Corridor 111-226 Region 3 Review

May 2018

Corridor 111-226

Jackpot to China Mountain

Corridor Rationale

This energy corridor provides north-south connectivity between Midpoint, Idaho and Las Vegas, Nevada. Input regarding alignment from AWEA, Idaho Power Company, Maximus USA, National Grid, the Rocky Mountain Area Transmission Study, and the Western Utility Group for the WWEC PEIS suggested following this route. The planned SWIP North transmission project (500 kV) generally follows the path of the corridor. Currently, there are no pending or recently authorized ROWs within or intersecting the corridor.

Corridor location (Region 3 portion):

Nevada (Elko Co.) BLM: Wells Field Office Regional Review Region(s): Region 3 and Region 6

Corridor width, length (Region 3 portion): Width 15,800 ft

28 miles of designated corridor34.3 mile-posted route, including gaps

Sec 368 energy corridor restrictions: (N)

• corridor is multi-modal

Corridor of concern (N)

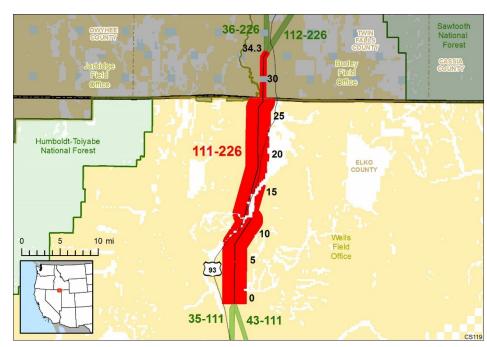


Figure 1. Corridor 111-226

Corridor history:

- Locally designated corridor prior to 2009 (Y)
- Existing infrastructure (Y)
 - Electric transmission:
 0 138 kV, 345 kV (MP 0 to MP 28)
 - Highways:
 U.S. 93 (MP 7 to MP 24)
- Energy potential near the corridor (N)
- Corridor changes since 2009 (Y)
 - 2015 NVCA ARMPA for GRSG narrowed ROW corridors within PHMAs and GHMAs to no more than 3,500 ft on BLM-administered lands.

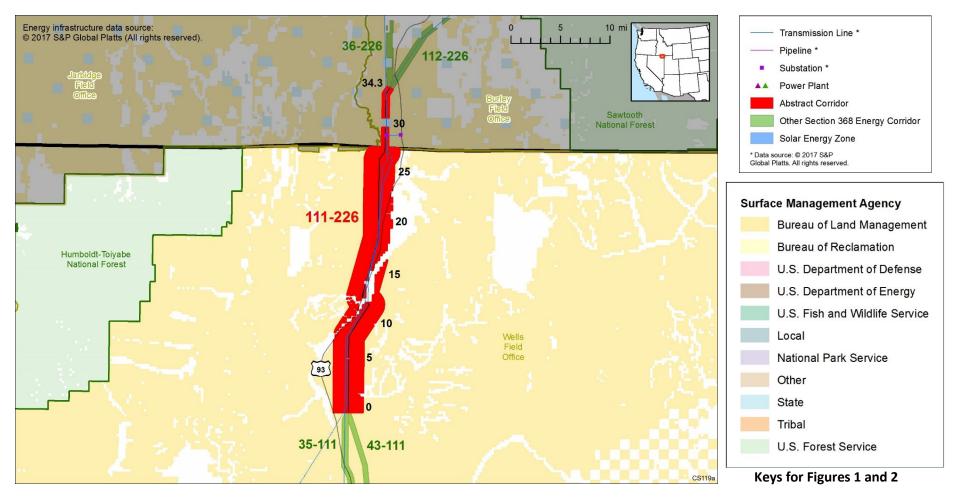


Figure 2. Corridor 111-226 and nearby electric transmission lines and pipelines (grayed out area outside of Region 2 and 3 Review)

Conflict Map Analysis

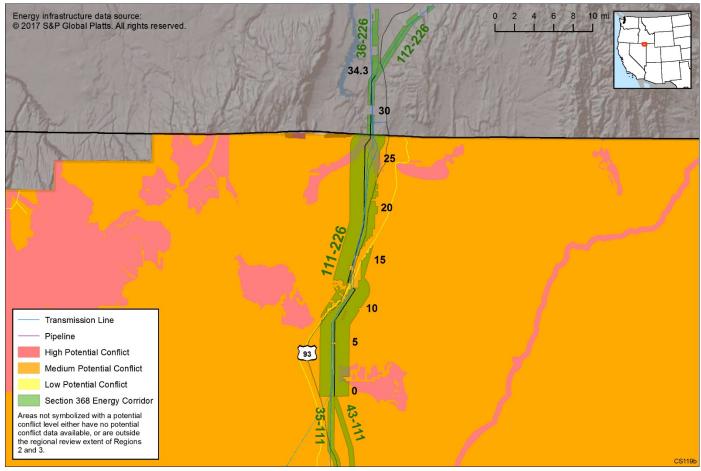


Figure 3. Map of Conflict Areas in Vicinity of Corridor 111-226

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/)

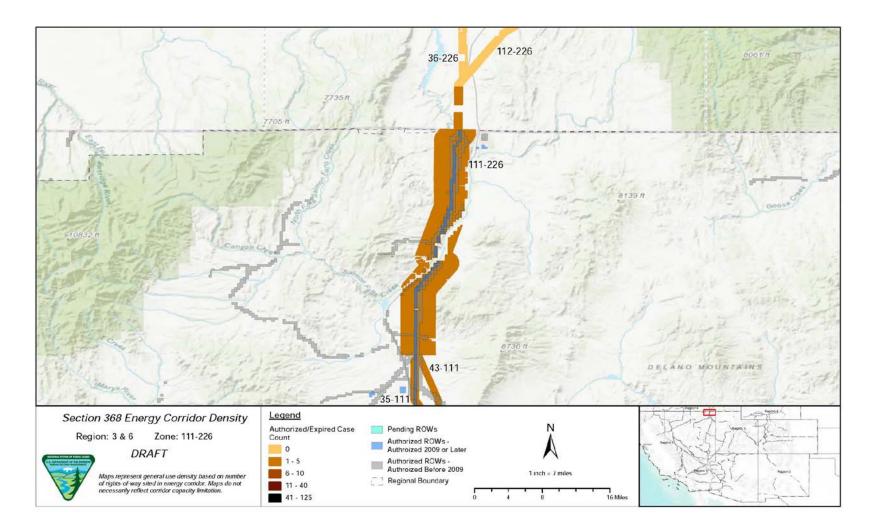


Figure 4. Corridor 111-226, Corridor Density Map

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 111-226 REVIEW TABLE							
ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1, 2}	
	<u> </u>	SOURCE ISSUES		Fillidiy issue		Source	Agency Review and Analysis	
_	Designated							
111-226 .001	BLM	Wells FO	Elko, NV	California Trail Back Country Byway	MP 25	GIS Analysis: back country byway adjacent to corridor.	Coordination with NDOT would be required to identify any management prescriptions related to the back country byway. (3)	
111-226 .002	BLM	Wells FO, Jarbidge FO	Elko, NV and Twin Falls, ID	Salmon Falls SRMA	MP 28	Agency Input: corridor is located within the Salmon Falls SRMA in Region 6, just north of the border with Region 3.	Existing and proposed transmission lines already occur within the corridor where it passes though the Salmon Falls SRMA. Collocation of future infrastructure with existing transmission lines would minimize the impacts within or near the SRMA.(1)	
Ecology								
111-226 .003	BLM	Wells FO	Elko, NV	GRSG (BLM and USFS sensitive species) NVCA GRSG PHMA	Entire length of corridor	RFI: delete/replace the corridor- 100% overlap with GRSG PACs. GIS Analysis: GRSG PHMA	Per BLM land use plan prescription, the current alignment maintains a preferred route for potential future energy development by being collocated with existing infrastructure	
						intersects corridor. Comment on corridor: apply a 4- mi buffer around corridor. This corridor contains 211,038 acres of GRSG PHMA and 27,175 acres of GRSG GHMA, as well as 202,919 acres of Sagebrush Focal Area. These categories of	(per BLM regulation). The corridor was also narrowed to a maximum of 3,500 ft. wide in the 2015 NVCA ARMPA for the GRSG. As such, the current alignment of the corridor best meets the siting principles. (1)	

	CORRIDOR 111-226 REVIEW TABLE								
ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1, 2}		
						habitat are essential for the GRSG life cycle. Delete/replace the corridor- 100% overlap with GRSG PACs.			
111-226 .004	BLM	Wells FO	Elko, NV	GRSG leks	Not specified.	Comment on abstract: 6 active status leks, 6 pending status leks, and 7 unknown status leks within these corridor areas. These lek sites are crucial for breeding season. Pending status indicates that GRSG breeding activity has been observed at this site and the site is awaiting additional data collection. Unknown status means that more information or data needs to be collected at this time, but that this is likely to be a significant area for GRSG.	This corridor location within the current range where GRSG leks occur is not easily resolved or avoided by corridor-level planning because alternate routes might also intersect lek sites. Further analysis to determine the presence of lek sites will be considered outside of corridor-level planning. (3)		
111-226 .005	BLM	Wells FO	Elko, NV	Pronghorn Antelope	MP 3 to MP 8, MP 23 to MP 26	Comment on abstract: these areas have been identified as crucial winter habitat for Pronghorn Antelope and should be avoided if at all possible.	Pronghorn Antelope winter habitat is an important consideration but further analysis of this species is not a consideration for corridor-level planning. (3)		
111-226 .006	BLM	Wells FO	Elko, NV	Mule Deer	MP 24 to MP 28	Comment on abstract: these areas have been identified as crucial winter habitat for Mule Deer and should be avoided if at all possible. If avoidance is not possible, extra planning and/or measures should be incorporated to reduce or minimize impacts to this habitat.	Mule Deer winter habitat and transitional range are important considerations but further analysis of this species is not a consideration for corridor-level planning. (3)		
					MP 9 to MP 12	This area has been identified as transitional range for Mule Deer and extra planning and/or measures should be			

				CORR	IDOR 111-226 REVIEW	TABLE	
ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1, 2}
						incorporated to reduce or minimize impacts to this habitat.	
111-226 .007	BLM	Wells FO	Elko, NV	Streams: Knoll Creek, Salmon Falls Creek, and Cottonwood Creek	MP 2, MP 8 to MP 19, MP 24 to MP 28, MP 26 to MP 27 MP 24 to MP 28	GIS Analysis: streams intersect corridor and corridor gaps. Comment on abstract: these	Alternate routes would still require crossing of one or more of the streams. Existing and proposed transmission lines within the corridor currently intersect the streams. Collocating
						areas cross Salmon River Creek, Cottonwood Creek, White Creek, and Steptoe Creek, all fishable waterways, and should be avoided if possible. If avoidance is not possible, extra planning and/or measures should be incorporated to reduce or minimize impacts to	future infrastructure within the corridor would minimize the spatial extent of impacts to the streams compared to their placement in a different corridor location. Fishable waterways are an important consideration but further analysis of these streams is not a consideration for corridor-level planning. (3)
						these waterways.	corridor-level planning. (3)
Visual Re	1						
111-226 .008	BLM	Wells FO	Elko, NV	VRM Class II	MP 24 to MP 28	GIS Analysis: VRM Class II area and corridor intersect.	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)
111-226 .009	BLM	Wells FO	Elko, NV	VRM Class III	MP 0 to MP 28	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)
111-226	BLM	Wells FO	Elko, NV	VRM Class IV	MP 0 to MP 7 and MP	GIS Analysis: VRM Class IV areas	The existing corridor location best
.010	Resources	l	<u> </u>		9 to MP 13	and corridor intersect.	meets the siting principles. (1)
111-226	BLM	Wells FO	Elko, NV	Known cultural	MP 7 to MP 28	Agency Input: portions of this	The potential for cultural resources is a
.011				resources		corridor are known to have a high concentration of sensitive cultural resources. Browns	concern for the Agencies that cannot be resolved during corridor-level planning. Surveys will occur as part of

	CORRIDOR 111-226 REVIEW TABLE							
ID	Agency	Agency Jurisdiction	County	Primary Issue	Corridor Location (by Milepost [MP])	Source	Agency Review and Analysis ^{1, 2}	
						Bench is an area of cultural concern. Comment on abstract: Browns Bench. This area is near to an obsidian source and is known to have a high density of cultural resources.	the ROW application process. Existing IOPs specific to cultural resources and tribal consultation would be followed in connection with any proposed energy project in the corridor. (3)	
	Concerns							
-	1 -	ilian Aviation	1					
111-226 .012	BLM	Wells FO	Elko, NV	MTR – VR	MP 0 to MP 20	GIS Analysis: VR intersects corridor.	The concern related to MTRs is noted and the adherence to existing IOP	
111-226 .013	BLM	Wells FO	Elko, NV	MTR – IR	MP 0 to MP 20	GIS Analysis: IR intersects corridor.	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)	

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; BLM = Bureau of Land Management; 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; NDOT = Nevada Department of Transportation; NVCA = Nevada and Northeastern California; PAC = Priority Area for Conservation; PEIS = Programmatic Environmental Impact Statement; PHMA = Priority Habitat Management Area; RFI = request for information; RMP = Resource Management Plan; ROW = right-of-way; SRMA = Special Recreation Management Area; USFS = U.S. Forest Service; VR = Visual Route; VRM = Visual Resource Management; WWEC = West-wide Energy Corridor.

Corridor 111-226 Region 6 Review

Corridor 111-226

Nevada-Idaho Connector Corridor

Corridor Purpose and Rationale

This energy corridor provides north-south pathway between Nevada and Idaho. The corridor connects to multiple Section 368 energy corridors, providing a continuous corridor network from Boise, Idaho to Las Vegas, Nevada across BLM- and USFS-administered lands. Input regarding alignment from multiple organizations¹ for the WWEC PEIS suggested following this route. The approved Southwest Intertie Project North (SWIP North) transmission project generally follows the path of the corridor.

Corridor location:

Idaho (Twin Falls Co.) BLM: Burley Field Office Regional Review Regions: Region 3 and Region 6

Corridor width, length: (Region 6 portion) Width 3,500 ft 5 miles of designated corridor 6 miles of posted route, including gaps

Designated Use:

• corridor is multi-modal

Corridor of concern (N)



Figure 1. Corridor 111-226

Corridor history:

- Locally designated prior to 2009 (N)
 Existing infrastructure (Y)
 - Two 138-kV and one 345-kV transmission lines are within and adjacent to the entire length of the corridor.
- Energy potential near the corridor (Y)
 - 1 substation is within the corridor and 2 more substations are within 5 mi of the corridor.
- Corridor changes since 2009 (N)

¹ American Wind Energy Association, Idaho Power Company, Rocky Mountain Area Transmission Study, and Western Utility Group

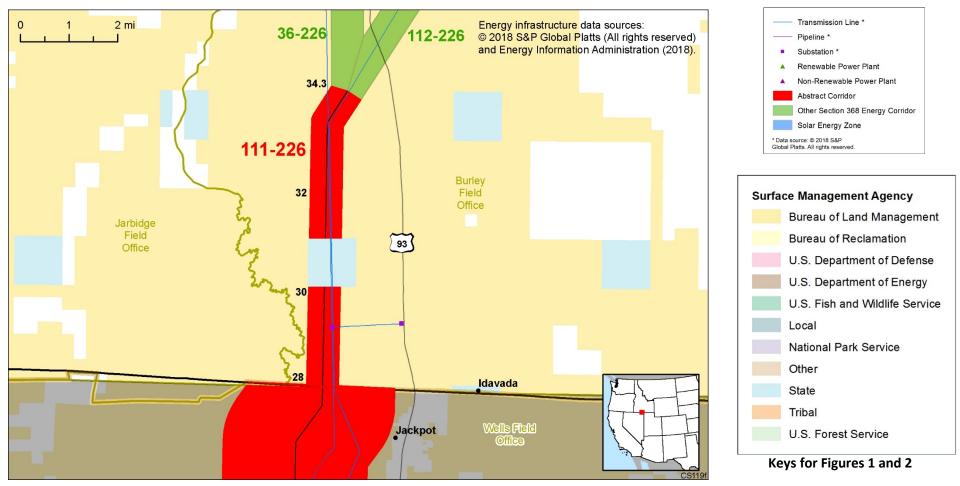


Figure 2. Corridor 111-226 and nearby electric transmission lines and pipelines

Conflict Map Analysis

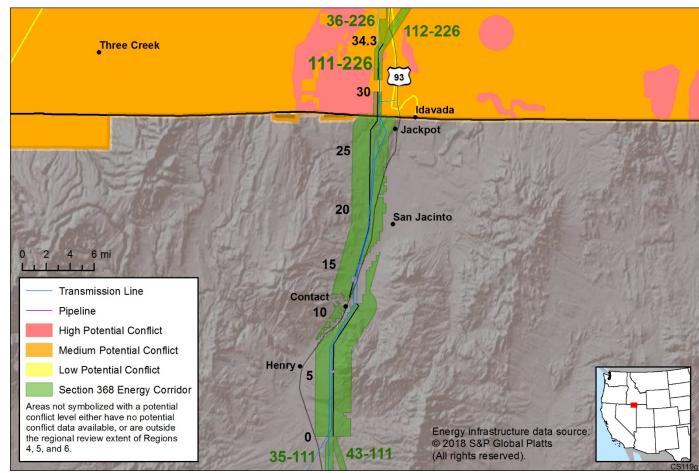


Figure 3 reflects a comprehensive resource conflict assessment developed to enable the Agencies and stakeholders to visualize a corridor's proximity to environmentally sensitive areas and to evaluate options for routes with lower potential conflict. The potential conflict assessment (low, medium, high) shown in the figure is based on <u>criteria</u> 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 3. Map of Conflict Areas in Vicinity of Corridor 111-226

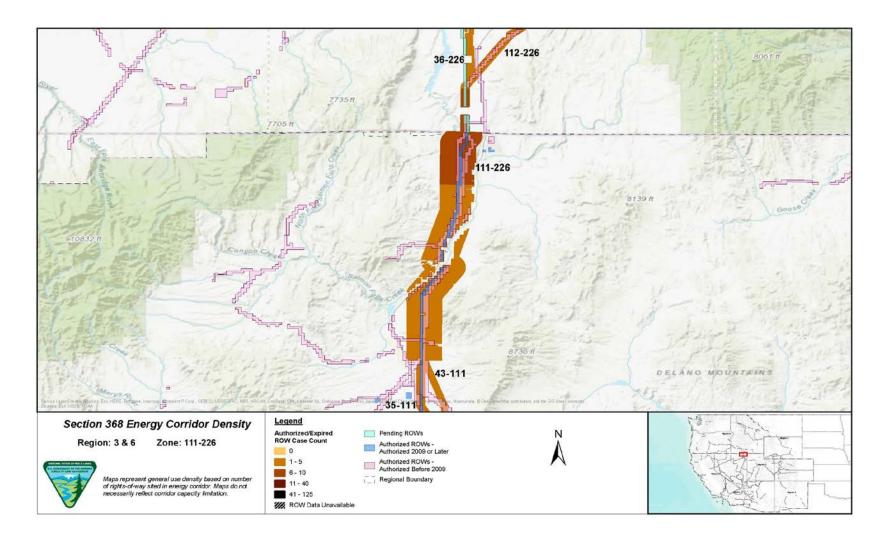


Figure 4. Corridor 111-226, Corridor Density Map

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 111-226 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: Burley Field Office							
Agency Land Use Plan: Twin Falls MFP (1987) Salmon Falls Reservoir SRMA is intersected by the corridor - The MFP does not prescribe ROW avoidance or exclusions for SRMAs within designated energy corridors. However, it is recommended to confine future energy transmission lines to designated corridors (two had been identified at the time of the MFP ROD).	MP 28 to MP 34		Between MP 28 and MP 34, the SRMA encompasses a broad area both west and east of the corridor, which cannot be avoided. The corridor location appears to best meet the siting principles because of collocation with two existing transmission lines and the absence of more preferable alternatives.				
VRM Class I areas are intersected by and adjacent to the corridor - The objective of VRM Class I designation is to preserve the existing character of the landscape.	MP 28 to MP 30 (intersection) and MP 32 to MP 34 (VRM Class I intersects and is adjacent to both sides of corridor)		VRM Class I is not consistent with future development and is not compatible with the corridor's purpose as a preferred location for infrastructure. The corridor could be shifted or narrowed to avoid the VRM Class I areas, but shifting the corridor could introduce additional resource conflicts. The Agencies could also consider changing the VRM class at the locations of VRM Class I intersections since the corridor is collocated with existing transmission lines.				
BLM Jurisdiction: Burley Field Office							
Agency Land Use Plan: Idaho GRSG ROD and ARMPA GRSG PHMA (ROW avoidance area) and the corridor intersect – The 2019 ARMPA states that collocating new infrastructure within existing ROWs and maintaining and upgrading ROWs is preferred over the creation of new ROWs or the	MP 28 to MP 34	RFI comment: delete/replace: 100% overlap with GRSG PACs.	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 existing transmission lines. The PHMA encompasses a broad area both west and east of				

CORRIDOR 111-226 REVIEW							
POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE	STAKEHOLDER INPUT and MILEPOST(MP)1INFORMATION		POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ²				
construction of new facilities in all management areas.			the corridor which cannot be avoided.				
GRSG IHMA (ROW avoidance area) and the corridor intersect – The 2019 ARMPA indicates that collocating new infrastructure within existing ROWs and maintaining and upgrading ROWs is preferred over the creation of new ROWs or the construction of new facilities in all management areas.	MP 28 to MP 34	RFI comment: delete/replace: 100% overlap with GRSG PACs.	ROW avoidance areas are not compatible with the corridor's purpose as a preferred location for infrastructure. However, the corridor is collocated with existing transmission lines. The IHMA encompasses a broad area both west and east of the corridor which cannot be avoided. Section 368 energy corridors are priority areas open to ROWS to maximize energy transmission while minimizing impacts on other resources.				

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.

Additional Compatibility Concerns

No additional concerns have been identified for Corridor 111-226.

Abstract Acronyms and Abbreviations

ARMPA = Approved Resource Management Plan Amendment; BLM = Bureau of Land Management; FO = Field Office; GIS = geographic information system; GRSG = Greater Sagegrouse; IHMA = important habitat management area; MFP = Management Framework Plan; MP = milepost; PAC = priority area for conservation; 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; SRMA = Special Recreation Management Area; USFS = U.S. Forest Service; VRM = visual resource management; WWEC = West-wide Energy Corridor.