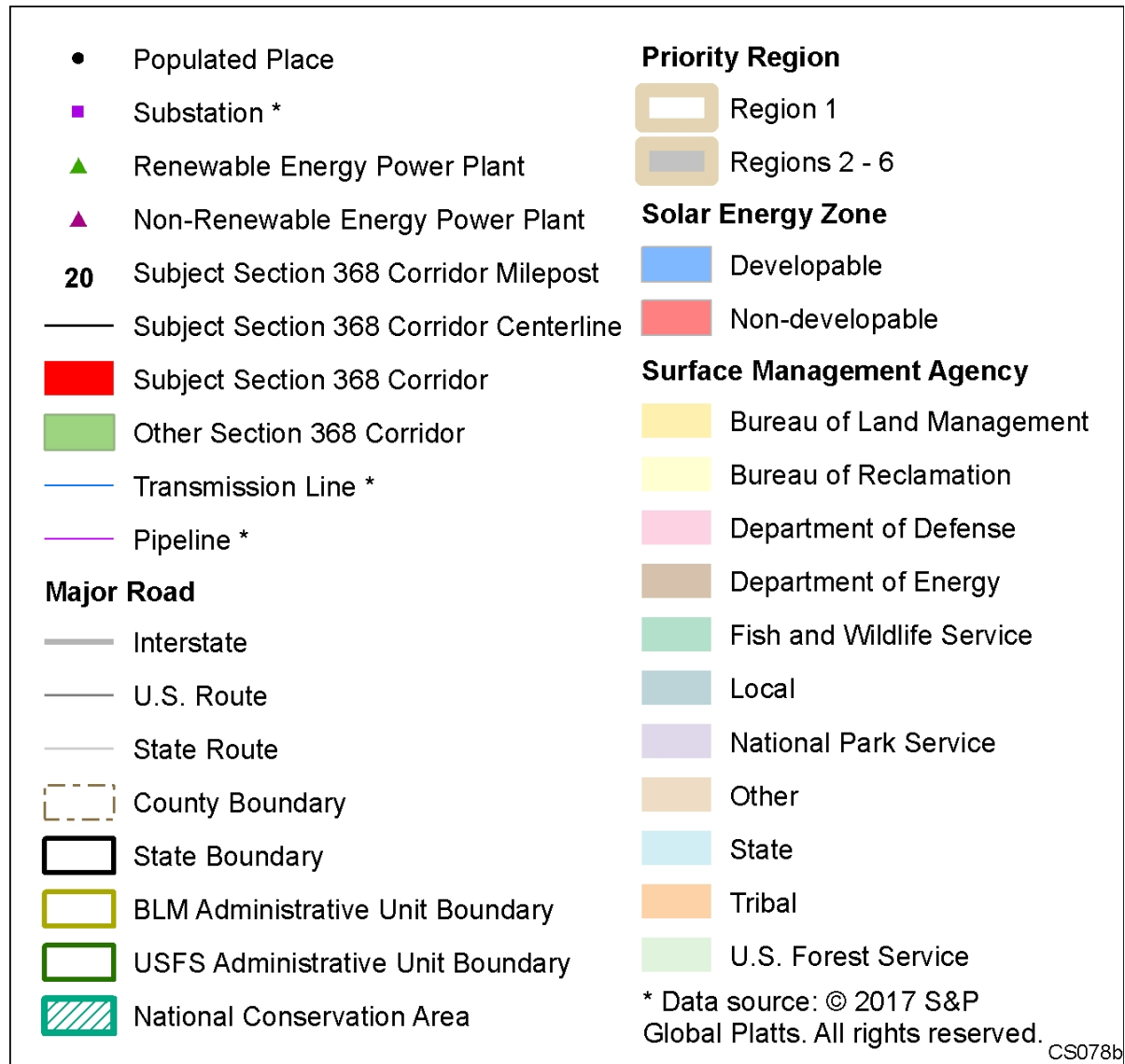
Bill Williams Corridor

Introduction

Corridor 46-269 extends northwest to southeast in west central Arizona, from the junction with Corridors 41-46 and 46-270, south of Franconia, to west of Phoenix (Figures 1 and 2). Federally designated portions of this corridor are entirely on BLM-administered land. The corridor comprises a 5,280-ft-wide section from MP 0 to MP 42.9 and a 10,560-ft-wide section from MP 42.9 to MP 93.7. Corridor 46-269 is designated multi-modal and can therefore accommodate both electrical transmission and pipeline projects, except for the section from MP 0.0 to MP 13.8, which is designated as underground only. The corridor spans 93.7-miles, with 66 miles designated on BLM-administered lands. The corridor's area is 65,704 acres or 103 square miles. This corridor is within Mohave, La Paz, and Maricopa counties in Arizona, under the jurisdiction of the Kingman, Lake Havasu, and Hassayampa Field Offices, and the Colorado River District and Phoenix District. The corridor is partially in Region 1 for 59 miles; however, 34.7 miles of this corridor, from MP 59.0 to MP 93.7, are in Region 2.



Figure 1. Corridor 46-269



Key

Detailed map displaying Corridor 23-25 and existing infrastructure. Renewable and non renewable energy power plants are identified. The map is color coded by surface management agency.

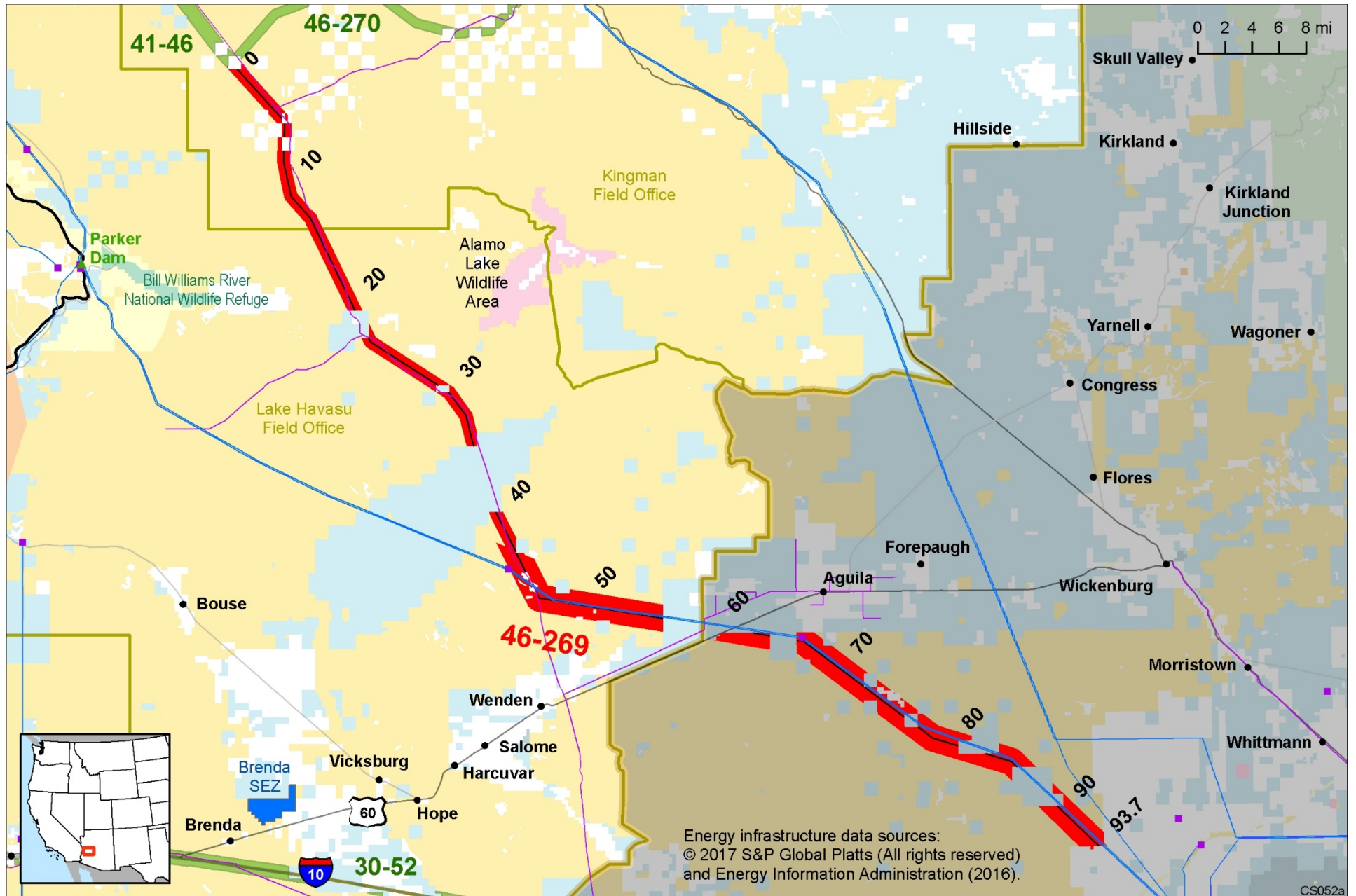


Figure 2. Corridor 46-269, Including Existing Energy Infrastructure

Corridor Rationale

During scoping for the WWEC PEIS, routes generally following this corridor were suggested by the Arizona Public Service Company, National Grid, and Western Utility Group. The corridor was designated to include existing infrastructure and to provide a pathway for additional energy transport, including electricity transmission from the Palo Verde Nuclear Generating Station.

Existing Infrastructure: The entire corridor is occupied by existing infrastructure. Current infrastructure occupying parts of the corridor includes three Western Area Power Administration 230-kV transmission lines from MP 43.6 to MP 93.7, a Sempra natural gas pipeline from MP 0 to MP 47.4, and an El Paso Natural Gas Company pipeline from MP 0 to MP 4.1.

Potential Future Development: Neither the Kingman, the Lake Havasu, nor the Hassayampa Field Office had any comments about this corridor during interviews for the Corridor Study. No planned transmission lines within the corridor are shown in the Platts data. Proposed out-of-state transmission projects that could affect this corridor include the SunZia Southwest Transmission Project and Southline Transmission Project. The corridor is adjacent to a DLA, that is, a REDA identified in the RDEP ROD, and overlaps the corridor between MP 40 and MP 42 and MP 5 and MP 56, providing opportunity for the corridor to accommodate renewable energy development and transmission.

Corridor of Concern Status

Corridor 46-269 is a corridor of concern. Concerns regarding proposed and designated Wilderness areas, Wild and Scenic Rivers, and ACECs were identified in the Settlement Agreement. These issues are highlighted in yellow in the Corridor Analysis table below.

Corridor Abstract Update

New data have been added to the Section 368 mapping tool since the release of the draft abstracts in September 2016. A GIS view identifying high-, medium-, and low-conflict areas consistent with the screening criteria in 43 CFR 2804.35(a)–(c) has also been added to the mapping tool. A complete description of the mapping tool and the high-, medium-, and low-conflict areas and a list of the GIS data sources are included in the 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 special-status species, lands with wilderness characteristics, military aviation, specially designated areas, visual resources, and IOPs.

Revisions, deletions, or additions to Section 368 energy corridors would be made only during the land use planning process through a plan amendment 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 proposed and designated Wilderness areas, Wild and Scenic Rivers, ACECs, Sonoran Desert Tortoise Category I or II Habitat, and areas of “very high” risk to the number and magnitude of flowline crossings. There were no suggestions for corridor revision, deletion, or addition in response to the release of the draft abstract. On the basis of Agency analysis of these issues, corridor revisions, deletions or additions are not recommended for Corridor 46-269.

Corridor Analysis

The corridor analysis table below identifies concerns affecting Corridor 46-269, 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 Constraints

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

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 46-269 – 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> | | | | | | | |
| 46-269 .001 | BLM | Lake Havasu FO and Kingman FO | La Paz and Mohave, AZ | Renewable-energy potential | Entire corridor | RFI: corridor could be a pathway to Las Vegas or California, but is not identified as a priority by Arizona utilities or solar developers. | Opportunity for the corridor to accommodate transmission tied to renewable-energy development. |
| 46-269 .002 | BLM | Lake Havasu FO | La Paz, AZ | Designated leasing area (DLA), i.e., Renewable Energy Development Area (REDA) | MP 40 to MP 42 and MP 54 to MP 56. | GIS Analysis: corridor is adjacent to a REDA, per the RDEP | The REDA provides opportunity for the corridor to accommodate transmission tied to renewable-energy development. |

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|--|--------|-------------------------------------|-----------------------------|--|--|--|--|
| ID | Agency | Agency Jurisdiction | County | Primary Concern/ Opportunity | Corridor Location (by Milepost [MP]) | Source: Context | Agency Review and Analysis |
| ENERGY PLANNING CONCERNS | | | | | | | |
| <i>Corridor Alignment and Spacing</i> | | | | | | | |
| 46-269 .003 | BLM | Kingman FO and Lake Havasu FO | Mohave and La Paz, AZ | Natural gas pipeline | MP 11.6 to MP 20.5 and MP 25.8 to MP 31.6. | GIS Analysis: Natural gas pipeline crosses from one side of the corridor to the other. This may reduce the potential for additional development. | Existing infrastructure would not affect future use of the corridor. Proposed project siting and collocation alternatives to address impacts would be analyzed as part of the project-specific environmental review required under NEPA and other Federal laws. |
| LAND MANAGEMENT RESPONSIBILITIES AND ENVIRONMENTAL CONCERNS | | | | | | | |
| <i>Ecology: Special Status Animal Species</i> | | | | | | | |
| 46-269 .004 | BLM | Lake Havasu FO | La Paz and Mohave, AZ | Southwestern Willow Flycatcher critical habitat. | MP 21.6 to MP 21.9 | RFI: Southwestern Willow Flycatcher critical habitat, in an undesignated corridor segment, is 656 ft from corridor. To minimize habitat destruction, all efforts should be made during project proposal and design to minimize contact with, and, if possible, avoid this critical habitat. | If BLM determined that there would be an effect, it would consult under ESA Sec. 7(a)(2) at the project level. |
| 46-269 .005 | BLM | Lake Havasu FO | La Paz and Mohave, AZ | Northern Mexican Gartersnake critical habitat | MP 21.6 to MP 21.9 | GIS Analysis: Northern Mexican Gartersnake critical habitat in undesignated corridor segment. | If BLM determined that there would be an effect, it would consult under ESA Sec. 7(a)(2). |
| 46-269 .006 | BLM | Lake Havasu FO | La Paz, AZ | Sonoran Desert Tortoise Category I or II Habitat | MP 28.6 to MP 32.8 and MP 43.1 to MP 49.2 | RFI; Comment on corridor abstract: Intersects Sonoran Desert Tortoise Category I or II Habitat. Reroute to avoid siting new facilities in this habitat where there is no existing transmission and minimize transmission siting in these areas. | Sonoran Desert Tortoise is not listed but is a BLM sensitive species subject to conservation measures. Because of the extent of tortoise habitat, rerouting is often not viable. The corridor follows existing BLM corridors designated through the RMP process, which followed existing utilities. While Desert Tortoise habitat exists throughout corridor, there is no nearby alternative route that would avoid |

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| ID | Agency | Agency Jurisdiction | County | Primary Concern/ Opportunity | Corridor Location (by Milepost [MP]) | Source: Context | Agency Review and Analysis |
| | | | | | | | Desert Tortoise habitat, connectivity, and undeveloped areas. |
| 46-269 .007 | BLM | Lake Havasu FO | La Paz, AZ | Connectivity flowlines | Not specified | RFI: Scored “Very High” risk to connectivity flowlines across the landscape and “High” risk to landscape permeability by Defenders of Wildlife. Reroute to avoid “Very High” risk to the number and magnitude of flowline crossings by WWEC segments. Where flowlines must unavoidably be crossed, minimize impact on connectivity. | Impacts on habitat connectivity would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| Hydrology: Surface Water | | | | | | | |
| 46-269 .008 | BLM | Lake Havasu FO and Kingman FO | Mohave and La Paz, AZ | Intermittent Stream: Castaneda Wash, Cunningham Wash (in undesignated gap in the corridor), Centennial Wash, Jackrabbit Wash | MP 3.2, MP 34.6, and MP 52.6 to MP 55.0 | GIS Analysis. | Linear ROWs can either span intermittent streams or be buried underneath them. |
| Lands and Realty: Rights-of-Way and General Land Use | | | | | | | |
| 46-269 .010 | BLM | Kingman FO and Lake Havasu FO | Mohave and La Paz, AZ | Land ownership | Scattered over full corridor extent | GIS Analysis: 128 acres were originally designated as part of this corridor, but are on private or state land, according to the 5/12/2015 version of Surface Management Agency data. | BLM would consider adjusting the corridor designation in a future RMP amendment to be consistent with the current jurisdiction, possibly during future project implementation. |
| Lands and Realty: Military and Civilian Aviation | | | | | | | |
| 46-269 .011 | BLM | Kingman FO and Lake Havasu FO | Mohave and La Paz, AZ | Military Training Route – Visual Route | MP 32 to MP 36 | GIS Analysis. Comment on corridor abstract: Military training route (VR-1268) with floor of 200 ft AGL. Potential for an obstruction in airspace used for high-speed, | DoD recommends that 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 |

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| ID | Agency | Agency Jurisdiction | County | Primary Concern/ Opportunity | Corridor Location (by Milepost [MP]) | Source: Context | Agency Review and Analysis |
| | | | | | | low-altitude military aircraft operations, which presents a potential safety risk. | RODs regarding coordination with DoD would be required. |
| 46-269 .012 | BLM | Kingman FO and Lake Havasu FO | Mohave and La Paz, AZ | Military Training Route – Instrument Route | MP 4 to MP 10, MP 32 to MP 37.0. MP 46 to MP 59 | GIS Analysis. Comment on corridor abstracts: Military training route (IR-213 and IR-214) 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. Military training route (IR-250) 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 that structures remain below the height of existing structures. Taller structures, over 200 ft AGL, will require further analysis for operational and safety impacts. Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. Adherence to IOP 1 under Project Planning in the WWEC PEIS RODs regarding coordination with DoD would be required. |
| Lands with Wilderness Characteristics | | | | | | | |
| 46-269 .015 | BLM | Kingman FO | Mohave, AZ | Citizens Proposed Wilderness units | Not specified | Settlement Agreement; RFI: Reroute to avoid concern. Intersects the edge of or overlaps several CPW units, including Planet, Aquarius Cliffs, Lower Burro Creek, Black Butte East, Black Butte West, Harcuvar Mountains Additions, East Belmont Mountains, West Belmont Mountains, Harquahala Addition, the proposed Harquahala NCA, and two units of the Swansea Additions. Comment on corridor abstract: Transmission and pipeline development in lands with wilderness characteristics is not | Prior to designating new corridors or prior to conducting surface-disturbing activities in areas of designated corridors, or making recommended corridor revisions, deletions, or additions, the BLM will be required to follow the procedures as outlined in BLM Manual 6310 (Conducting Wilderness Characteristics Inventory on BLM Lands [Public]) and 6320. |

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|---|--------|-------------------------------|-----------------------|---|--|--|---|
| ID | Agency | Agency Jurisdiction | County | Primary Concern/ Opportunity | Corridor Location (by Milepost [MP]) | Source: Context | Agency Review and Analysis |
| | | | | | | appropriate, and WWEC should be excluded from these areas. The Agencies should identify lands with wilderness characteristics as a constraint and ensure that their recommendations for corridor revision, deletion, or addition and mitigation measures address them. | |
| Specially Designated Areas | | | | | | | |
| 46-269 .016 | BLM | Kingman FO | Mohave, AZ | Aubrey Peak Wilderness Area | Abuts corridor on north side, MP 7.4 to MP 12.4. | GIS Analysis: Reroute to avoid concern. | When Wilderness was designated in 1990 under the Arizona Desert Wilderness Act, many ROWs served as boundaries to the Wilderness Areas and pre-date the Wilderness designation. Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 46-269 .009 | BLM | Lake Havasu FO | Mohave, AZ | Wild and Scenic River Eligible Segment: Bill Williams River | MP 21.8 | GIS Analysis: Bill Williams River crosses in an undesignated gap in the corridor. Reroute to avoid concern. | The Bill Williams River crosses the corridor at a segment eligible for Wild and Scenic River status, but the segment has not been officially designated by Congress. Designation is possible but not being considered at this time. If designation occurs, a management plan would be developed within 3 years. Existing corridor designations would be a consideration in this planning process. |
| 46-269 .017 | BLM | Kingman FO and Lake Havasu FO | La Paz and Mohave, AZ | Three Rivers ACEC | Small portions intersect corridor at MP 20.6 to MP 22.8. | RFI: Reroute to avoid concern. | While the corridor crosses specially designated areas, there is no nearby alternative route that would avoid both specially designated areas and |

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| ID | Agency | Agency Jurisdiction | County | Primary Concern/ Opportunity | Corridor Location (by Milepost [MP]) | Source: Context | Agency Review and Analysis |
| | | | | | | | undeveloped areas. The designated corridor follows existing BLM corridors designated in local RMPs, which followed existing utilities. Impacts would be analyzed as part of the project-specific environmental review required under NEPA and other Federal laws. |
| INTERAGENCY OPERATING PROCEDURES (IOPS, OR BEST MANAGEMENT PRACTICES) | | | | | | | |
| 46-269 .new2 | | | | Trenching | MP 0 to MP 13.8 | Comment on corridor abstract: To minimize wildlife becoming entrapped in open pipeline trenches, backfilling should occur close together; leaving trenches open at night should be avoided; and escape ramps should be constructed at least every 150 ft with slope less than 45 degrees (1:1). Trenches that have been left open overnight should be inspected and animals removed prior to backfilling. Trenching should occur in cooler months. | Best management practices would be analyzed as part of the project-specific environmental review required under NEPA and other Federal laws. |
| Visual Resources | | | | | | | |
| 46-269 .009 | BLM | Kingman FO | Mohave, AZ | VRM Class I | MP 7.4 to MP 8.3 and MP 12.1 to MP 12.6 | GIS Analysis. VRM Class I area is adjacent to corridor. | The corridor does not intersect VRM Class I areas. Impacts would be analyzed and mitigated as part of the project-specific environmental review required under NEPA and other Federal laws. |
| 46-269 .010 | BLM | Lake Havasu FO | Mohave and La Paz, AZ | VRM Class II | MP 13.9 to MP 16.0, MP 16.6 to MP 23.2, MP 25.2, and MP 27.1 to MP 27.8 | GIS Analysis. | 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 |
| 46-269 .011 | BLM | Kingman FO and Lake Havasu FO | Mohave and La Paz, AZ | VRM Class III | MP 6.7 to MP 10.3, MP 13.9 to MP 20.8, | GIS Analysis. | |

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| | | | | | MP 22.7 to MP 34.6, and MP 42.3 to MP 56.1 | | 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). |
| 46-269 .012 | BLM | Kingman FO and Lake Havasu FO | Mohave and La Paz, AZ | VRM Class IV | MP 0 to MP 6.8, MP 9.9 to MP 13.8, MP 32.4 to MP 34.0, MP 39.4 to MP 45.3, and MP 53.9 to MP 56.1 | GIS Analysis. | While VRM Class IV objectives allow for major modification to occur and management activities may dominate the view, minimizing visual 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 | | | | | | | |
| 46-269 .new3 | | | | | | Input was provided clarifying existing capacity and potential for new capacity. | 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; DoD = Department of Defense; ESA = Endangered Species Act; FO = Field Office; GIS = geographic information system; IOP = Interagency Operating Procedures; MP = milepost; NEPA = National Environmental Policy Act; PEIS = Programmatic Environmental Impact Statement; RDEP = Restoration Design Energy Project; REDA = Renewable Energy Development Area; RFI = Request for Information; RMP = Resource Management Plan; ROD = Record of Decision; ROW = right-of-way; VRM = Visual Resource Management; WWEC = West-wide Energy Corridor

Corridor 46-269
Region 2 Review

Corridor 46-269

Bill Williams Corridor

Corridor Rationale

This energy corridor provides a pathway for additional energy transport including electricity transmission from the Palo Verde Nuclear Generating Station. Input regarding alignment from Arizona Public Service Electric Company; the New Mexico Energy, Minerals, and Natural Resources Department; Trans West; and Western Transmission Protocol during the WWEC PEIS suggested following this route. There are no planned transmission or pipeline projects or pending or recently authorized ROWs for transmission line or pipeline projects within the corridor.

Corridor location (Region 2 portion; Region 1 was evaluated in Region 1 Review):

Arizona (Maricopa Co.)
BLM: Hassayampa Field Office
Regional Review Region(s): Region 1 and 2

Corridor width, length (Region 2 portion):

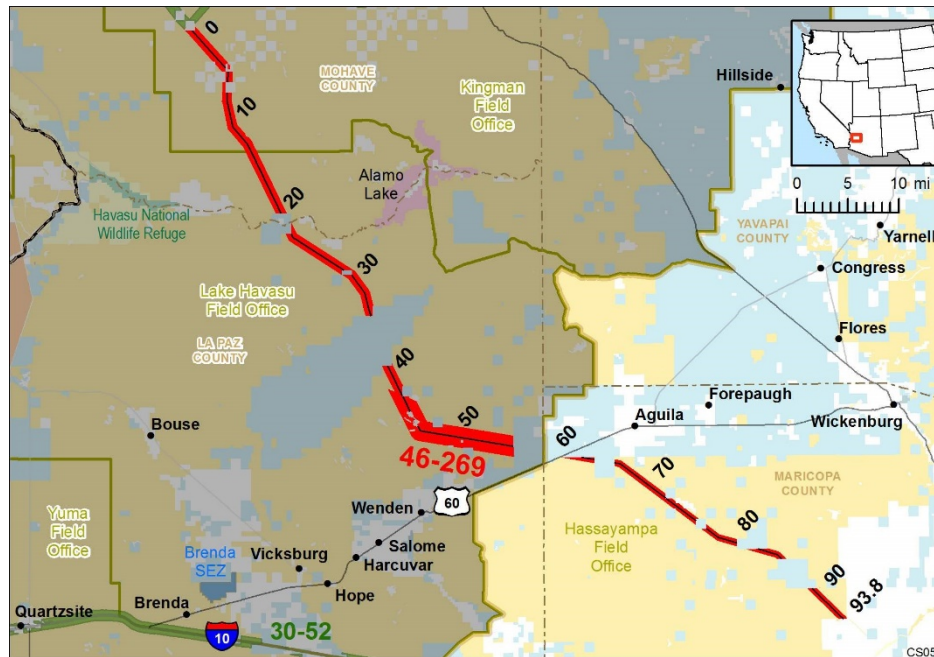
Width 3,500 ft
25.7 miles of designated corridor
34.7 mile-posted route, including gaps

Sec 368 energy corridor restrictions (Region 2 portion): (N)

- corridor is multi-modal

Corridor of concern (Region 2 portion): (Y)

- proposed and designated Wilderness areas.



Corridor history (Region 2 portion):

- Locally designated corridor prior to 2009 (Y)
- Existing infrastructure (Y)
 - Electric transmission:
 - two 230-kV lines (59 to MP 94; entire length of corridor in Region 2)
- Energy potential near the corridor (Y)
 - REDA as close as 0.1 mi between MP 83 and MP 94.
- Corridor changes since 2009 (N)

Figure 1. Corridor 46-269

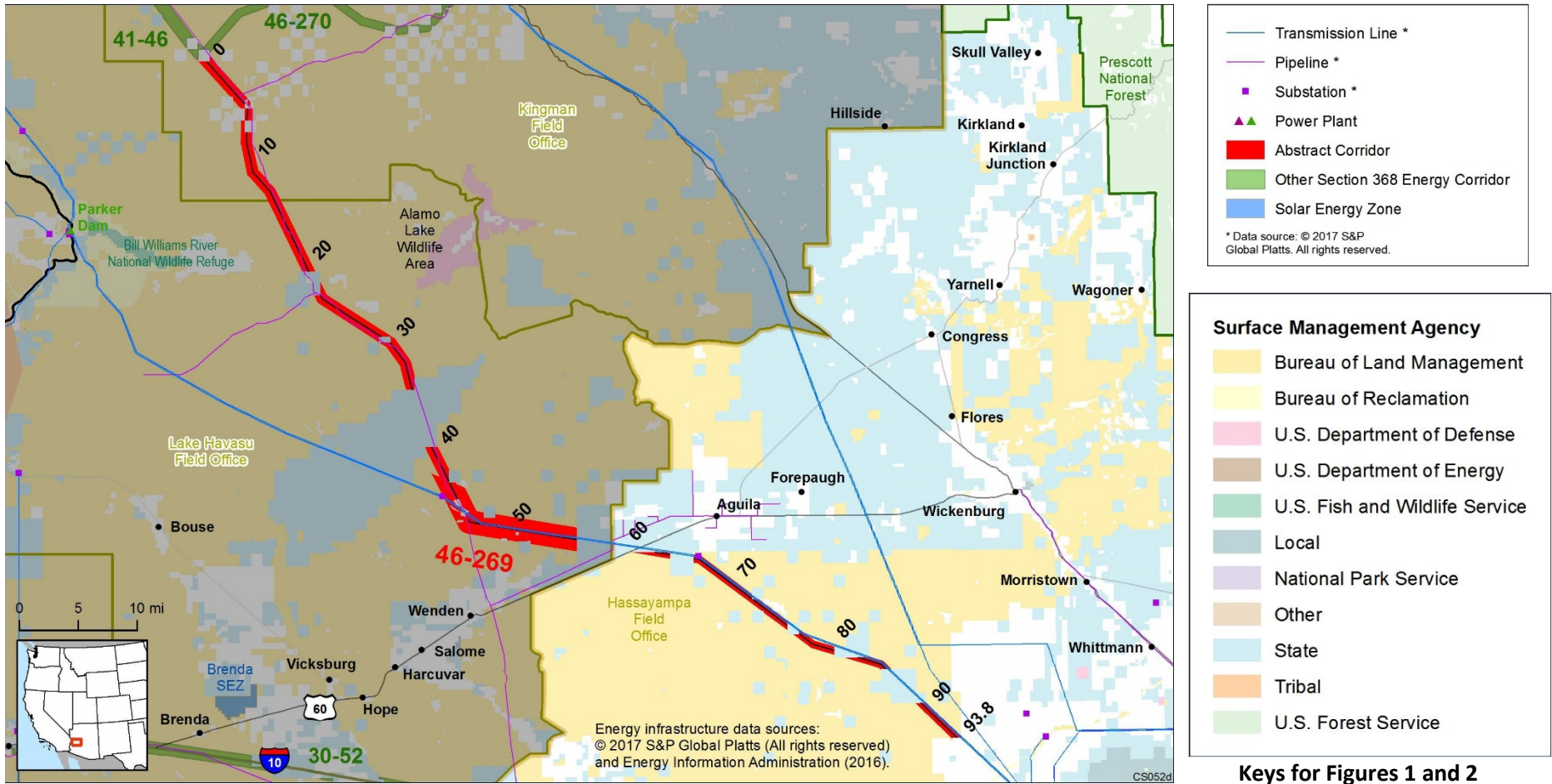


Figure 2. Corridor 46-269 and nearby electric transmission lines and pipelines (grayed out area outside of Region 2 and 3 Review)

Conflict Map Analysis

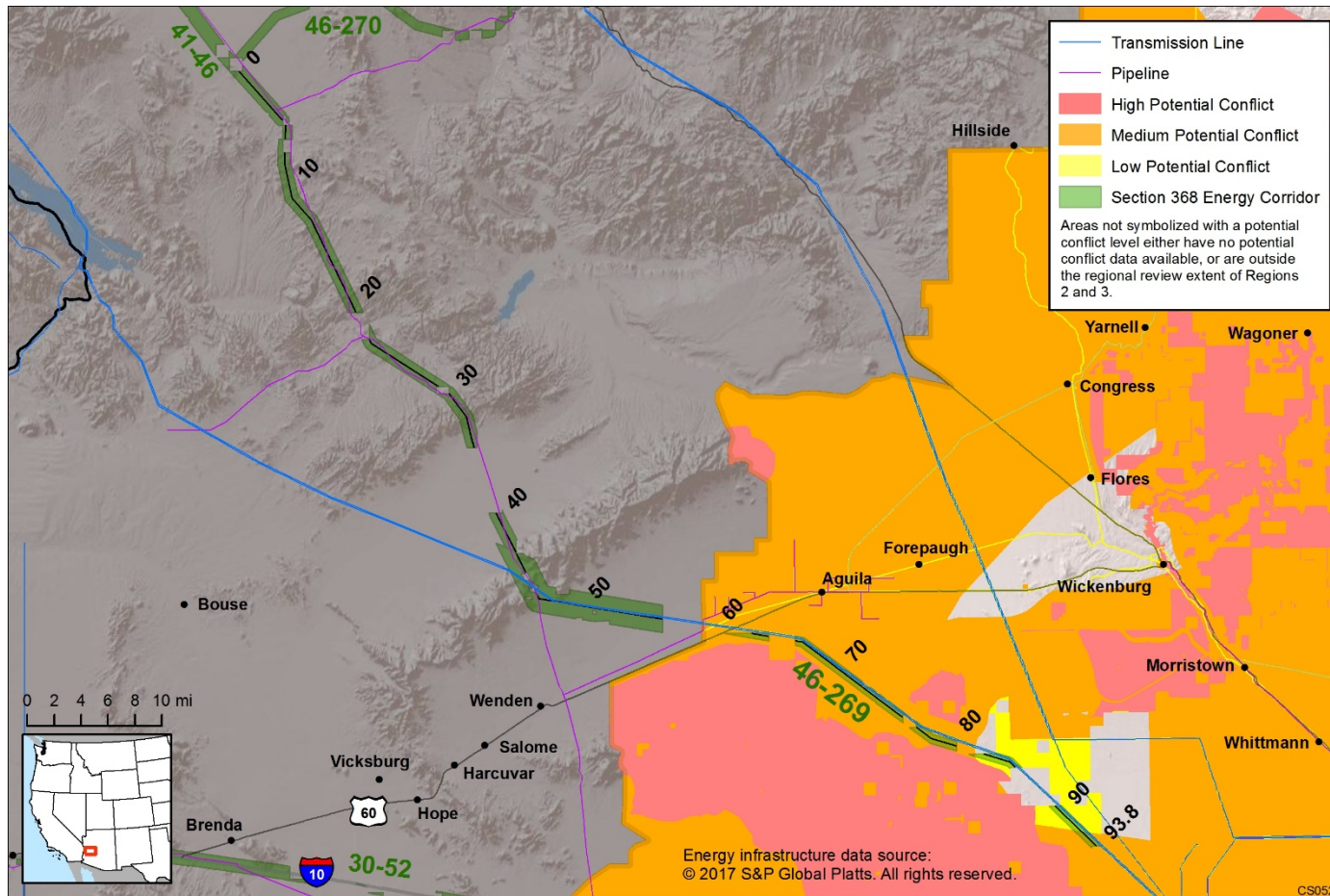


Figure 3. Map of Conflict Areas in Vicinity of Corridor 46-269

Figure 3 reflects a comprehensive resource conflict assessment developed to enable the Agencies and stakeholders to visualize a corridor’s proximity to environmentally sensitive areas and to evaluate options for routes with lower potential conflict. The potential conflict assessment (low, medium, high) shown in the figure is based on [criteria](#) found on the WWEC Information Center at www.corridoreis.anl.gov. To meet the intent of the Energy Policy Act and the Settlement Agreement siting principles, corridors may be located in areas where there is potentially high resource conflict; however, where feasible, opportunity for corridor revisions should be identified in areas with potentially lower conflict.

Visit the 368 Mapper for a full view of the Potential conflict map (<https://bogi.evs.anl.gov/section368/portal/>)

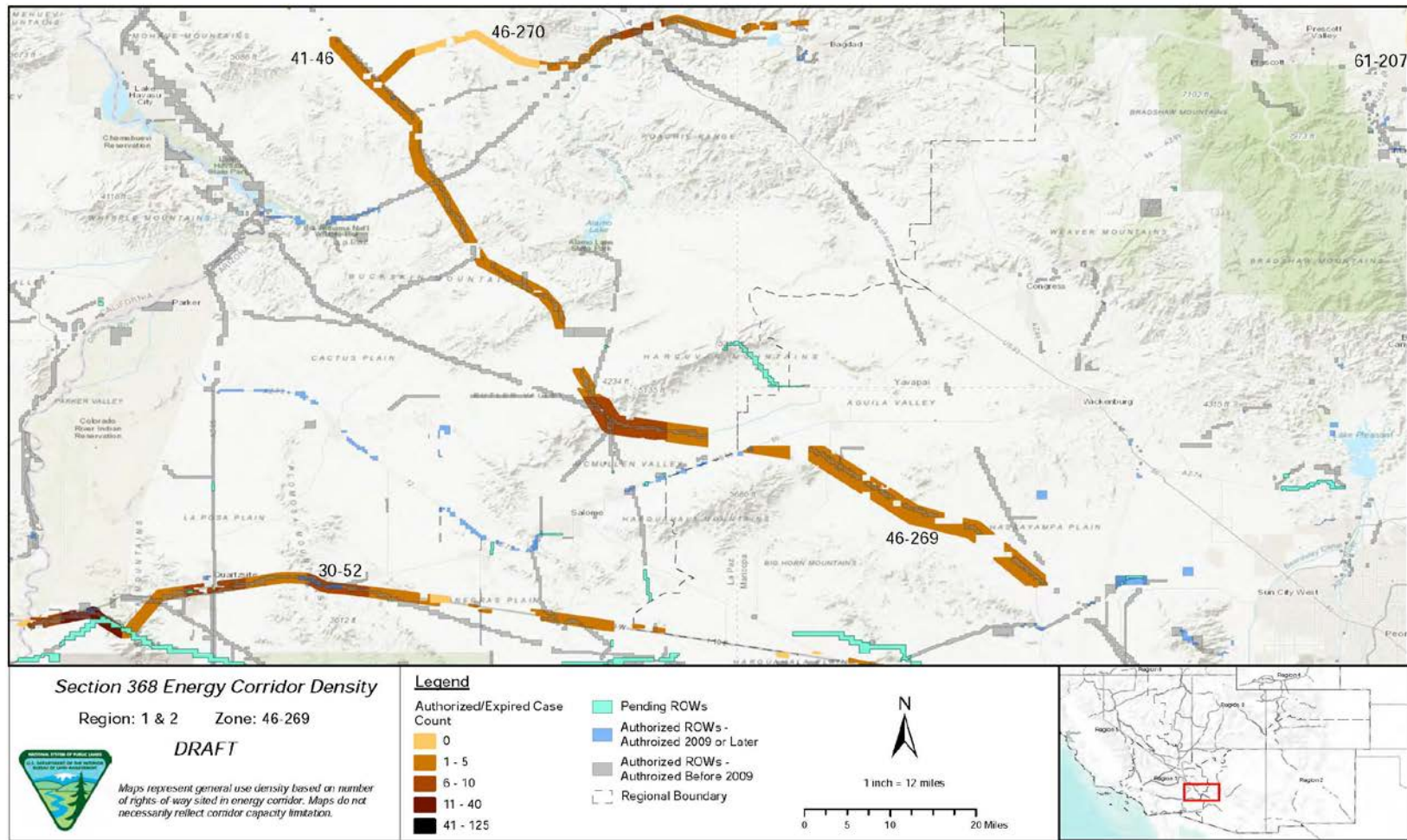


Figure 4. Corridor 46-269, Corridor Density Map

Figure 4 shows the density of energy use to assist in evaluating corridor utility. ROWs granted prior to the corridor designation (2009) are shown in grey; ROWs granted after corridor designation are shown in blue; and pending ROWs under current review for approval are shown in turquoise. Note the ROW density shown for the corridor is only a snapshot that does not fully illustrate remaining corridor capacity. Not all ROWs have GIS data at the time this abstract was developed. BLM and USFS are currently improving their ROW GIS databases and anticipate more complete data in the near future.

General Stakeholder Feedback on Corridor Utility

Stakeholders did not provide specific input on corridor utility.

Corridor Review Table

The table below captures details of the Agencies’ review of the energy corridor. Consideration of the general corridor siting principles of the 2012 Settlement Agreement framed each corridor review, to identify potential improvements to maximize corridor utility and minimize impacts on the environment. Initial Agency analysis is provided to facilitate further discussion during stakeholder workshops.

| CORRIDOR 46-269 REVIEW TABLE | | | | | | | |
|--------------------------------------|--------|---------------------|--------------|---------------------------------|--------------------------------------|--|---|
| ID | Agency | Agency Jurisdiction | County | Primary Issue | Corridor Location (by Milepost [MP]) | Source | Agency Review and Analysis ^{1, 2} |
| ENVIRONMENTAL RESOURCE ISSUES | | | | | | | |
| <i>Specially Designated Areas</i> | | | | | | | |
| 46-269 .001 | BLM | Hassayampa FO | Maricopa, AZ | Harquahala Mountains Wilderness | MP 64 to MP 67 (near) | Settlement Agreement RFI: re-route to avoid proposed and designated Wilderness. GIS Analysis: Wilderness Area as close as 1.5 mi south of corridor. | Existing infrastructure and corridor was present on margin of the Wilderness Area at time of Congressional designation. Wilderness is an important resource that is considered carefully during corridor planning. The corridor’s current location does not intersect the Wilderness Area and best meets the siting principles. (1) |
| 46-269 .002 | BLM | Hassayampa FO | Maricopa, AZ | Harquahala ACEC | MP 62 to MP 69 | GIS Analysis: ACEC and corridor intersect. | Development in the corridor can occur within the ACEC. In the RMP, BLM encourages new ROWs to be located within designated corridors. The Agencies could also consider shifting the corridor outside of the ACEC, aligning with the existing 230-kV transmission line as the southern border of the corridor rather than the centerline (2) |
| 46-269 .003 | BLM | Hassayampa FO | Maricopa, AZ | Black Butte ACEC | MP 77 to MP 78 | GIS Analysis. ACEC and corridor intersect. | Development in the corridor can occur within the ACEC. In the RMP BLM encourages new ROWs to be located within designated corridors. The Agencies could also consider shifting the corridor outside of the ACEC, aligning with the existing 230-kV |

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| ID | Agency | Agency Jurisdiction | County | Primary Issue | Corridor Location (by Milepost [MP]) | Source | Agency Review and Analysis ^{1,2} |
| | | | | | | | transmission line as the northern border of the corridor (2) |
| 46-269 .004 | BLM | Hassayampa FO | Maricopa, AZ | Proposed Belmont-Harquahala Mountains NCA | Not specified. | RFI: proposed Harquahala NCA. | The proposed NCA has not been designated and is therefore not a consideration at the time of this review. (1) |
| Ecology | | | | | | | |
| 46-269 .005 | BLM | Hassayampa FO | Maricopa, AZ | Sonoran Desert Tortoise Category I and II management habitat (BLM sensitive species, not listed under ESA) | MP 62 to MP 69 and MP 76 to MP 82 MP 61 to MP 83 Not specified. | RFI: re-route to avoid siting new facilities in Sonoran Desert Tortoise Category I and II management habitat. Minimize impacts from new energy infrastructure development to the maximum extent practicable, and where impacts are unavoidable, utilize compensatory mitigation pursuant to BLM policy. Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within four miles of Category I and II habitat. Comment on abstract: impacts to sensitive desert tortoise habitat has the potential to adversely impact use of MCAGCC Twentynine Palms and Barry M. Goldwater Range for ground-to-ground, air-to-ground, and maneuver training, as well as use of transit routes near, around, or between DoD ranges. Comment on abstract: re-route to avoid siting new facilities in Sonoran Desert Tortoise | The Bradshaw-Harquahala RMP states that no net loss will occur in the quality or quantity of Category I and II Desert Tortoise habitat to the extent practicable. BLM would address and include mitigation measures in decision documents to offset the loss of quality or quantity of Category I, II, and III tortoise habitats. Future ROWs in the corridor would be mitigated in accordance with the Desert Tortoise Range-wide Plan and other applicable policy guidance. (3) A corridor revision would not be a likely solution to resolve this issue because there is already existing infrastructure within the corridor. Also, the corridor location within the current range of the tortoise is not easily resolved or avoided by corridor-level planning because alternate routes would still require siting through tortoise management habitat. Further analysis to determine the presence of the species and its habitat occurring within the area will be considered outside of corridor-level planning. (3) |

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| | | | | | | Category I and II management habitat. | |
| 46-269 .006 | BLM | Hassayampa FO | Maricopa, AZ | Connectivity flowlines | Not specified. | RFI: re-route to avoid "Very High" risk to the number and magnitude of flowline crossings by WWEC segments. Where flowlines must unavoidably be crossed, minimize impacts to connectivity. | Connectivity flowlines is not a BLM-recognized term. The Agencies are exploring an opportunity for adding an IOP related to wildlife migration corridors and habitat to ensure appropriate consideration occurs with proposed development within the energy corridor. (2) |
| Lands with Wilderness Characteristics | | | | | | | |
| 46-269 .007 | BLM | Hassayampa FO | Maricopa, AZ | Lands with wilderness characteristics | MP 91 to MP 94 | RFI: BLM-inventoried lands with wilderness characteristics not managed for protection - Harquahala Mountains. GIS Analysis: lands with wilderness characteristics over 1 mi southwest of corridor. | Management decisions for lands with wilderness characteristics are made through a land use planning effort. The BLM retains broad discretion regarding the multiple use management of lands possessing wilderness characteristics without Wilderness or WSA designations. As such, land possessing the characteristics of wilderness are not subject to the legal thresholds or other statutory obligations specified for congressionally designated Wilderness and WSAs. In locations where the BLM is not managing lands with wilderness characteristics with protective allocations, project-level planning will still consider ways to minimize or avoid impacts while meeting the purpose and need of various types of land use including energy projects. At this time, given the information available, the corridor is determined as best meeting the siting principles of the settlement agreement. (1) |
| 46-269 .008 | BLM | Hassayampa FO | Maricopa, AZ | Citizens' proposed wilderness | Not specified. | RFI: Citizens' proposed wilderness - Harquahala | The BLM's current inventory findings will be used in land use planning analyses related to the revision, |

| CORRIDOR 46-269 REVIEW TABLE | | | | | | | |
|------------------------------|--------|---------------------|--------------|---------------|---|---|---|
| ID | Agency | Agency Jurisdiction | County | Primary Issue | Corridor Location (by Milepost [MP]) | Source | Agency Review and Analysis ^{1, 2} |
| | | | | | MP 61 to MP 64 MP 77 to MP 80 MP 81 MP 81 to MP 85 MP 91 to MP 93 | <p>Wilderness Area Addition, West Belmont Mountains</p> <p>Comment on abstract: corridor intersects with BLM wilderness-quality lands:</p> <p>1,162 acres overlap (Harquahala WA Addition-citizens' wilderness proposal).</p> <p>1,103 acres overlap (Black Butte West-citizens' wilderness proposal).</p> <p>223 acres overlap (Black Butte East-citizens' wilderness proposal).</p> <p>2,150 acres overlap (West Belmont Mountains-citizens' wilderness proposal).</p> <p>1,117 acres overlap (East Belmont Mountains-citizens' wilderness proposal).</p> <p>Exclude energy corridors from all wilderness-quality lands.</p> | <p>deletion, or addition to the energy corridors. Consideration of citizens' wilderness proposals is beyond the Agencies scope and authority. As such, the corridor's current location best meets the siting principles. (1)</p> <p>At such time that citizens' inventory information is formally submitted, the BLM will compare its official Agency inventory information with the submitted materials, determine if the conclusion reached in previous BLM inventories remains valid, and update findings regarding the lands ability to qualify as wilderness in character.</p> |
| Visual Resources | | | | | | | |
| 46-269 .009 | BLM | Hassayampa FO | Maricopa, AZ | VRM Class I | MP 64 to MP 67 | GIS Analysis: VRM Class I as close as 1.5 mi south of corridor. | The corridor does not cross VRM Class I areas. (1) |
| 46-269 .010 | BLM | Hassayampa FO | Maricopa, AZ | VRM Class II | MP 79 to MP 81 | GIS Analysis: VRM Class II areas are adjacent to corridor. | The corridor does not cross VRM Class II areas. (1) |
| 46-269 .011 | BLM | Hassayampa FO | Maricopa, AZ | VRM Class III | MP 60 to MP 69 | GIS Analysis: VRM Class III areas and corridor intersect. | VRM Class III allows for moderate change to the characteristic landscape, although minimizing visual contrast remains a requirement. Management activities may attract the attention of |

| CORRIDOR 46-269 REVIEW TABLE | | | | | | | |
|---------------------------------------|--------|---------------------|--------------|---------------|--------------------------------------|---|---|
| ID | Agency | Agency Jurisdiction | County | Primary Issue | Corridor Location (by Milepost [MP]) | Source | Agency Review and Analysis ^{1,2} |
| | | | | | | | the casual observer, but shall not dominate the view. (1) |
| 46-269 .012 | BLM | Hassayampa FO | Maricopa, AZ | VRM Class IV | MP 60 to MP 62 and MP 69 to MP 94 | GIS Analysis: VRM Class IV areas and corridor intersect. | The existing corridor location best meets the siting principles. (1) |
| Land Use Concerns | | | | | | | |
| Military and Civilian Aviation | | | | | | | |
| 46-269 .013 | BLM | Hassayampa FO | Maricopa, AZ | MTR SUA - MOA | MP 59 to MP 75 | GIS Analysis: MOA and corridor intersect | The concern related to MTRs is noted and the adherence to an existing IOP regarding coordination with DoD would be required to ensure this potential conflict is considered at the appropriate time. In addition, there is an opportunity to consider a revision to the existing IOP to include height restrictions for corridors in the vicinity of DoD training routes. DoD recommends structures remain below 200' AGL. Taller structures will require further analysis for operational and safety impacts. (2) |
| 46-269 .014 | BLM | Hassayampa FO | Maricopa, AZ | MTR – IR | MP 59 to MP 63 | GIS Analysis: IR and corridor intersect. Comment on abstract: MTR (IR-250) 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. | |
| 46-269 .015 | BLM | Hassayampa FO | Maricopa, AZ | MTR – VR | MP 92 to MP 94 | GIS Analysis: VR and corridor intersect. | |

¹ Projects proposed in the corridor would be reviewed during their ROW application review process and would adhere to Federal laws, regulations, and policy.

² (1) = confirm existing corridor best meets siting principles; (2) = identify opportunities to improve corridor placement or IOPs; (3) = acknowledge concern not easily resolved or avoided by corridor-level planning.

Abstract Acronyms and Abbreviations

ACEC = Area of Critical Environmental Concern; BLM = Bureau of Land Management; DoD = Department of Defense; ESA = Endangered Species Act; FO = Field Office; GIS = geographic information system; IOP = interagency operating procedure; IR = Instrument Route; MCAGCC = Marine Corps Air Ground Combat Center; MOA = Military Operations Area; MP = milepost; MTR = Military Training Route; NCA = National Conservation Area; PEIS = Programmatic Environmental Impact Statement; REDA = renewable energy development area; RFI = request for information; RMP = Resource Management Plan; ROW = right-of-way; SUA = Special Use Airspace; USFS = U.S. Forest Service; VR = Visual Route; VRM = Visual Resource Management; WWEC = West-wide Energy Corridor.