Corridor 17-35

Region 3 Review

Corridor 17-35

North Valmy to US 93

Corridor Rationale

This energy corridor provides transmission linkage between multiple West-wide energy corridors within northeastern Nevada. Input regarding alignment from AWEA, the Frontier Line, National Grid, the Redding Electric Utility, and the Western Utility Group during the WWEC PEIS suggested following this route. Two planned 500-kV transmission projects generally follow the path of a portion of the corridor. There are no pending or authorized ROWs for transmission lines or pipelines within the corridor, but six recently authorized transmission lines and one recently authorized pipeline intersect the corridor.

Corridor location (Region 3 portion; the Region 5 portion will be evaluated in a future Review):
Nevada (Elko, Eureka, and Lander Co.)
BLM: Tuscarora and Wells Field Offices
USFS: Humboldt-Toiyabe National Forest
Regional Review Region(s): Region 3, Region 5

Corridor width, length (Region 3 portion):
Width variable from 1,000 – 15,840 ft
57.5 miles of designated corridor
167.9 mile-posted route, including gaps

Sec 368 energy corridor restrictions: (N)
- corridor is multi-modal

Corridor of concern (Y)
- access to coal plants and impacts on Greater Sage-grouse habitat.

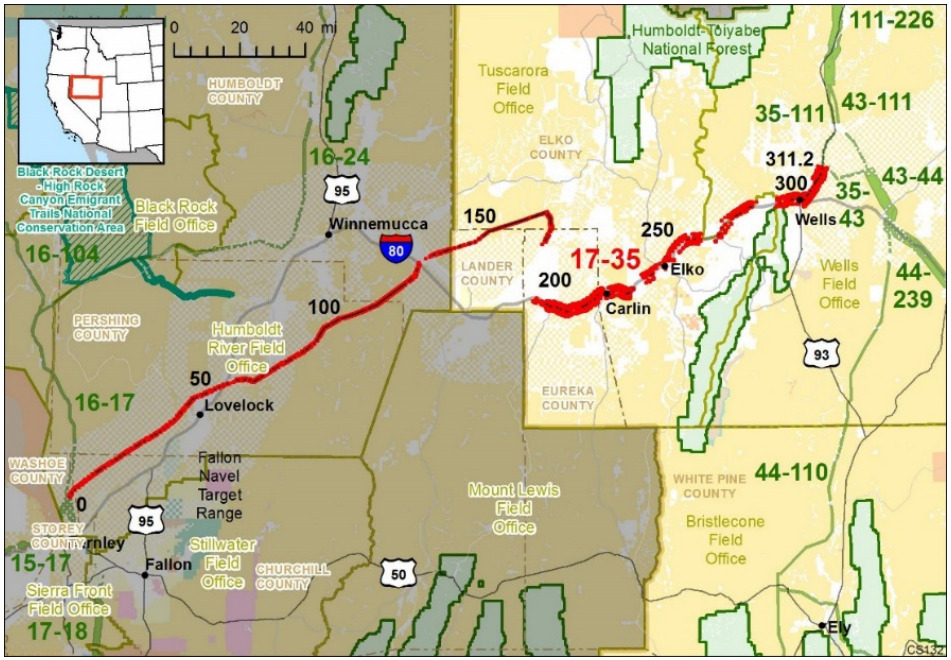
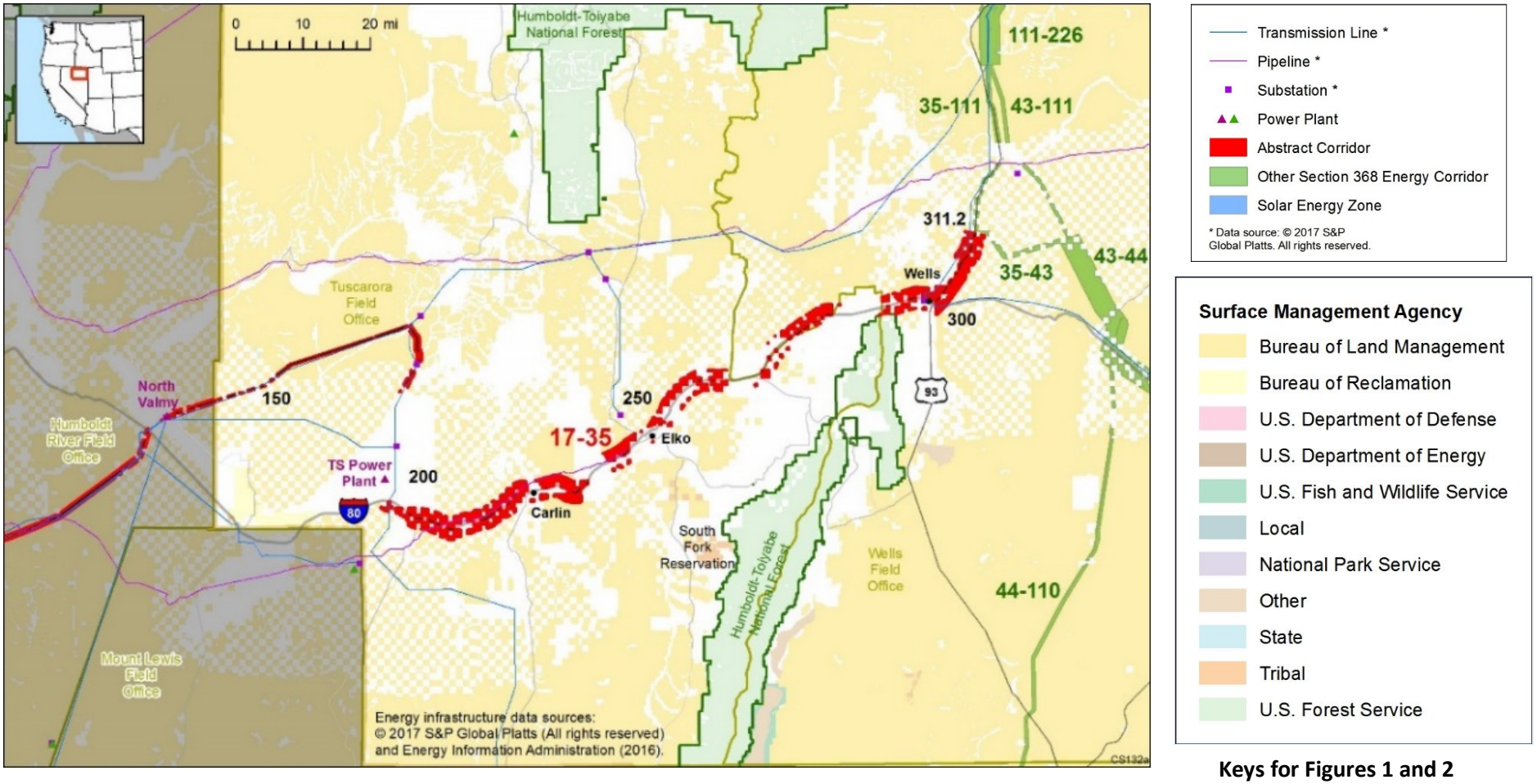


Figure 1. Corridor 17-35

Corridor history:
- Locally designated corridor prior to 2009 (Y)
- Existing infrastructure (Y)
  - Electric transmission:
    - 120 kV, 345 kV (MP 181 to MP 202)
    - 138 kV (MP 297 to MP 311)
    - 345 kV (MP 143 to MP 175)
    - 60 kV (MP 178 to MP 203)
    - 69 kV (MP 250 to MP 297)
  - Pipelines:
    - 2 natural gas (MP 209 to MP 244)
  - Highways:
    - I-80 (MP 202 to MP 299)
    - U.S. 93 (MP 299 to MP 311)
- Energy potential near the corridor (Y)
  - 2 substations in corridor
  - coal power plant (218 MW) 3 mi from MP 199
- Corridor changes since 2009 (Y)
  - 2015 NVCA ARMPA for GRSG narrowed the corridor to no more than 3,500 ft within PHMAs and GHMAs on BLM-administered land.



Keys for Figures 1 and 2

Figure 2. Corridor 17-35 and nearby electric transmission lines and pipelines (grayed out area outside of Region 2 and 3 Review)

Conflict Map Analysis

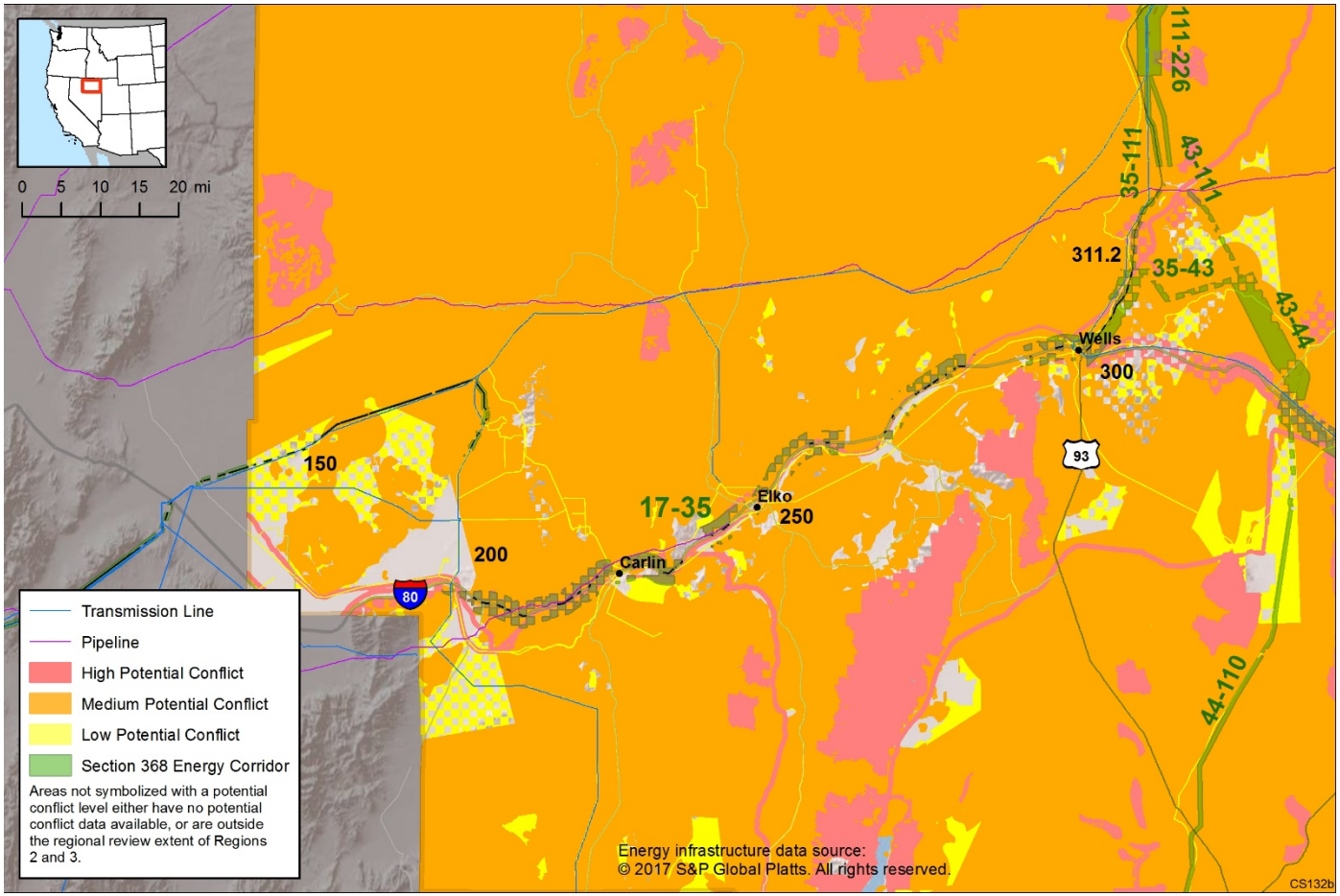


Figure 3. Map of Conflict Areas in Vicinity of Corridor 17-35

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/)

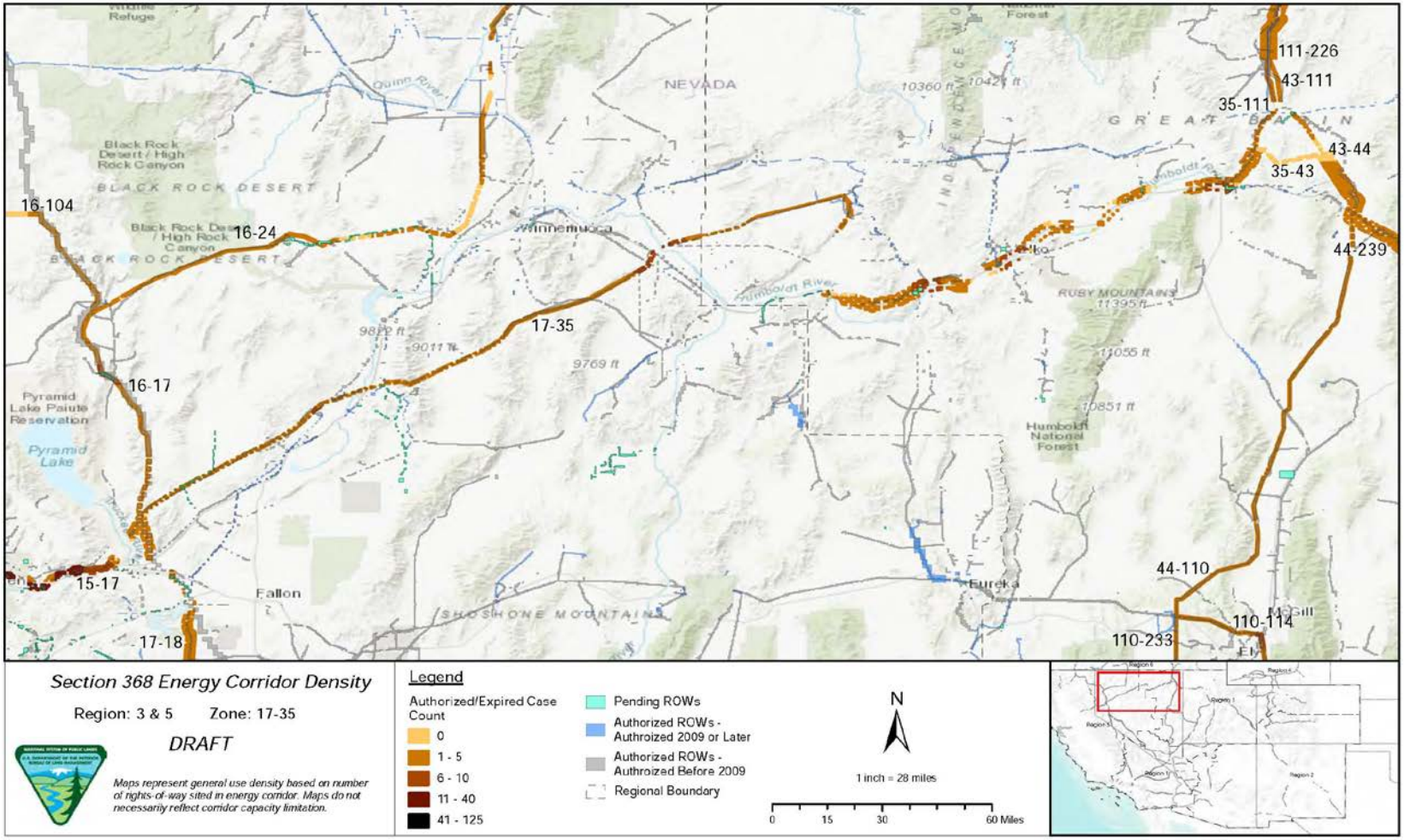


Figure 4. Corridor 17-35, Corridor Density Map

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 agencies 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 17-35 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
ENVIRONMENTAL RESOURCE ISSUES							
Specially Designated Areas							
17-35 .001	BLM	Tuscarora FO and Wells FO	Eureka and Elko, NV	California NHT	MP 202 to MP 206, MP 212 to MP 311 MP 206 to MP 212	GIS Analysis: NHT intersects or is adjacent to corridor. GIS Analysis: NHT as close as 1 mi south of corridor	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)
17-35 .002	BLM	Tuscarora FO and Wells FO	Eureka and Elko, NV	Four Trails Feasibility Study Trail	MP 202 to MP 206, MP 212 to MP 311 MP 206 to MP 212	GIS Analysis: study trail intersects or is adjacent to corridor on BLM land GIS Analysis: study trail as close as 1 mi south of corridor.	
Ecology							
17-35 .003	BLM	Tuscarora FO and Wells FO	Lander, Elko, and Eureka, NV	Nevada and Northeastern GRSG PHMA (BLM and USFS sensitive species)	MP 157 to MP 161, MP 175 to MP 175, MP 215 to MP 226, MP 300 to MP 311	Settlement Agreement; RFI: re-route to avoid impacts to GRSG habitat. Exclude new infrastructure ROWs and avoid all new energy infrastructure development within GRSG PACs (14% overlap). Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within 4 mi of important GRSG breeding areas. GIS Analysis: GRSG PHMA intersects corridor.	Per BLM land use plan prescription, the current alignment avoids PHMA to the greatest extent possible while maintaining a preferred route for potential future energy development to be collocated with existing infrastructure (per BLM regulation). The corridor was also narrowed to a maximum of 3,500 ft. wide on BLM-administered land in the 2015 NVCA ARMPA for GRSG. The current alignment of the corridor best meets the siting principles. (1)

CORRIDOR 17-35 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
						Comment on abstract: apply a 4-mi buffer around corridor. This corridor contains 131,631 acres of priority GRSG habitat and 400,991 acres of general GRSG habitat. These categories of habitat are essential for the GRSG life cycle. Comment on abstract: Reroute to avoid GRSG habitat and breeding areas.	
17-35 .004	BLM & USFS	Tuscarora FO and Wells FO and Humboldt-Toiyabe National Forest	Lander, Elko, and Eureka, NV	NV CA GRSG GHMA (BLM and USFS sensitive species, not listed under ESA)	Scattered across full length of corridor	Settlement Agreement. RFI: re-route to avoid impacts to GRSG habitat. Exclude new infrastructure ROWs and avoid all new energy infrastructure development within GRSG PACs (14% overlap). Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within four miles of important GRSG breeding areas. GIS Analysis: GRSG GHMA intersects corridor.	
17-35 .005	BLM	Tuscarora FO and Wells FO	Lander, Elko, and Eureka, NV	GRSG lek locations	MP 143 to MP 189 MP 215 to MP 220 MP 276 to MP 277	Comment on abstract: 2 active leks, 1 pending lek, and 4 unknown leks. These sites are crucial for breeding season. 1 active lek, 2 pending leks, and 1 unknown lek. These sites are crucial for breeding season. 1 lek with a currently unknown activity status.	Individual GRSG leks are an important natural resource taken into consideration for responsible energy development during an application review. Further analysis to determine the presence of GRSG leks occurring within the area will be considered outside of corridor-level planning. (3)

CORRIDOR 17-35 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
					MP 294 to MP 302 MP 311	3 active leks, 1 pending lek, and 2 unknown leks. These sites are crucial for breeding season. 2 leks with a currently unknown activity status. Unknown status indicates that more information or data needs to be collected but this could be a significant area for breeding.	
17-35 .006	BLM	Tuscarora FO and Wells FO	Lander, Elko, and Eureka, NV	Mule Deer	MP 177 to MP 190, MP 201 to MP 209, MP 211 to MP 216, MP 229 to MP 233, MP 304 to MP 311 MP 146 to MP 152, MP 161 to MP 163, MP 208 to MP 212, MP 229 to MP 239	Comment on abstract: these areas have been identified as Mule Deer migration corridors and should be avoided if at all possible. Unimpaired migration is crucial to Mule Deer life cycles. These areas have been identified as crucial winter habitat for Mule Deer and should be avoided if at all possible.	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)
17-35 .007	BLM	Tuscarora FO and Wells FO	Lander, Elko, and Eureka, NV	Pronghorn Antelope	MP 143 to MP 152, MP 184 to MP 191, MP 261 to MP 282	Comment on abstract: these areas have been identified as crucial winter habitat for Pronghorn Antelope and should be avoided if at all possible.	Ungulate winter habitat is an important consideration but further analysis of this species is not a consideration for corridor-level planning. (3)
17-35 .008				Lahontan Cutthroat Trout (ESA listed: threatened)	Not specified.	Comment on abstract: Additional species not identified in the corridor abstract may be present: Lahontan Cutthroat Trout. Conduct further analysis to determine the presence of abovementioned species.	The corridor location within the current range where this species may occur is not easily resolved or avoided by corridor-level planning. Further analysis to determine the presence of the species occurring within the area will be considered outside of corridor-level planning. Consultation with the USFWS would be required prior to

CORRIDOR 17-35 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
							authorizing development in the corridor. (3)
Lands with Wilderness Characteristics							
17-35 .009	BLM	Tuscarora FO	Lander, Elko and Eureka NV	Lands with Wilderness Characteristics	MP 150 to MP 200	GIS Analysis: Lands with wilderness units intersect corridor gap.	Because the corridor has an existing transmission line, the Agencies do not recommend re-routing the corridor, which would result in new impacts on the ground. (1)
Visual Resources							
17-35 .010	BLM	Tuscarora FO	Eureka, NV	VRM Class II	MP 202 to MP 236, MP 240 to MP 263, MP 267 to MP 270, MP 271 to MP 271, MP 273, MP 275 to MP 283, and MP 291 to MP 302 MP 202 to MP 205, MP 212 to MP 311	GIS Analysis: VRM Class II areas and corridor intersect. Agency Input: corridor crosses and follows California NHT and Four Trails Study Trail, increasing the potential conflict with VRM class objective.	Future development within the corridor could be limited as VRM Class II allows for low level of change to the characteristic landscape. Management activities may be seen, but should not attract the attention of the casual observer. (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)
17-35 .011	BLM	Wells FO	Elko, NV	VRM Class III	MP 307 to MP 310	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 the casual observer, but shall not dominate the view. (1)
17-35 .012	BLM	Tuscarora FO	Lander, Elko, and Eureka, NV	VRM Class IV	MP 143 to MP 143, MP 144 to MP 145, MP 146, MP 148 to MP 149, MP 151, MP 152, MP 154 to MP 160, MP 161 to MP 169, MP 170 to MP 174, MP 175 to	GIS Analysis: VRM Class IV areas and corridor intersect.	The existing corridor location best meets the siting principles. (1)

CORRIDOR 17-35 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
					MP 181, MP 182 to MP 185, MP 186, MP 228 to MP 229, MP 294 to MP 311		
Cultural Resources							
17-35 .013	BLM	Wells FO	Elko, NV	Cultural resources	MP 143 to MP 200	Agency Input: portions of this corridor are known to have a high concentration of sensitive cultural resources, such as prehistoric sites, TCPs, antelope traps, and historic railroad.	The elevated concentration of cultural resources is a concern for the Agencies which cannot be resolved during corridor-level planning. Existing IOPs specific to cultural resources and tribal consultation would be followed in connection with any proposed energy project in the corridor. (3)
Tribal Concerns							
17-35 .014	BIA	Elko Band	Elko, NV	Elko Band	MP 249 to MP 250	GIS Analysis: Elko Band is adjacent to corridor gap.	Tribal consultation with the Elko Band and Wells Colony would occur in connection with any proposed energy project in the corridor. Consider an opportunity to route around Elko to the north. (2)
17-35 .015	BIA	Wells Colony	Elko, NV	Wells Colony	MP 297	GIS Analysis: Wells Colony is adjacent to corridor.	
Land Use Concerns							
Corridor pinched by BLM or USFS authorized use							
17-35- .016	BLM	Wells FO	Elko, NV	Mining activity	Not specified.	Agency Input: there is significant mining activity in the vicinity of the corridor.	There is an opportunity for the BLM to consider shifting the corridor to the west (to align with existing electric infrastructure) between MP 175 and MP 181, which would avoid ongoing mining activities in that area. (2)
Military and Civilian Aviation							
17-35 .017	NA	Private land	Elko, NV	Elko Regional Airport	MP 246 to MP 247	GIS Analysis: airport intersects corridor gap.	City development spans the width of the corridor. Future development of the corridor would not be feasible in this area. The Agencies can only authorize projects on BLM- and USFS-administered lands. Development in corridor gaps would require coordination outside of the Agencies.

CORRIDOR 17-35 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
							Consider an opportunity to route around Elko to the north. (2)
17-35 .018	NA	Private land	Elko, NV	Wells Municipal Airport/Harriet Field	MP 300 to MP 301	GIS Analysis: airport intersects corridor gap.	City development spans the majority of the width of the corridor. Future development of the corridor would not be feasible in this area. The Agencies can only authorize projects on BLM- and USFS-administered lands. Development in corridor gaps would require coordination outside of the Agencies. Consider an opportunity to route around Elko to the north. (2)
17-35 .019	BLM	Tuscarora FO	Elko and Eureka, NV	MTR – IR	MP 164 to MP 192, MP 206 to MP 218	GIS Analysis: IR intersects corridor.	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)
Public Access and Recreation							
17-35 .020	NA	Private Land	Elko, NV	Southside Park; Angel Park; Main City Park	MP 248 to MP 249	GIS Analysis: three parks in corridor gap.	The Agencies can only authorize projects on BLM- and USFS-administered lands. Development in corridor gaps would require coordination outside of the Agencies. Consider an opportunity to route around Elko to the north. (2)
17-35 .021	NA	Private Land	Elko, NV	Fairgrounds Upper Gate	MP 249	GIS Analysis: park in corridor gap.	
17-35 .022	NA	Private Land	Elko, NV	Ruby View Golf Course	MP 250	GIS Analysis: golf course in corridor gap.	
17-35 .023	NA	Private Land	Elko, NV	Chimney Rock Municipal Golf Course	MP 297	GIS Analysis: golf course in corridor gap.	
17-35 .024	NA	Private Land	Elko, NV	Wells City Park	MP 298	GIS Analysis: park in corridor gap.	

[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

ARMPA = Approved Resource Management Plan Amendment; AWEA = American Wind Energy Association; BIA= Bureau of Indian Affairs; BLM = Bureau of Land Management; DoD = Department of Defense; ESA = Endangered Species Act; FO = Field Office; GHMA = General Habitat Management Area; GIS = geographic information system; GRSG = Greater Sage-grouse; IOP = interagency operating procedure; IR = Instrument Route; MP = milepost; MTR = Military Training Route; NHT = National Historic Trail; NST = National Scenic Trail; NVCA = Nevada-California; PAC = Priority Area for Conservation; PEIS = Programmatic Environmental Impact Statement; PHMA = Priority Habitat Management Area; RFI = request for information; ROW = right-of-way; TCP = Traditional Cultural Property; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; VRM = Visual Resource Management; WWEC = West-wide Energy Corridor.

Corridor 17-35

Region 5 Review

Corridor 17-35

Pyramid Lake to US 93 Corridor

Corridor Purpose and Rationale

This energy corridor connects multiple West-wide energy corridors within northeastern Nevada. Input regarding alignment from multiple organizations[1] during the WWEC PEIS suggested following this route. An electric transmission line is planned to generally follow the corridor from MP 69 to MP 128 and two electric transmission lines are planned to generally follow the corridor from MP 208 to MP 300. The Region 3 portion of the corridor was evaluated in the Regions 2 and 3 regional review and are not included in this review.

Corridor location:
Nevada (Churchill, Humboldt, Pershing, and Washoe Co.)
BLM: Humboldt Field Office
Regional Review Regions: Region 3 and Region 5

Corridor width, length: (Region 5 portion)
Width 3,500 (1,000 ft between MP 143 and MP 175).
83 miles of designated corridor
143 miles of posted route, including gaps

Designated Use:
- corridor is multi-modal

Corridor of concern (Y)
Access to coal plant, impacts to GRSG habitat.

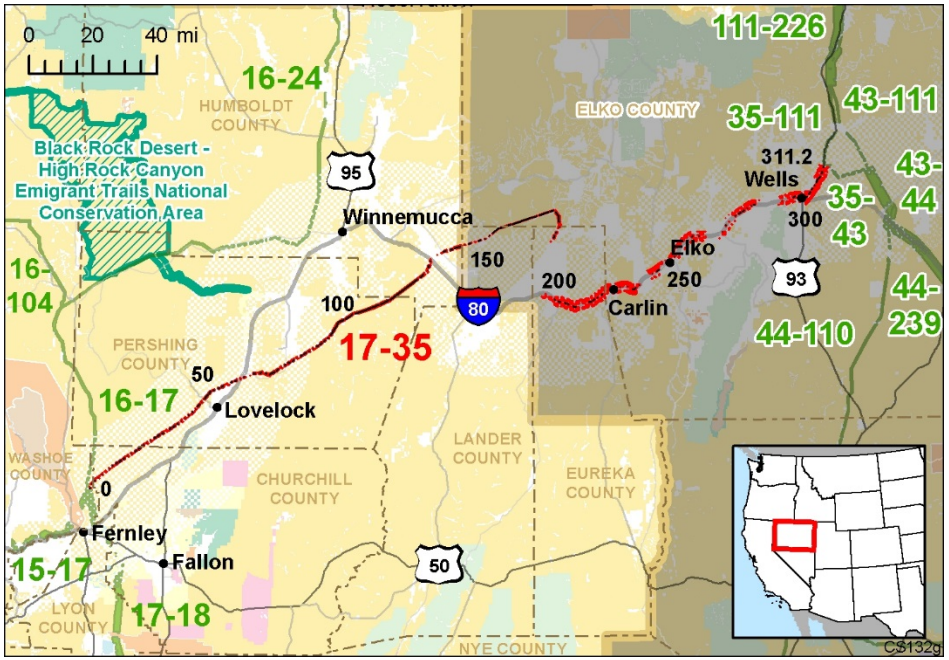
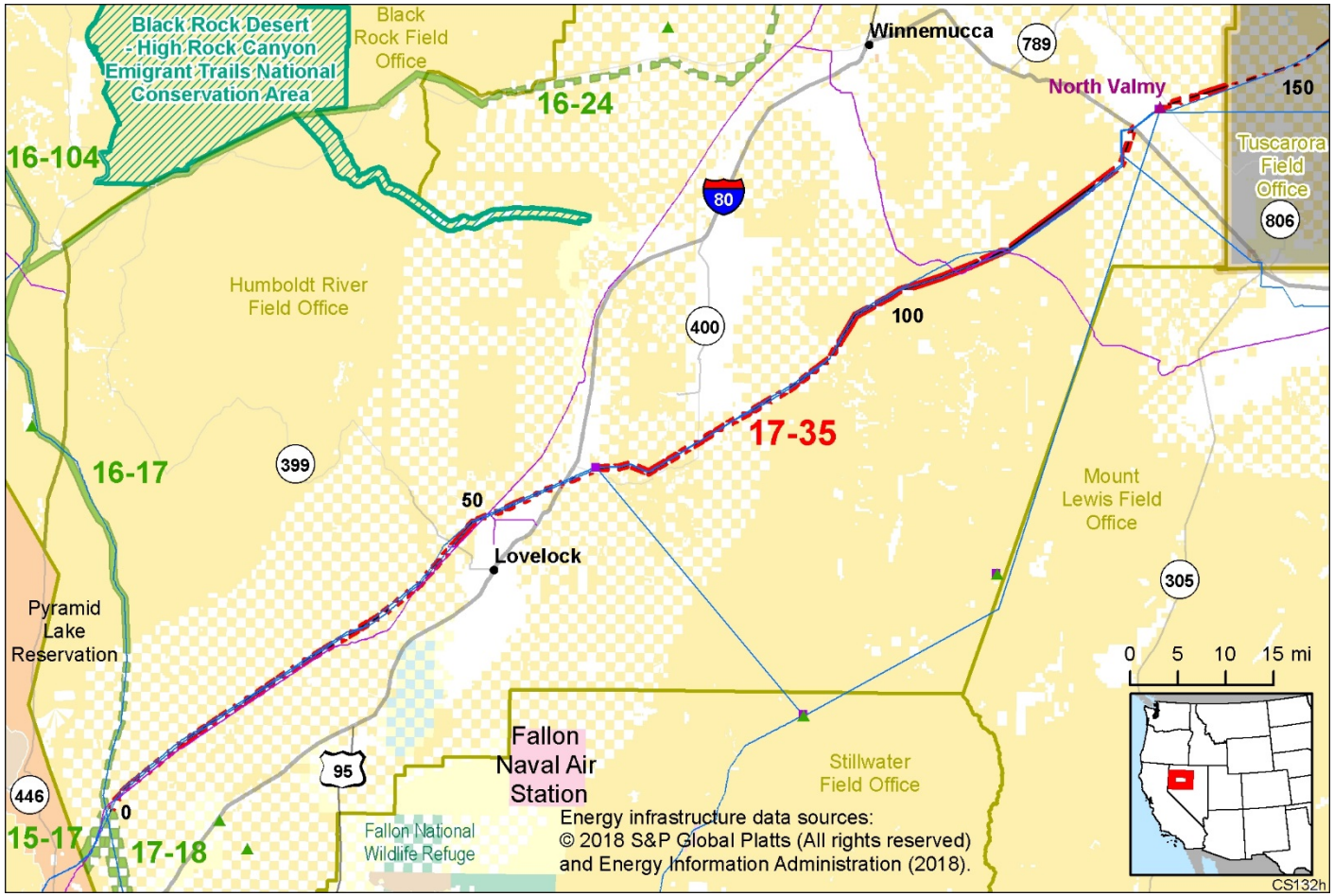
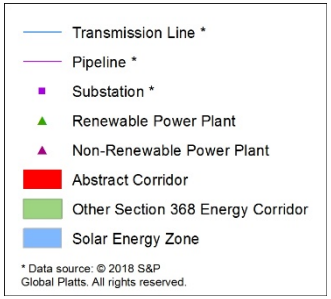


Figure 1. Corridor 17-35

Corridor history:
- Locally designated prior to 2009 (N)
- Existing infrastructure (Y)
  - 115-, 120-, and two 345-kV transmission lines are within and adjacent to the entire length of the corridor in Region 5.
  - Three natural gas pipelines are within and adjacent to portions of the corridor.
- Energy potential near the corridor (Y)
  - Coal power plant is in corridor gap at MP 136.
  - 1 substation is within the corridor and 19 more substations are within 5 mi of the corridor.
- Corridor changes since 2009 (N)

[1] American Wind Energy Association, Frontier Line, National Grid, Redding Electric Utility, Western Interconnect Transmission Paths, and Western Utility Group





Keys for Figures 1 and 2

Figure 2. Corridor 17-35 and nearby electric transmission lines and pipelines

Conflict Map Analysis

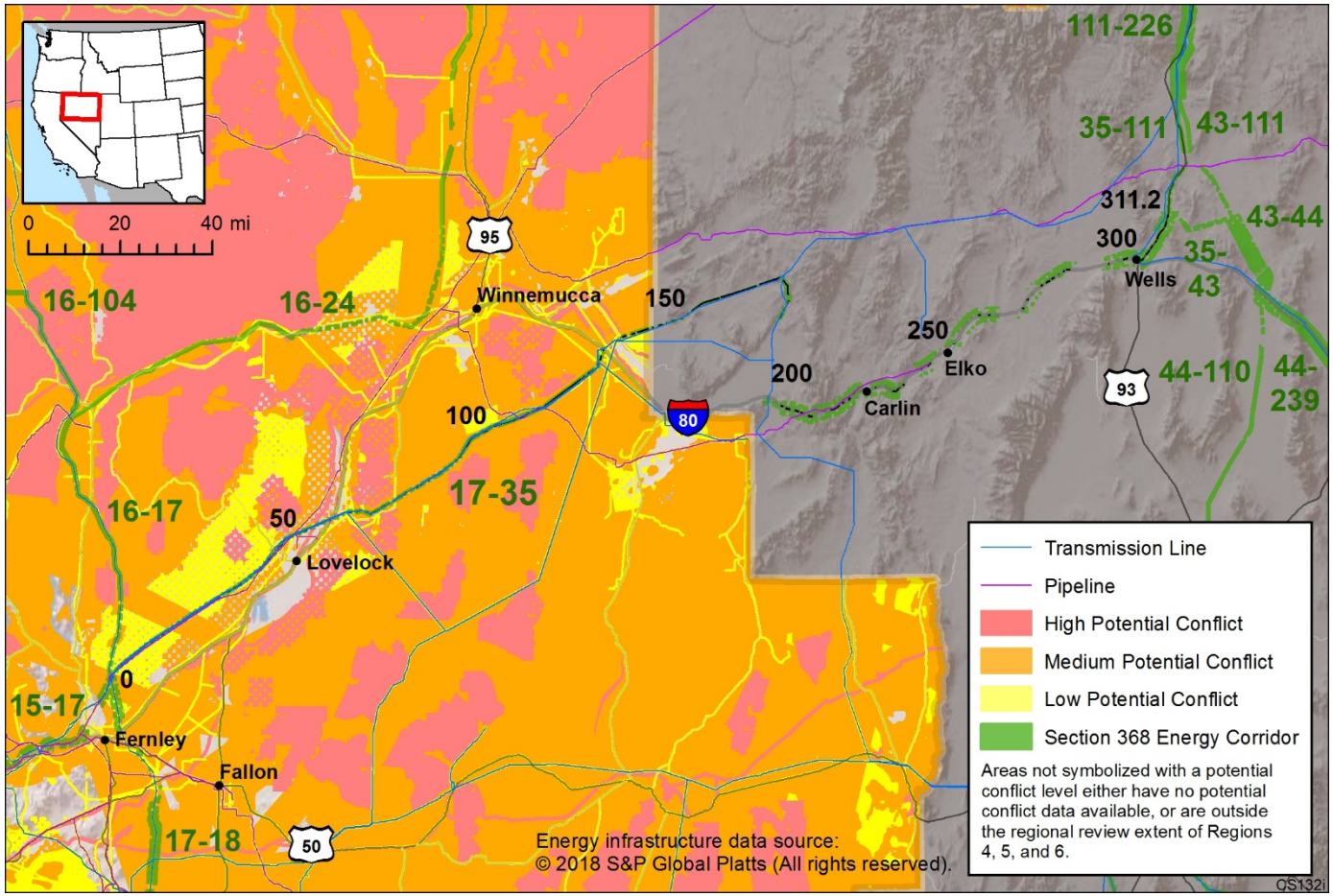


Figure 3. Map of Conflict Areas in Vicinity of Corridor 17-35

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/)

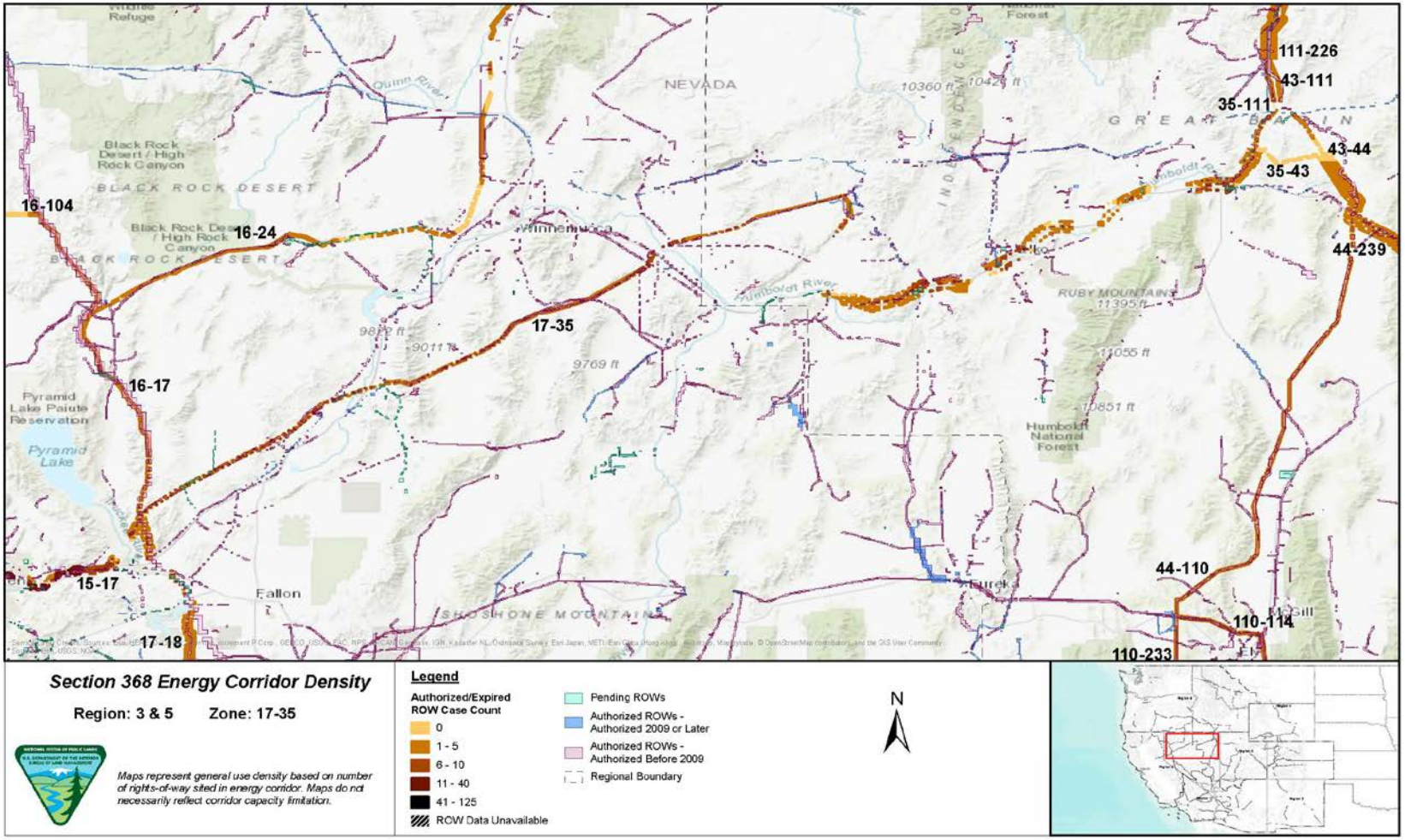


Figure 4. Corridor 17-35, Corridor Density Map

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 pink; 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.

Corridor Review Table

Designated energy corridors are areas of land prioritized for energy transmission infrastructure and are intended to be predominantly managed for multiple energy transmission infrastructure lines. Other compatible uses are allowable as specified or practicable. Resource management goals and objectives should be compatible with the desired future conditions (i.e., responsible linear infrastructure development of the corridor with minimal impacts) of the energy transmission corridor. Land management objectives that do not align with desired future conditions should be avoided. The table below identifies serious concerns or issues and presents potential resolution options to better meet corridor siting principles.

The preliminary information below is provided to facilitate further discussion and input prior to developing potential revisions, deletions, or additions.

CORRIDOR 17-35 REVIEW			
POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE	**MILEPOST (MP)[1]**	**STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION**	**POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS [2]**
BLM Jurisdiction: *Winnemucca District Office* ***Agency Land Use Plan:*** *Winnemucca District Planning Area RMP (2015)*			
California NHT and the corridor intersect - The RMP does not prescribe ROW avoidance or exclusions for areas within the California NHT. The corridor crosses the NHT High Priority segment (Rye Patch Reservoir to Woolsey) near Lovestock.	MP 55 to MP 56, MP 60, and MP 137	Intersections of the corridor with the California NHT are at an angle and do not parallel the NHT. The National Trails System Act, as cited in the Comprehensive Plan for the California NHT (1999)[3], states that the Secretary of the Interior or the Secretary of Agriculture may grant easements and ROWs upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national forest system, provided that any conditions contained in such easements and ROWs are related to the policy and purposes of this Act. For high potential route segments, the National Trails System Act states: Federally owned sites and segments of these trails are considered federal	NHT high potential segments may not be compatible with the corridor's purpose as a preferred location for energy infrastructure. However, the corridor is collocated with existing infrastructure (several transmission lines), and there is a minimal area of intersection. It might be possible to shift or delete some small segments of the corridor at these intersection locations to avoid the NHT. Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.

CORRIDOR 17-35 REVIEW			
POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE	**MILEPOST (MP)[1]**	**STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION**	**POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS [2]**
		protection components and should receive special attention by managing agencies to enhance their trail-related values.	
Four Trails Feasibility Study Trail and the corridor intersect – The RMP does not prescribe ROW avoidance or exclusions for areas within the Study Trail.	MP 55 to MP 56, MP 60, and MP 137	Intersections of the corridor with the Four Trails Feasibility Study Trail are approximately perpendicular. The Act (Public Law 111-11; 2009) directs the Secretary of the Interior to revise the original feasibility studies of the Oregon, Mormon Pioneer, California, and Pony Express NHTs. BLM Manual 6280 directs the BLM to maintain the values, characteristics, and settings for which the trail is being studied or for which the trail was recommended as suitable.	The corridor is collocated with existing infrastructure (several transmission lines), and there is a minimal area of intersection. It might be possible to shift or delete some small segments of the corridor at these intersection locations to avoid the Study Trail. Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.
***BLM Jurisdiction**: Winnemucca District Office* ***Agency Land Use Plan:** Nevada and Northeastern California GRSG ROD and ARMPA – March 2019*			
GRSG OHMA and the corridor intersect - The 2019 ARMPA states that OHMA is allocated as open for major ROWs.	MP 65 to MP 69, MP 87, MP 89 to MP 90, MP 93 to MP 97, MP 104, MP 108 to MP 110, MP 15 to MP 120, MP 125 to MP 126, and MP 129 to MP 132		The corridor appears to best meet siting principles. The corridor is collocated with one to two existing transmission lines and the GRSG OHMA areas are open to major transmission lines.
GRSG PHMA (ROW avoidance area) and the corridor intersect – The 2019 ARMPA indicates that PHMA and GHMA areas are designated as major pipeline (≥24-inch diameter) ROW avoidance areas, unless the major pipeline meets one of the allocation exception criteria outlined (in MD SSS 5).	MP 67 to MP 72	Comment on abstract: new transmission lines along this corridor will create new, fresh roads. It will also add more towers for ravens to nest in and perch on in a Sage-grouse breeding area. Corridor could be	ROW avoidance areas are not compatible with the corridor's purpose as a preferred location for infrastructure. However, collocation is preferred and the corridor is collocated with two existing transmission lines. Also, the PHMA area cannot be readily avoided because it encompasses a broad area around both sides of the

CORRIDOR 17-35 REVIEW			
POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE	**MILEPOST (MP)[1]**	**STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION**	**POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS [2]**
The ARMPA also states that co-locating new infrastructure within or next to existing infrastructure is a priority when PHMA and GHMA areas cannot be avoided.		revised from MP 64 to MP 74 to follow the Lovelock-Unionville road, routed even further south near the open pit gold mine, or go around the southern end of the Humboldt Range.	corridor. It might be possible to re-route the corridor to avoid PHMA, however, the corridor would not be collocated along existing energy infrastructure. Required Design Features in the 2019 ROD/ARMPA documents would be implemented to minimize impacts.
GRSG GHMA (ROW avoidance area) and the corridor intersect – The 2019 ARMPA indicates that PHMA and GHMA areas are designated as major pipeline (≥24-inch diameter) ROW avoidance areas, unless the major pipeline meets one of the allocation exception criteria outlined (in MD SSS 5). The ARMPA also states that co-locating new infrastructure within or next to existing infrastructure is a priority when PHMA and GHMA areas cannot be avoided.	MP 67, MP 71 to MP 73, MP 87 to MP 96, MP 104 to MP 117, and MP 126 to MP 129	Comment on abstract: MP 87 to MP 96, MP 104 to MP 115. Corridor passes between two large lek areas and very close to one of them. Adding more transmission lines or upgrading the existing one would negatively impact Sage-grouse. The towers would also provide perches and nesting places for ravens that predate on sage grouse nests. Even though there is an existing transmission line, new lines could be routed around the sage grouse habitat and avoid some of these conflicts. Also consider burying transmission lines. However, it is unknown how buried electrical lines will impact Sage-grouse nesting.	ROW avoidance areas are not compatible with the corridor's purpose as a preferred location for infrastructure. However, collocation is preferred and the corridor is generally collocated with one to two existing transmission lines. At a few locations (e.g., MP 67) there may be opportunity to shift the corridor to avoid the GHMA. In other locations (e.g., MP 103 to MP 117), the GHMA encompasses areas on both sides of the corridor and could not readily be avoided.

[1] Mileposts are rounded to the nearest mile.

[2] Siting Principles include: *Corridors are thoughtfully sited to provide maximum utility and minimum impact on the environment; Corridors promote efficient use of landscape for necessary development; Appropriate and acceptable uses are defined for specific corridors; and Corridors provide connectivity to renewable energy generation to the maximum extent possible, while also considering other generation, in order to balance the renewable sources and to ensure the safety and reliability of electricity transmission.* Projects proposed in the corridor would be reviewed during their ROW application review process and would adhere to Federal laws, regulations, and policy.

[3] Full Title: Comprehensive Management and Use Plan / Final Environmental Impact Statement - California National Historic Trail and Pony Express National Historic Trail. Management and Use Plan Update/Final Environmental Impact Statement - Oregon National Historic Trail and Mormon Pioneer National Historic Trail.

Additional Compatibility Concerns

The issues and concerns listed below are not explicitly addressed through agency land use plans or are too general in nature to be addressed without further clarification. Although difficult to quantify, the concerns listed have potential to affect future use and/or development within this designated corridor. The Agencies have provided a preliminary general analysis. The information below is provided to facilitate further discussion during stakeholder review.

Corridor Revision:

- Using Google Earth, the road scar of the existing transmission line crossing the Humboldt Range is not prominent. It could be because the natural vegetation has already grown over the road or because the road is rarely traveled. Putting in new transmission lines along this corridor will create new, fresh roads. It will also add more towers for ravens to nest in and perch on in a sage grouse breeding area. Corridor 17-35 at MP 64 to MP 74 could follow the Lovelock-Unionville road, be moved even further south near the open pit gold mine or go around the southern end of the Humboldt Range (comment on abstract).

Analysis: Collocation is preferred and at this location the corridor is collocated with an existing 345-kV transmission line.

Topography and Terrain:

- The corridor crosses mountainous areas.

Analysis: Topography could be a factor when pursuing a project proposal. The Agencies could consider potential adjustments to the corridor to avoid terrain concerns.

Jurisdictional Concerns:

- There are pinch points with in the corridor where it passes through developed towns such as Elko, Carlin, and Wells where there will be little to no space available to construct new infrastructure.

Analysis: Section 368 energy corridors are only designated on BLM- and USFS-administered lands. It is possible that future infrastructure could potentially be selectively located within the corridor to minimize intersections with private land and towns.

- The California NHT crosses private lands within the corridor path at MP 133.

Analysis: Section 368 energy corridors cannot be designated on private land. If future development was located along the private land segments, the future transmission line or pipeline would cross rather than parallel the NHT (minimizing impact on trail values). Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.

Military and Civilian Aviation:

- MTR – VR and the corridor intersect from MP 16 to MP 22 and MP 71 to MP 82.
  MTR – IR and the corridor intersect from MP 17 to MP 22 and MP 132 to MP 141.
  MTR – Slow-speed Route and the corridor intersect from MP 77 to MP 115**.**

Analysis: Adherence to existing IOP regarding coordination with DoD would be required. Agencies could consider a revision to the existing IOP to include height restrictions for corridors in the vicinity of DoD training routes.

Abstract Acronyms and Abbreviations

ARMPA = Approved Resource Management Plan Amendment; BLM = Bureau of Land Management; BMP = best management practice; DoD = Department of Defense; FO = Field Office; GHMA = general habitat management area; GIS = geographic information system; GRSG = Greater Sage-grouse; IOP = interagency operating procedure; IR = instrument route; MP = milepost; MTR = Military Training Route; NHT = National Historic Trail; NST = National Scenic Trail; OHMA = other habitat management area; PEIS = Programmatic Environmental Impact Statement; PHMA = priority habitat management area; RFI = request for information; RMP = resource management plan; ROD = Record of Decision; ROW = right-of-way; USFS = U.S. Forest Service; VR = visual route; VRM = visual resource management; WWEC = West-wide Energy Corridor.