

Corridor 81-272

Rio Grande Corridor

Corridor Rationale

This energy corridor provides a pathway for electrical energy transmission through a portion of central New Mexico. Input regarding alignment from Chevron and the Western Utility Group during the WWEC PEIS suggested following this route. A 2016 ROW grant for SunZia authorized two 500-kV electric transmission line projects that generally follow the corridor from MP 39 to MP 100.

Corridor location:

New Mexico (Sierra and Socorro Co.)
BLM: Las Cruces District Office and Socorro Field Office)
Regional Review Region(s): Region 2

Corridor width, length:

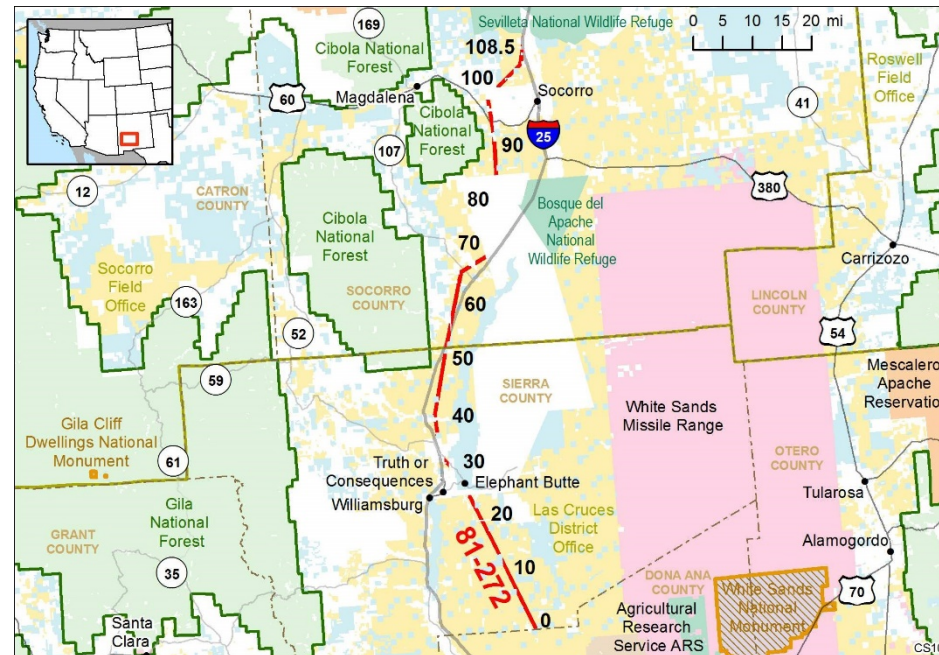
Width 3,500 ft
70.6 miles of designated corridor
108.5 mile-posted route, including gaps

Sec 368 energy corridor restrictions: (N)

- corridor is multi-modal

Corridor of concern (Y)

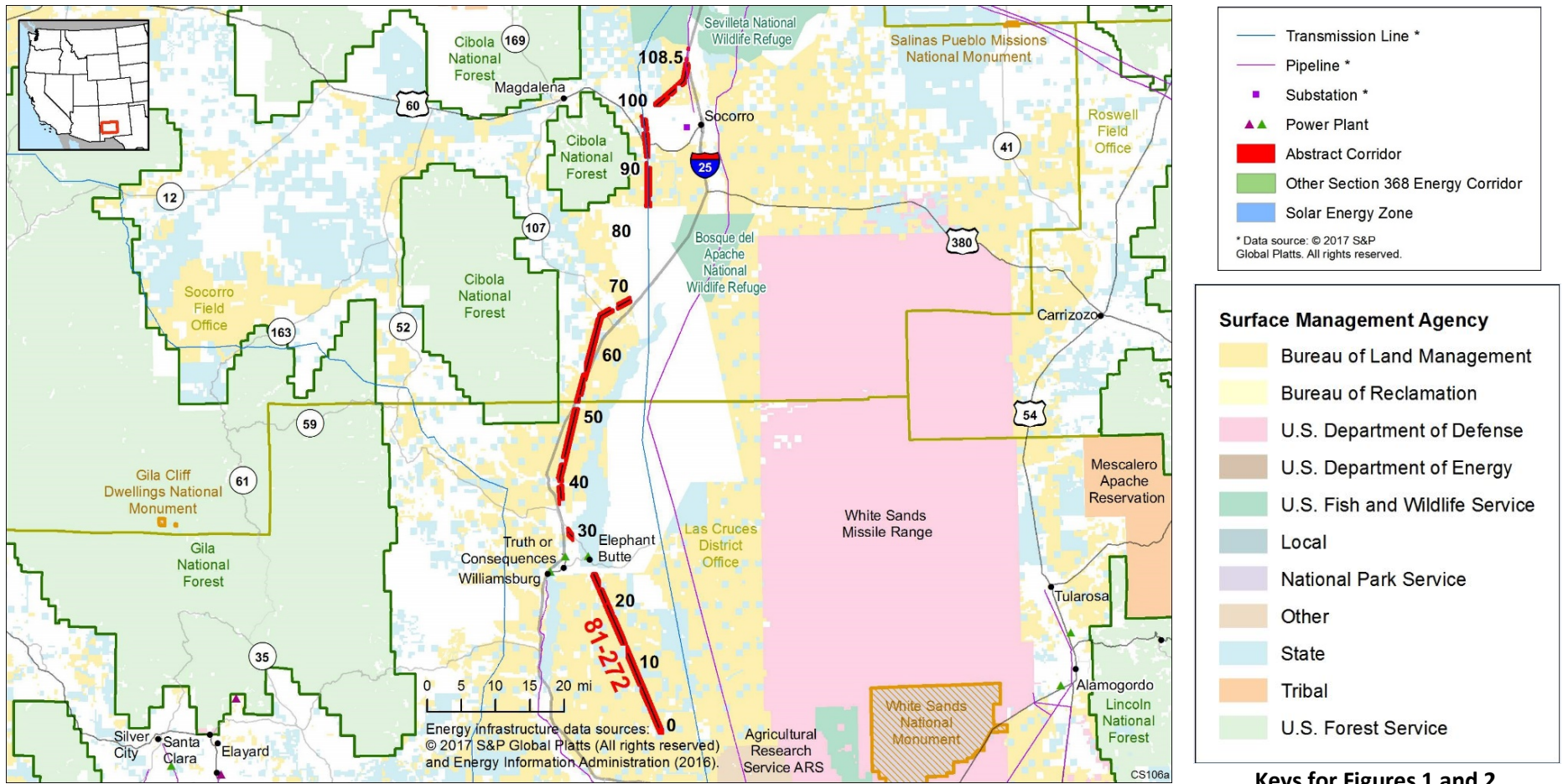
- Sevilleta NWR and NCAs. (There are no NCAs in close proximity to the corridor, so they are not discussed in the abstract.)



Corridor history:

- Locally designated corridor prior to 2009 (N)
- Existing infrastructure (Y)
 - Electric transmission:
 - 115 kV, 345 kV (MP 0 to MP 60, MP 106 to MP 109)
 - 345 kV (MP 74 to MP 98)
- Energy potential near corridor (Y)
 - Two substations in corridor gaps (MP 27 to MP 29)
 - Solar energy power plant less than 3 mi west of MP 26
 - Hydroelectric power plant in corridor gap at MP 28
- Corridor changes since 2009 (N)

Figure 1. Corridor 81-272



Keys for Figures 1 and 2

Figure 2. Corridor 81-272 and nearby electric transmission lines and pipelines

Conflict Map Analysis

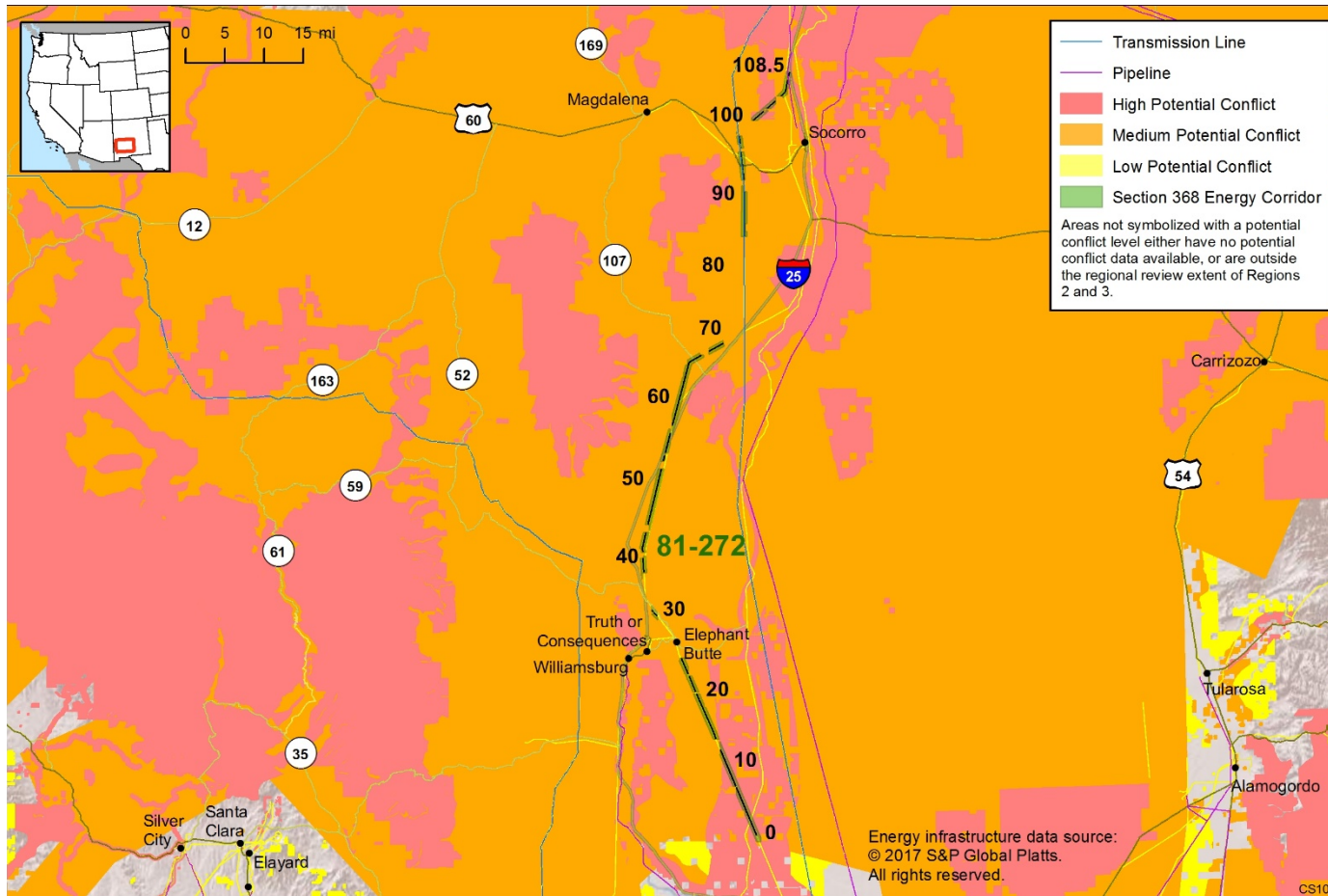


Figure 3. Map of Conflict Areas in Vicinity of Corridor 81-272

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 WVEC 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/>)

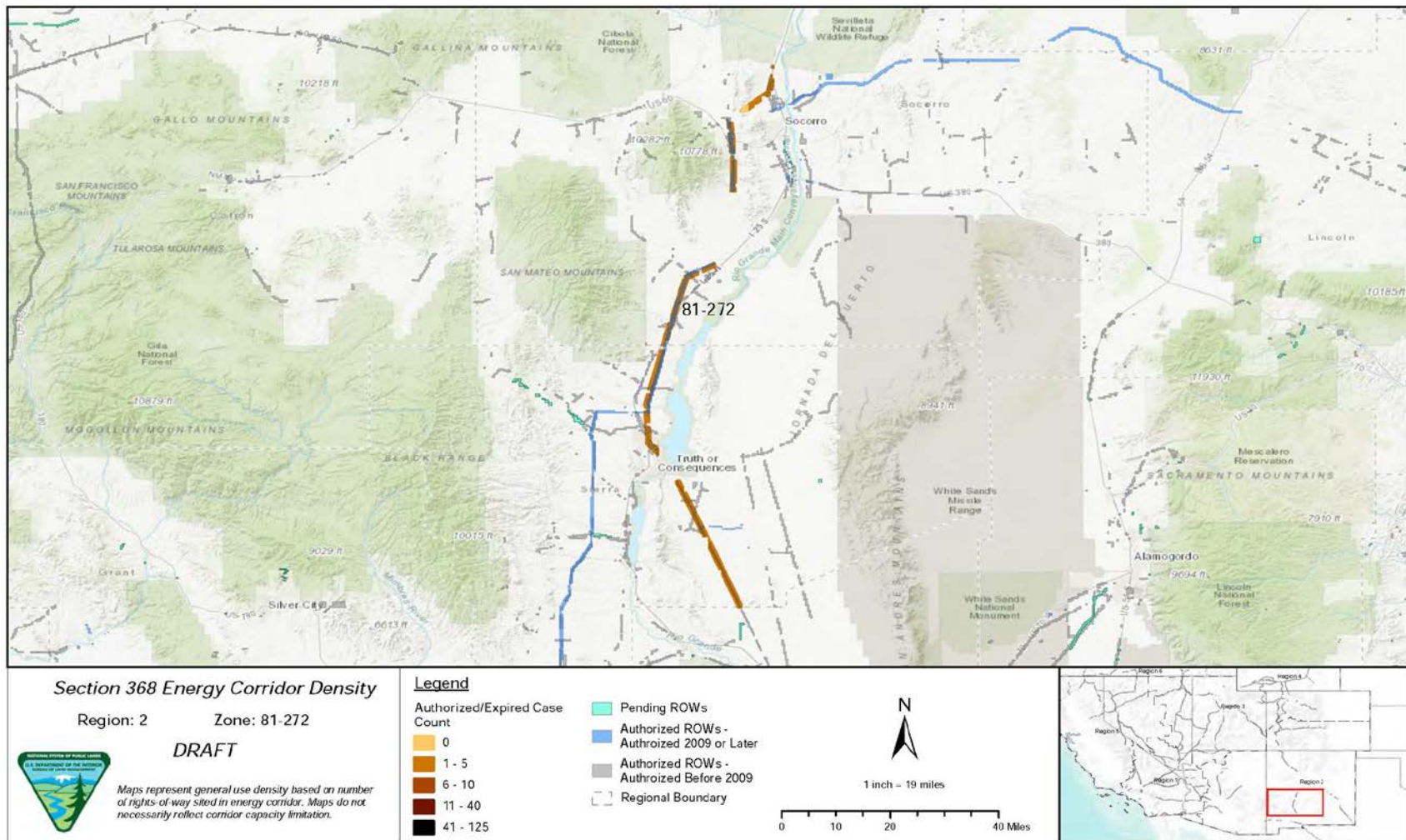


Figure 4. Corridor 81-272, Corridor Density Map

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 81-272 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>							
81-272 .001	BLM	NMDOT	Socorro and Sierra, NM	Geronimo Trail National Scenic Byway	MP 28 to MP 35	GIS Analysis: Geronimo Trail National Scenic Byway intersects and is adjacent to corridor.	The Geronimo Trail National Scenic Byway is administered by NMDOT, and future development in the corridor would require coordination with this agency. (3)
81-272 .002	BLM	NMDOT	Socorro and Sierra, NM	El Camino Real National Scenic Byway	Intersects: MP 33 to MP 35, MP 55 to MP 56, and MP 59 to MP 60 Runs parallel: MP 35 to MP 55, MP 56 to MP 59, MP 60 to MP 73, and MP 105 to MP 109	GIS Analysis: El Camino Real National Scenic Byway intersects and runs parallel to corridor as close as 2,600 ft.	The El Camino Real National Scenic Byway is administered by NMDOT, and future development in the corridor would require coordination with this agency. (3)
81-272 .003	BLM	Las Cruces DO, Socorro FO	Sierra and Socorro, NM	El Camino Real de Tierra Adentro NHT	MP 2 to MP 3 and MP 108 to MP 109	GIS Analysis: NHT and corridor intersect.	The El Camino Real de Tierra Adentro NHTCMP designated areas on BLM-administered lands that are visible within approximately 5 mi of high-potential sites and segments, and also in relatively undisturbed areas, as VRM Class II areas. The Agencies could consider following the existing I-25 corridor and the existing 115-kV transmission line from MP 0 to MP 28

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1,2}
							and the approved SunZia route between MP 100 and MP 108 to better avoid the El Camino Real de Tierra Adentro NHT. In addition, 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)
81-272 .004	BLM	Socorro FO	Socorro, NM	Ladron Mountain - Devil's Backbone Complex ACEC	MP 100 to MP 104	GIS Analysis: ACEC and corridor intersect.	There is a conflict between the corridor designation and the existing Socorro RMP, which has a requirement to "exclude the authorization of right-of-way and leases within the ACEC." This conflict must be resolved. There is an opportunity to revise the corridor or revise the ACEC boundary or management prescriptions. (2)
Ecology							
81-272 .005	BLM	Socorro FO	Socorro, NM	Southwestern Willow Flycatcher critical habitat (ESA-listed: endangered); Western Yellow-billed Cuckoo proposed critical habitat (ESA-listed: threatened)	MP 106 to MP 109	RFI: consult with USFWS to avoid adverse modification to Southwestern Willow Flycatcher designated critical habitat within 1.2 mi. GIS Analysis: critical habitat for both species as close as 1 mi east of corridor. Comment on abstract: over 2 mi of the corridor goes through Southwestern Willow Flycatcher critical habitat. Reroute to avoid critical habitat.	The corridor does not intersect critical habitat for the Southwestern Willow Flycatcher or proposed critical habitat for the Western yellow-billed Cuckoo. However, there is an opportunity for the Agencies to consider revising the corridor in this general location to follow the recently approved SunZia transmission line route south of the Sevilleta NWR that extends to the east. (2)
81-272 .006				Special Status Species	Not specified.	Comment on abstract: additional species not identified in the corridor abstract may be	This corridor location within the current range where these species may occur is not easily resolved or avoided

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1,2}
						<p>present: Mexican Gray Wolf, New Mexico Meadow Jumping Mouse, Least Tern, Mexican Spotted Owl, Northern Aplomado Falcon, Piping Plover, Western Yellow-billed Cuckoo, Narrow-headed Gartersnake, Chiricahua Leopard Frog, Gila Trout, Rio Grande Silvery Minnow, Alamosa Springsnail, Chupadera Springsnail, Socorro Springsnail, Socorro Isopod, Pecos Sunflower, Sneed Pincushion Cactus, Todsen's Pennyroyal, and Wright's Marsh Thistle</p> <p>Conduct further analysis to determine the presence of abovementioned species.</p>	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)
81-272 .007	BLM			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.	Not a corridor-level planning issue. Connectivity flowline is not a BLM-recognized term, but impacts on habitat connectivity would be addressed at the project level and through management prescriptions in the RMP. (3)
81-272 .008	BLM	Las Cruces DO	Sierra, NM	Desert Bighorn Sheep Corridor	Not specified.	Agency Input: Desert Bighorn Sheep wildlife corridor intersects the Section 368 energy corridor.	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)
81-272 .009	BLM	Las Cruces DO	Sierra, NM	Wildlife habitat	Not specified.	Comment on abstract: corridor runs through several sections with high management conflicts, many of which focus on areas designated as level 1 or 2 within	Wildlife habitat is an important consideration but further analysis is not a consideration for 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 ^{1,2}
					MP 0 to MP 25	the crucial habitat assessment on the mapping tool. Overall, we encourage revisions where possible to avoid high conflict management areas, especially as they pertain to wildlife resources. The corridor runs through a high conflict management region.	For MP 100 to MP 109, there is an opportunity to consider revising the corridor south of the Sevilleleta NWR to follow the recently approved SunZia transmission line route that extends to the east. (2)
				MP 17 to MP 29	Corridor also crosses land shown to be most crucial under the crucial habitat assessment. As noted in the corridor abstract, there are BLM lands just west of I-25 that would avoid high conflict areas and are ranked very low on the crucial habitat assessment. We encourage the revision of this corridor from MP 0 to MP 29, moving the corridor west to occupy BLM land with much fewer management conflicts.		
				MP 101 to MP 109	Consider shortening the corridor to MP 97, if possible. The corridor crosses BLM land that is considered most crucial according to the crucial habitat assessment. This would increase existing measures to protect the Sevilleleta NWR. Moving the corridor may be difficult given the amount of private land, which is why shortening the corridor may be a more		

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						effective option to avoid conflicts.	
81-272 .010	BLM	Las Cruces DO	Sierra, NM	Waterbirds	MP 26 to MP 30	<p>Comment on abstract: 4 mi of the corridor cut through the Elephant Butte Lake State Park IBA. This state park hosts the largest concentration of wintering Western and Clark's Grebes in the state and is an important stopover site for migrating waterbirds.</p> <p>Coordinate with New Mexico Energy, Minerals and Natural Resources Department to avoid impacts to habitat within and around the state park.</p>	Agencies acknowledge the corridor gap includes the Elephant Butte State Park IBA. Waterbirds are an important consideration but further analysis of these species is not a consideration for corridor-level planning. (3)
81-272 .011	BLM	Las Cruces DO	Sierra, NM	Vegetative treatment area	MP 9 to MP 21, MP 36 to MP 39, MP 40 to MP 43, and MP 48 to MP 50	<p>Agency Input.</p> <p>GIS Analysis: Treatment area intersects designated corridor</p>	<p>Vegetation treatment areas are an important consideration but further analysis is not a consideration for corridor-level planning. (3)</p> <p>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)</p>
Paleontological Resources							
81-272 .012	BLM	Las Cruces DO, Socorro FO	Sierra and Socorro, NM	Paleontological resources	MP 0 to MP 2, MP 5 to MP 15, MP 15 to MP 16, MP 17 to MP 20, MP 32 to MP 40, MP 41 to MP 56, MP 57 to MP 91, MP 94 to MP 104, and MP 106	<p>Agency Input: approximately 90% of the corridor within Socorro FO is in PFYC Class 4 indicating a high potential for occurrence of important fossil resources.</p> <p>GIS Analysis: PFYC areas intersect designated corridor.</p>	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)

CORRIDOR 81-272 REVIEW TABLE

ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1,2}
Lands with Wilderness Characteristics							
81-272 .013	BLM			Citizens' proposed wilderness	<p>Not specified.</p> <p>MP 0 to MP 2</p> <p>MP 81 to MP 85</p> <p>MP 85</p> <p>MP 105 to MP 108</p>	<p>RFI: Chupadera Wilderness Addition, Magdalena Mountains 1, Magdalena Mountains 2, Organ Foothills, Point of Rocks, Polvadera Mountain</p> <p>Comment on abstract: the corridor abstracts dismiss all intersections with citizens' proposed wilderness areas. This approach is wholly inappropriate and inadequate; the Agencies must address conflicts with proposed wilderness.</p> <p>Corridor intersects with BLM wilderness-quality lands. 478 acres overlap (Point of Rocks-Citizen).</p> <p>1,029 acres overlap (Magdalena Mountains 1-Citizen), an important habitat for Pronghorn, Mule Deer, American Black Bear, Coyote, both Red and Gray Foxes, Mountain Lion, and Bobcat.</p> <p>102 acres overlap (Chupadera Wilderness Addition-CWP).</p> <p>177 acres overlap (Polvadera Mountain-CWP).</p> <p>BLM should exclude energy corridors from all wilderness-quality lands.</p>	<p>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.</p>

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81-272 .014	BLM	Las Cruces DO	Sierra, NM	Lands with wilderness characteristics	MP 0 to MP 3	Agency Input: BLM wilderness characteristic unit: NM-030-094a	<p>Future development in this corridor may affect the wilderness characteristics of this unit.</p> <p>Management decisions for lands with wilderness characteristics are made through a land use planning effort. Lands with wilderness characteristics in Sierra, Otero, and Doña Ana counties are being evaluated in the Tri-County RMP, which is currently in draft. (3)</p>
Visual Resources							
81-272 .015	BLM	Socorro FO	Socorro, NM	VRM Class I	MP 62 to MP 65	GIS Analysis: VRM Class I areas are over 1 mi east of corridor.	The corridor does not cross VRM Class I areas. (1)
81-272 .016	BLM	Las Cruces DO, Socorro FO	Sierra and Socorro, NM	VRM Class II	MP 0 to MP 14 and MP 100 to MP 105	GIS Analysis: VRM Class II areas and corridor intersect.	In the Socorro RMP, VRM Class II areas are designated as avoidance areas. Avoidance areas in the Socorro FO do not allow power lines larger than 14 kV or new roads wider than 14 ft of driving surface and would require an RMP amendment for development outside of these parameters. This is an opportunity to review corridor placement to avoid conflict with VRM Class II areas associated with the El Camino Real de Tierra Adentro NHT. The Agencies could consider following the existing I-25 corridor and the existing 115-kV transmission line from MP 0 to MP 28 and the approved SunZia route between MP 100 and MP 108 to better avoid VRM Class II areas. (2)
81-272 .017	BLM	Las Cruces DO, Socorro FO	Sierra and Socorro, NM	VRM Class III	MP 14 to MP 25, MP 32 to MP 33, MP 37 to MP 42, MP 44 to MP 51, MP 89 to MP 93	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

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1,2}
					MP 31 to MP 32 MP 37 to MP 41	Agency Input: corridor in VRM Class III area and crosses Highway 195, the El Camino Real National Scenic Byway, and other high volume local roads, near many other roadways outside of the corridor and adjacent to residential area. Agency Input: corridor is within a VRM Class III area crossing Rock Canyon Road and 2,600 ft or more to I-25 and the El Camino Real National Scenic Byway increasing potential conflict with the VRM class objective.	the casual observer, but shall not dominate the view. (1)
81-272 .018	BLM	Socorro FO, Las Cruces DO	Sierra and Socorro, NM	VRM Class IV	MP 12 to MP 13, MP 41 to MP 101, and MP 104 to MP 109	GIS Analysis: VRM Class IV areas intersect the corridor.	The existing corridor location best meets the siting principles. (1)
Land Use Concerns							
Military and Civilian Aviation							
81-272 .019	BLM	Las Cruces DO, Socorro FO	Socorro and Sierra, NM	MTR – VR	MP 2 to MP 109	GIS Analysis: VR and corridor intersect. Comment on abstract: corridor is underneath VR-176 owned and operated by 49th Wing, Holloman AFB. Height should be no higher than existing structures and may affect training if over 100 feet AGL and 12 NM away from routes center lines.	The concern related to MTRs is noted and the adherence to 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. (2)
81-272 .020	BLM	Las Cruces DO	Sierra, NM	DoD SUA - Restricted Area	MP 0 to MP 27	GIS Analysis: restricted area and corridor intersect.	

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1,2}
Public Access and Recreation							
81-272 .021	NA	NMEMNRD	Socorro and Sierra, NM	Elephant Butte Reservoir State Park	MP 25 to MP 73	GIS Analysis: the Park runs parallel to corridor between MP 32 and MP 73. The corridor crosses the Park in a corridor gap between MP 26 and MP 30.	BLM can only authorize projects on BLM-administered lands. Development in corridor gaps would require coordination outside of the Agencies. (3)
Other noted land use concerns (where applicable)							
81-272 .022	USFWS	Sevilleta NWR	Socorro, NM	Sevilleta NWR	MP 109	<p>Settlement Agreement; RFI: re-route to avoid the Sevilleta NWR.</p> <p>GIS Analysis: the northernmost end of the corridor terminates 1,600 ft from the NWR.</p>	<p>The corridor terminates before reaching the Sevilleta NWR.</p> <p>There is an opportunity to revise the corridor south of the refuge to follow the recently approved SunZia route to the east to avoid terminating the corridor near the refuge (2).</p>
81-272 .023	DoD	Socorro FO	Socorro, NM	DoD-administered lands north of White Sands Missile Range	Not specified.	Agency Input: corridor proximity to DoD lands.	There is an opportunity to consider the addition of an Agency Coordination IOP with DoD to mitigate potential impacts pre-emptively by coordinating at early stages of energy infrastructure proposals to avoid adverse impacts to training activities. (2)
81-272 .024	BLM	Las Cruces DO	Sierra, NM	Proposed and/or pending projects	Not specified.	Agency Input: authorized project uses the corridor.	Agencies confirm the corridor best meets siting principles. The corridor conforms to the White Sands RMP to promote the maximum utilization of existing ROWs, including joint use whenever possible. Consistent with BLM ROW regulations, notification to adjacent ROW holders would be provided. (1)

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ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1,2}
81-272 .025			Sandoval, NM	Corridor siting in Sandoval County	Not specified.	Comment on abstract: concerns with potential impacts of a Section 368 Corridor located in eastern Sandoval County with respect to economic impacts, infrastructure impacts, impacts to ecological values, water quality, tribal cultural values and sacred ceremonial sites, wildlife habitat, and human health and safety.	There is no corridor within eastern Sandoval County. There are four Section 368 energy corridors in New Mexico and Corridor 80-273 is the only corridor in Sandoval County. The corridor begins approximately 37 mi northwest of Placitas at the western edge of the Zia Pueblo Reservation and continues northwest for 27 mi within western Sandoval County before continuing into McKinley County. (1)

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; AGL = above ground level; BLM = Bureau of Land Management; CWP = Citizen Wilderness Proposal; DO = District Office; DoD = Department of Defense; ESA = Endangered Species Act; FO = Field Office; GIS = geographic information system; IBA = important bird area; IOP = Interagency Operating Procedures; MP = milepost; MTR = Military Training Route; NA = not applicable; NCA = National Conservation Area; NHT = National Historic Trail; NHTCMP = National Historic Trail Comprehensive Management Plan; NMDOT = New Mexico Department of Transportation; NMEMNRD = New Mexico Energy Minerals and Natural Resources Department; NWR = National Wildlife Refuge; PEIS = Programmatic Environmental Impact Statement; PFYC = Potential Fossil Yield Classification; RFI = Request for Information; RMP = Resource Management Plan; ROW = right-of-way; SUA = Special Use Airspace; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; VR = Visual Route; VRM = Visual Resource Management; WVEC = West-wide Energy Corridor.