

# Corridor 81-213

## Las Cruces-Tucson Corridor

### Corridor Rationale

Input regarding alignment from the American Wind Energy Association; Kinder Morgan; the New Mexico Energy, Minerals, and Natural Resources Department; and the Western Utility Group during the WWEC PEIS suggested following this route. There are two planned 500-kV transmission lines that generally follow the path of the corridor from MP 76 to MP 99 and MP 125 to MP 145.3, respectively. The BLM has one pending ROW application for a transmission line within the corridor from MP 1.1 to MP 2.1 and there is one pending or recently authorized transmission line ROW within the corridor between MP 90 to MP 96. A recently authorized transmission line project intersects the corridor at two locations.

#### Corridor location:

Arizona (Cochise Co.)

New Mexico (Doña Ana, Grant, Hidalgo, and Luna Co.)

BLM: Safford Field Office (Arizona) and Las Cruces District Office (New Mexico)

Regional Review Region(s): Region 2

#### Corridor width, length:

Width 3,500 ft

51.4 miles of designated corridor

145.3 mile-posted route, including gaps

#### Sec 368 energy corridor restrictions: (N)

- corridor is multi-modal

#### Corridor of concern (N)

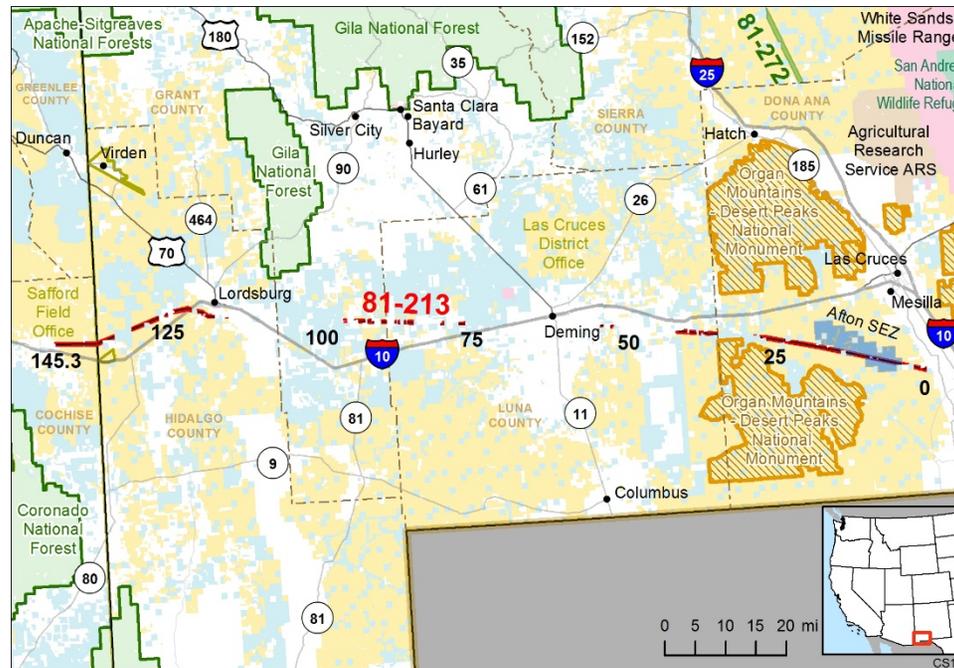


Figure 1. Corridor 81-213

#### Corridor history:

- Locally designated corridor prior to 2009 (N)
- Existing infrastructure (Y)
  - Electric transmission:
    - 345 kV (MP 3 to MP 28)
    - 345 kV (MP 75 to MP 100)
  - Pipelines:
    - multiple natural gas (MP 0 to MP 54 and MP 76 to MP 128)
    - two refined product pipelines (MP 111 to MP 124)
- Energy potential near the corridor (Y)
  - Afton SEZ overlaps corridor (MP 4 to MP 19)
  - One natural gas power plant overlaps corridor (MP 8) and another is over 2 mi away (MP 117)
  - REDA within 5 mi (MP 145)
- Corridor changes since 2009 (N)

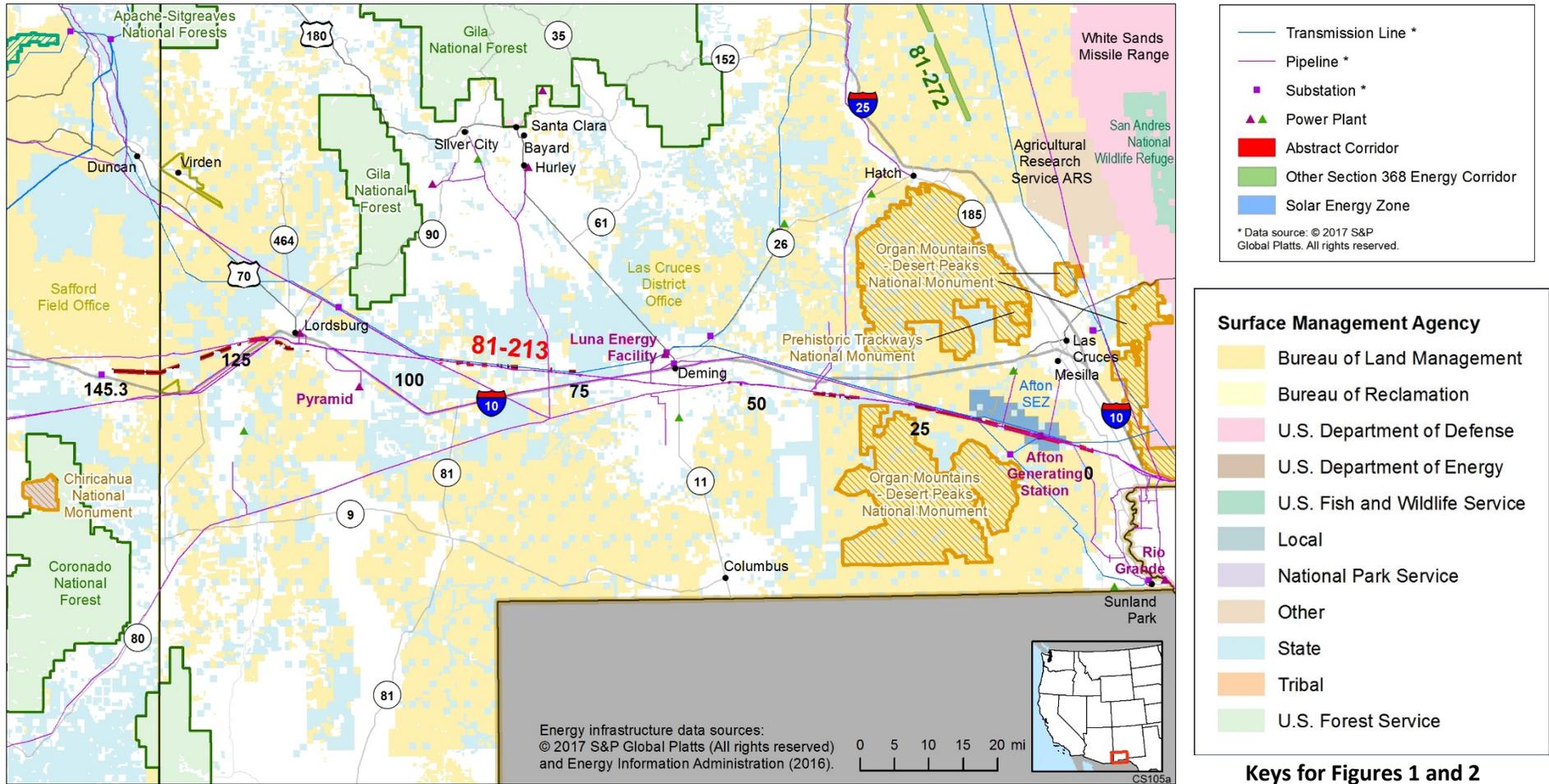


Figure 2. Corridor 81-213 and nearby electric transmission lines and pipelines

## Conflict Map Analysis

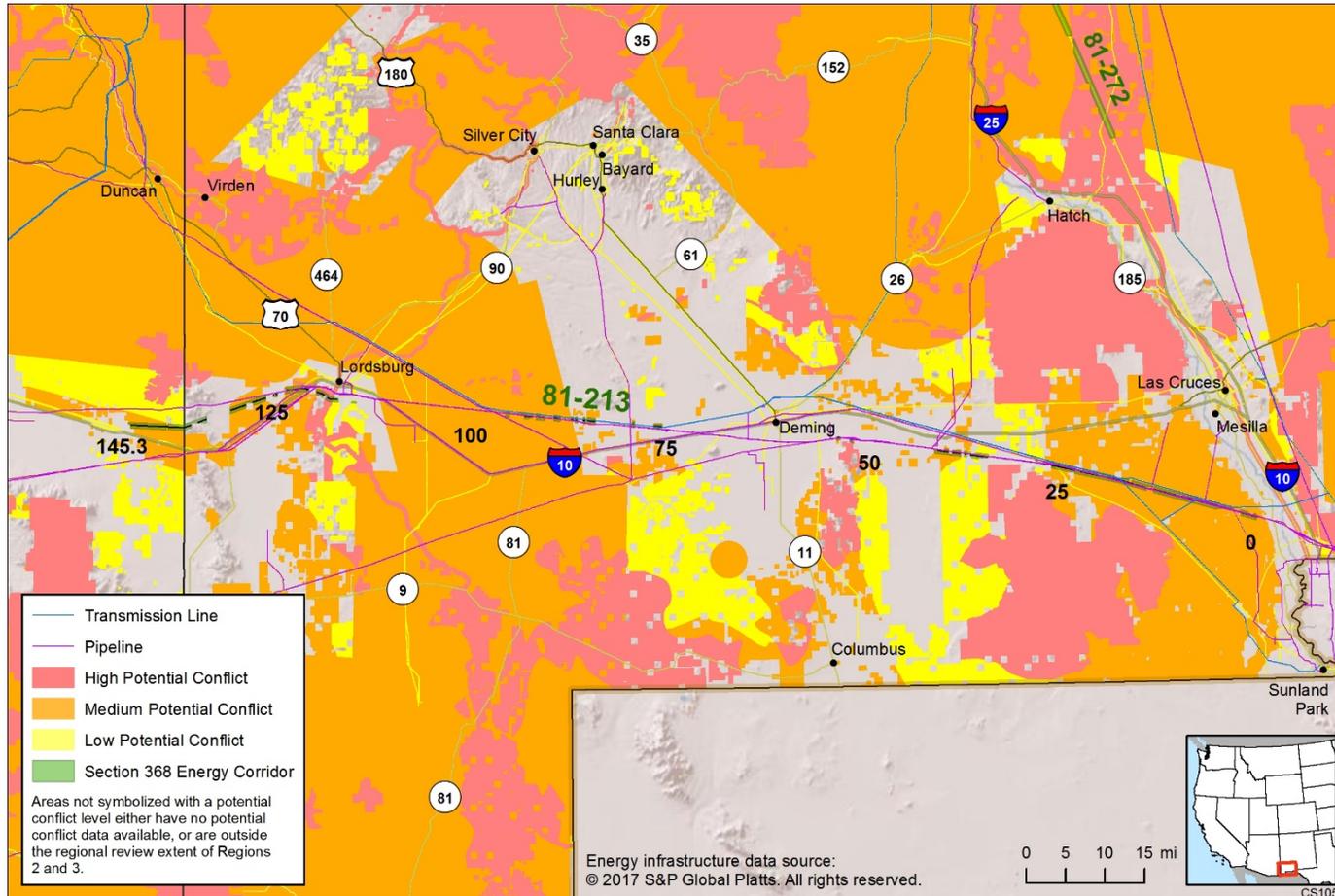
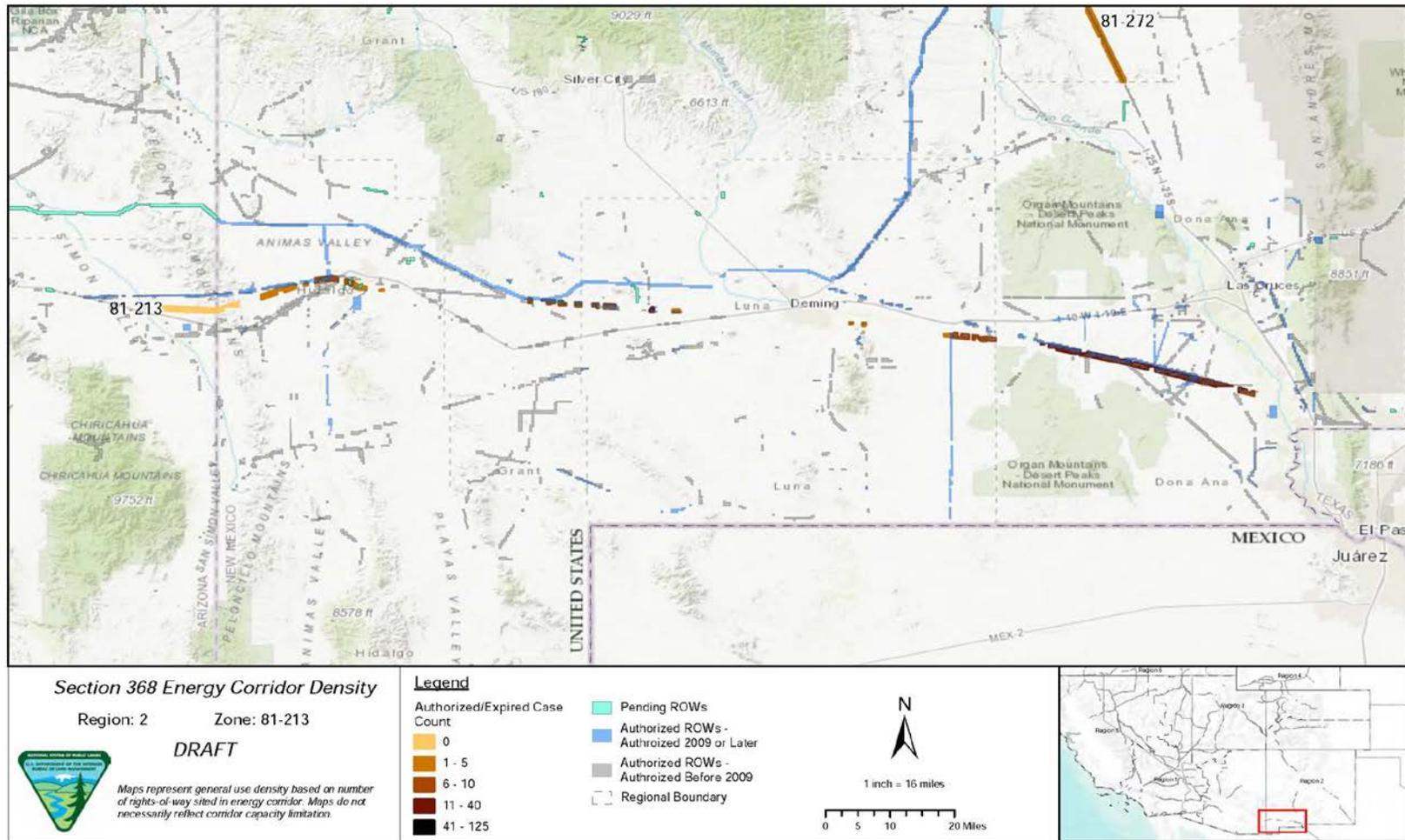


Figure 3 reflects a comprehensive resource conflict assessment developed to enable the Agencies and stakeholders to visualize a corridor’s proximity to environmentally sensitive areas and to evaluate options for routes with lower potential conflict. The potential conflict assessment (low, medium, high) shown in the figure is based on [criteria](#) found on the WWEC Information Center at [www.corridoreis.anl.gov](http://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 3. Map of Conflict Areas in Vicinity of Corridor 81-213



**Figure 4. Corridor 81-213, 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 ROW's 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 81-213 REVIEW TABLE							
ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis <sup>1,2</sup>
<b>ENVIRONMENTAL RESOURCE ISSUES</b>							
<i>Specially Designated Areas</i>							
81-213 .001	BLM	Las Cruces DO	Hidalgo, NM	CDNST	MP 119	GIS Analysis: CDNST and corridor intersect.	There is an opportunity for the Agencies to consider adding an IOP for NSTs and NHTs as well as adding an IOP related to Visual Resources to ensure appropriate consideration occurs with proposed development within the energy corridor. (2)
81-213 .002	BLM	Las Cruces DO, Safford FO	Hidalgo, NM and Cochise, AZ	Butterfield Trail (study route)	MP 118 to MP 129 (near), MP 142 to MP 144 (intersect), and MP 144 to MP 145 (adjacent)	GIS Analysis: Butterfield Trail and the corridor abut and intersect in some locations. The Butterfield Trail is as close as 1,100 ft from the corridor at other locations.	The Mimbres RMP identifies the Butterfield Trail as a ROW avoidance area with the special stipulation that a new facility will not be located within 0.25 mi of any stage station on the Trail. (3)  There is an opportunity for the Agencies to consider adding an IOP for NSTs and NHTs as well as adding an IOP related to Visual Resources to ensure appropriate consideration occurs with proposed development within the energy corridor. (2)
81-213 .003	BLM	Las Cruces DO	Doña Ana and Luna, NM	Organ Mountains - Desert Peaks National Monument	MP 25 to MP 29 (near) and MP 35 to MP 37 (near)	GIS Analysis: National Monument as close as 1 mi from corridor.	National Monuments are an important resource that are considered carefully during corridor planning. The corridor’s current location does not intersect the

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							National Monument and best meets the siting principles (1).
<b>Ecology</b>							
81-213 .004				Mexican spotted owl (ESA-listed: threatened)	Not specified.	Comment on abstract: impacts on Mexican Spotted Owls should be analyzed on a finer scale.	This corridor does not appear to intersect with Mexican Spotted Owl critical habitat. Further analysis to determine the presence of all species occurring within the area will be considered outside of corridor-level planning. (3)
81-213 .005	BLM	Las Cruces DO	Hidalgo, NM	BLM sensitive species: Night-blooming Cereus (ESA-listed: endangered)	MP 118 to MP 121  MP 136	GIS Analysis: endangered species occurrence intersects corridor.  GIS Analysis: endangered species occurrence adjacent to designated corridor	Future development in the corridor may conflict with the Mimbres RMP objectives to give priority to the protection and management of habitat for known populations of Federal species, to prevent the listing of Federal candidates, and to assist in the recovery of listed species. Further analysis to determine the presence of ESA-listed species occurring within the area will be considered outside of corridor-level planning. (3)
81-213 .006	BLM	Las Cruces DO	Doña Ana, NM	BLM sensitive species: Sand Prickly Pear Cactus (ESA-listed: endangered)	MP 5 to MP 6	GIS Analysis: endangered species occurrence intersects designated corridor.	Further analysis to determine the presence of all species occurring within the area will be considered outside of corridor-level planning. (3)
81-213 .007				Chihuahua Scurfpea (ESA: under review)	Not specified.	Comment on abstract: the Chihuahua Scurfpea should be included in the species analysis.	This corridor location within the current range where these species may occur is not easily resolved or avoided by corridor-level planning because alternate routes would still require siting through the current range of these species. Further analysis to determine the presence of all species occurring within the area will be considered outside of corridor-level planning. (3)

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis <sup>1,2</sup>
81-213 .008				Wright's Marsh Thistle (ESA: candidate species)	Not specified.	Comment on abstract: impacts on the Wright's Marsh Thistle should be analyzed on a finer scale.	This corridor location within the current range where these species may occur is not easily resolved or avoided by corridor-level planning because alternate routes would still require siting through the current range of these species. Further analysis to determine the presence of all species occurring within the area will be considered outside of corridor-level planning. (3)
81-213 .009	BLM	Las Cruces DO	Hidalgo, NM	Lordsburg Playa Research Natural Area	MP 128 to MP 132  MP 125 to MP 134	GIS Analysis: corridor intersects playa.  Comment on abstract: corridor should avoid crossing the Lordsburg Playa. When the playas have water in them during the spring and fall avian migration periods, the transmission lines will create a collision hazard to water birds that fly in and out of the playa area. Recommend that the corridor be moved north around the playas which is what the Southline Transmission Project opted to do.	Future development of corridor may conflict with existing Mimbres RMP and Riparian and Aquatic Habitat Management RMPA. Construction activities in the playa that remove or destroy riparian vegetation are to be avoided in these avoidance areas.  In addition, dust from the playa cause hazardous dust events known as "brown-outs" on I-10 and have contributed to past and recent driving fatalities. NMDOT submitted an ACEC proposal to preserve land and reduce uses that contribute more dust. The ACEC proposal would be dealt with in a land use plan effort (amendment or revision).  Routing corridor through the playa may present environmental and safety concerns. The Agencies should consider opportunities for corridor revision to avoid the playa, perhaps along the recently authorized Southline Transmission Project. (2)
81-213 .010	BLM	Las Cruces DO	Doña Ana, NM	Vegetation treatment area	MP 13	Agency Input.	Vegetation treatment areas are an important consideration but further

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						GIS Analysis: Treatment area intersects designated corridor	analysis is not a consideration for corridor-level planning. (3)  Development within the corridor would require the use of National Seed Strategy for guidance in using native plant materials for reclamation and standard core indicators and standard data collection protocol to ensure vegetation reclamation success. (3)
81-213 .011	BLM	Las Cruces DO, Safford FO	Hidalgo, NM and Cochise, AZ	Wildlife habitat	MP 119 to MP 145	<p>Comment on abstract: concern about impacts to critical wildlife habitat in migration corridor for Chihuahuan Desert species. Corridor crosses a substantial region of crucial wildlife habitat near the AZ-NM border. Nearly this entire section of the corridor is designated as either a level 1 or 2 within the crucial habitat assessment.</p> <p>Revision of the corridor would be difficult given that state land occupies the less-crucial habitat immediately north of the corridor and that moving the corridor farther north would require additional revisions to avoid the lower end of the Gila National Forest. An effective revision that may help mitigate potential wildlife impacts would likely require additional corridor gaps along state land north of the existing corridor and shifting the remaining area of the corridor north onto BLM land west of Route 70. Encourage</p>	<p>Wildlife habitat is an important consideration but further analysis of this species is not a consideration for corridor-level planning. (3)</p> <p>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)</p>

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis <sup>1,2</sup>
						Agencies to consider a corridor revision that would allow for transmission from NM to AZ without sacrificing critical wildlife habitat.	
<b>Air Quality</b>							
81-213 .012	BLM	Las Cruces DO	Hidalgo, NM	Lordsburg Playa	MP 128 to MP 132	GIS Analysis: corridor intersects playa.	<p>Future development of corridor may conflict with existing Mimbres RMP and Riparian and Aquatic Habitat Management RMPA. Construction activities in the playa which remove or destroy riparian vegetation are to be avoided in these avoidance areas.</p> <p>In addition, dust from the playa causes hazardous dust events known as “brown-outs” on I-10 and have contributed to past and recent driving fatalities. NMDOT submitted an ACEC proposal to preserve land and reduce uses that contribute more dust. The ACEC proposal would be dealt with in a land use plan effort (amendment or revision).</p> <p>Routing corridor through the playa may present environmental and safety concerns. The Agencies should consider opportunities for corridor revision to avoid the playa, perhaps along the recently authorized Southline Transmission Project. (2)</p>
<b>Paleontological Resources</b>							
81-213 .013	BLM	Las Cruces DO	Doña Ana, Luna, Grant, and Hidalgo, NM	PFYC Class 4	MP 0 to MP 23, MP 26 to MP 27, MP 35 to MP 53, MP 80 to MP 81, MP 88, MP 94 to MP 95, and MP 137 to MP 138	GIS Analysis: PFYC Class 4 areas intersect designated corridor	The identified potential of paleontological resources is a concern for the Agencies, which cannot be resolved during corridor-level planning. Assessments will occur as part of the ROW application process. (3)

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis <sup>1,2</sup>
<b>Lands with Wilderness Characteristics</b>							
81-213 .014	BLM	Las Cruces DO  Safford FO	Cochise, AZ	Lands with wilderness characteristics	Not specified.  MP 142 to MP 145	RFI: BLM-identified Potential lands with wilderness characteristics - NM-LC-010, NM-LC-011, NM-LC-012, NM-LC-013, and NM-LC-016.  Comment on abstract: corridor intersects with BLM wilderness-quality lands. 1,221 acres overlap (Pack Trail-BLM). Exclude energy corridors from all wilderness-quality lands	NM-LC-010 thru 013, and 016 were part of the Southline EIS analysis. However, 010, 011, 012, and 016 were determined not to possess wilderness characteristics, and only a small portion NM-LC-013 is adjacent to the corridor, and the corridor would not impact the wilderness characteristics. (1)  The BLM retains broad discretion regarding the multiple use management of lands possessing wilderness characteristics without Wilderness, 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. There are necessities that warrant land use and thus rationalize energy corridors as meeting the best siting principles which include maximizing utility while minimizing impacts. 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. Furthermore, the impairment of wilderness characteristics does not, in and of itself, constitute a significant impact; or on its own, warrant the relocation of a corridor or corridor

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							segment. BLM must consider all resources and resource uses and carefully weigh the current value for the present generation as well as for future generations. At this time, given the information available the corridor is determined as best meeting the siting principles of the settlement agreement. (1)
81-213 .015	BLM	Las Cruces DO	Hidalgo, NM	Citizens' Proposed Wilderness	Not specified.  MP 128 to MP 132	RFI: Lordsburg Playa North.  Comment on abstract: corridor intersects with BLM wilderness-quality lands. 1,744 acres overlap (Lordsburg Playa North-citizens wilderness proposal). Exclude energy corridors from all wilderness-quality lands.	The BLM's current inventory findings will be used in land use planning analyses related to the revision, deletion, or addition to the energy corridors. Consideration of citizen wilderness proposals is beyond the Agencies scope and authority. As such, the corridor's current location best meets the siting principles. (1)  At such time that citizen's 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.
<b>Visual Resources</b>							
81-213 .016	BLM	Las Cruces DO	Luna and Hidalgo, NM	VRM Class II	MP 52, MP 54, MP 118 to MP 123  MP 119 to MP 121  MP 122 to MP 123	GIS Analysis: VRM Class II areas intersect corridor.  Agency Input: corridor crosses VRM Class II area in vicinity of CDNST.  Agency Input: North side of corridor edges into VRM Class II area associated with Butterfield	Future development within the corridor could be limited as VRM Class II areas allow for low level of change to the characteristic landscape. Management activities may be seen, but should not attract the attention of the casual observer. This is an opportunity to review corridor placement to avoid conflict with VRM Class II areas, especially at the VRM

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis <sup>1,2</sup>
						Trail. I-10 crossing also includes KOPs that should be considered close to the corridor in VRM Class II and III areas.	Class II intersection at MP 122 to MP 123. (2)
81-213 .017	BLM	Safford FO, Las Cruces DO	Cochise, AZ and Doña Ana, Grant, Hidalgo, and Luna, NM	VRM Class III	MP 0 to MP 28, MP 38 to MP 42, MP 54 to MP 54, MP 77 to MP 95, MP 121 to MP 132, MP 138 to MP 145;  MP 142 to MP 145	GIS Analysis: VRM Class III areas intersect the corridor.  Agency Input: Butterfield Trail National Study Trail crosses corridor within VRM Class III area increasing potential conflict with VRM objective.	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 the casual observer, but shall not dominate the view. (1)
81-213 .018	BLM	Safford FO, Las Cruces DO	Cochise, AZ, Doña Ana, Hidalgo, and Luna, NM	VRM Class IV	MP 29, MP 35 to MP 38, MP 116 to MP 119, MP 139 to MP 140	GIS Analysis: VRM Class IV areas intersect the corridor.	The existing corridor location best meets the siting principles. (1)
<b>Cultural Resources</b>							
81-213 .019	NA	Private land	Hidalgo, NM	Shakespeare Ghost Town	MP 120 (adjacent)	GIS Analysis: NRHP property adjacent to corridor.	The NRHP listed property adjacent to the corridor is a concern that Agencies cannot resolve during corridor-level planning. Existing IOP's are specific to cultural resources and would be followed in connection with any proposed energy project in the corridor that may also potentially affect listed properties adjacent to corridors. (3)
<b>Tribal Concerns</b>							
81-213 .020	BLM	Las Cruces DO	Luna, NM	Tribal lands	MP 43	GIS Analysis: Tribal lands within 2 mi north of corridor.	Existing IOPs specific to cultural resources and tribal consultation would be followed in connection with any proposed energy project in the corridor. (3)

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							The Agencies are exploring an opportunity for adding an IOP related to early tribal engagement during the conceptual stage of route planning for energy projects. (2)
<b>Land Use Concerns</b>							
<b>Military and Civilian Aviation</b>							
81-213 .021	BLM	Las Cruces DO	Hidalgo, Grant, and Luna, NM	MTR – VR	MP 88 to MP 112	GIS Analysis: VR and the corridor intersect.	The concern related to Military Training Routes is noted and the adherence to existing IOP regarding coordination with DoD would be required to insure 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. (2)
<b>Other noted land use concerns</b>							
81-213 .022	BLM	Las Cruces DO		Proposed and/or pending projects	Not specified.	Agency Input: proposed and/or pending projects intersect with the corridor.	The corridor conforms to the Mimbres RMP to encourage new facilities to be located near existing sites or in existing corridors. Consistent with BLM ROW regulations, notification to adjacent ROW holders would be provided. (1)
81-213 .023	BLM	Las Cruces DO	Hidalgo, NM	Lordsburg Playa	MP 128 to MP 132	Agency Input: Federal Register Notice 63 FR 34661 Emergency Closure of Lordsburg Playa to Off-Highway Vehicles (OHV), Hidalgo County, NM	<p>Future development of corridor may conflict with existing Mimbres RMP and Riparian and Aquatic Habitat Management RMPA. Construction activities in the playa that remove or destroy riparian vegetation are to be avoided in these avoidance areas.</p> <p>In addition, dust from the playa cause hazardous dust events known as “brown-outs” on I-10 and have contributed to past and recent driving fatalities. NMDOT submitted an ACEC proposal to preserve land and reduce</p>

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							<p>uses that contribute more dust. The ACEC proposal would be dealt with in a land use plan effort (amendment or revision).</p> <p>Routing corridor through the playa may present environmental and safety concerns. The Agencies should consider opportunities for corridor revision to avoid the playa, perhaps along the recently authorized Southline Transmission Project. (2)</p>

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

<sup>2</sup> (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; CDNST = Continental Divide National Scenic Trail; DO = District Office; ESA = Endangered Species Act; FO = Field Office; DoD = Department of Defense; GIS = geographic information system; IOP = interagency operating procedures; KOP = key observation point; MP = milepost; MTR = Military Training Route; NA = not applicable; NMDOT = New Mexico Department of Transportation; NHT = National Historic Trail; NRHP = National Register of Historic Places; NST = National Scenic Trail; OHV = off-highway vehicle; PEIS = Programmatic Environmental Impact Statement; PFYC = Potential Fossil Yield Classification; REDA = Renewable Energy Development Area; RMP = resource management plan; RMPA = Resource Management Plan Amendment; ROW = right-of-way; SEZ = Solar Energy Zone; USFS = U.S. Forest Service; VR = Visual Route; VRM = Visual Resource Management; WWEC = West-wide Energy Corridor.