

Corridor 11-228

Bend to Boise Corridor

Corridor Purpose and Rationale

The corridor provides an east-west pathway for energy transport from eastern Oregon into Idaho along existing infrastructure. The corridor connects multiple Section 368 energy corridors, creating a continuous corridor network across BLM- and USFS-administered lands. Input regarding alignment from multiple organizations¹ during the WVEC PEIS suggested following this route. Boardman (Longhorn) to Hemingway Transmission (B2H), a 500-kV planned transmission line, follows and runs adjacent to the corridor from MP 207 to MP 221.

Corridor location:

Oregon (Cook, Deschutes, Harney, Lake and Malheur Co.) and Idaho (Owyhee Co.)
BLM: Central Oregon, Deschutes, Malheur, Owyhee, and Three Rivers Field Offices
Regional Review Region: Region 6

Corridor width, length:

Width variable 1,500 ft to 3,500 ft
149 miles of designated corridor
221 miles of posted route, including gaps

Designated Use:

- corridor is multi-modal

Corridor of concern (N)



Figure 1. Corridor 11-228

Corridor history:

- Locally designated prior to 2009 (Y)
- Existing infrastructure (Y)
 - 115- and 500-kV transmission lines are within and adjacent to the corridor for portions of its length.
- Energy potential near the corridor (Y)
 - 2 hydroelectric power plans within 1 mi.
 - 15 substations are within 5 mi of the corridor.
- Corridor changes since 2009 (N)

¹ American Wind Energy Association, Idaho Power Company, National Grid, Rocky Mountain Area Transmission Study, and Western Interconnect Transmission Paths

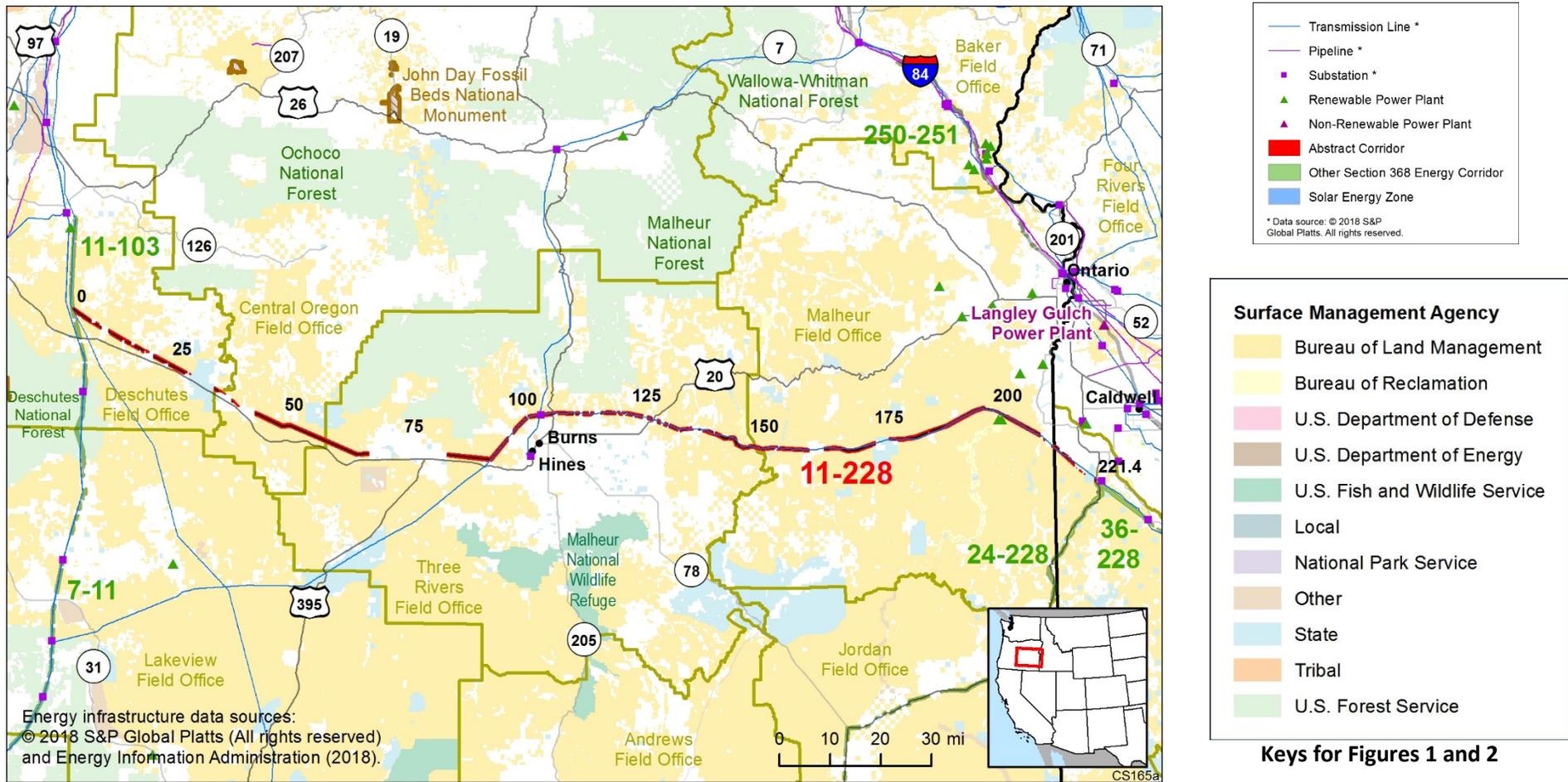


Figure 2. Corridor 11-228 and nearby electric transmission lines and pipelines

Conflict Map Analysis

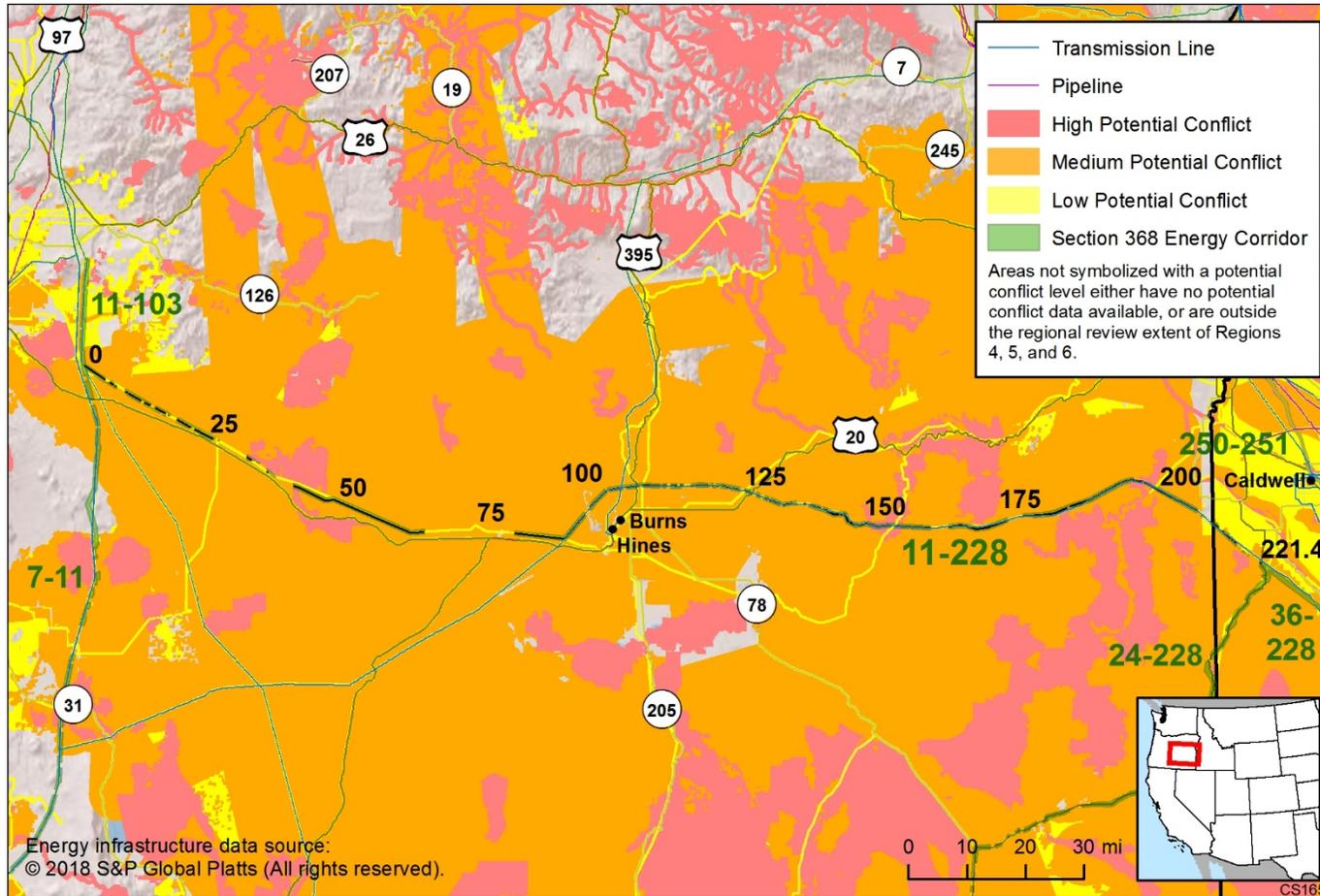


Figure 3. Map of Conflict Areas in Vicinity of Corridor 11-228

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/>)

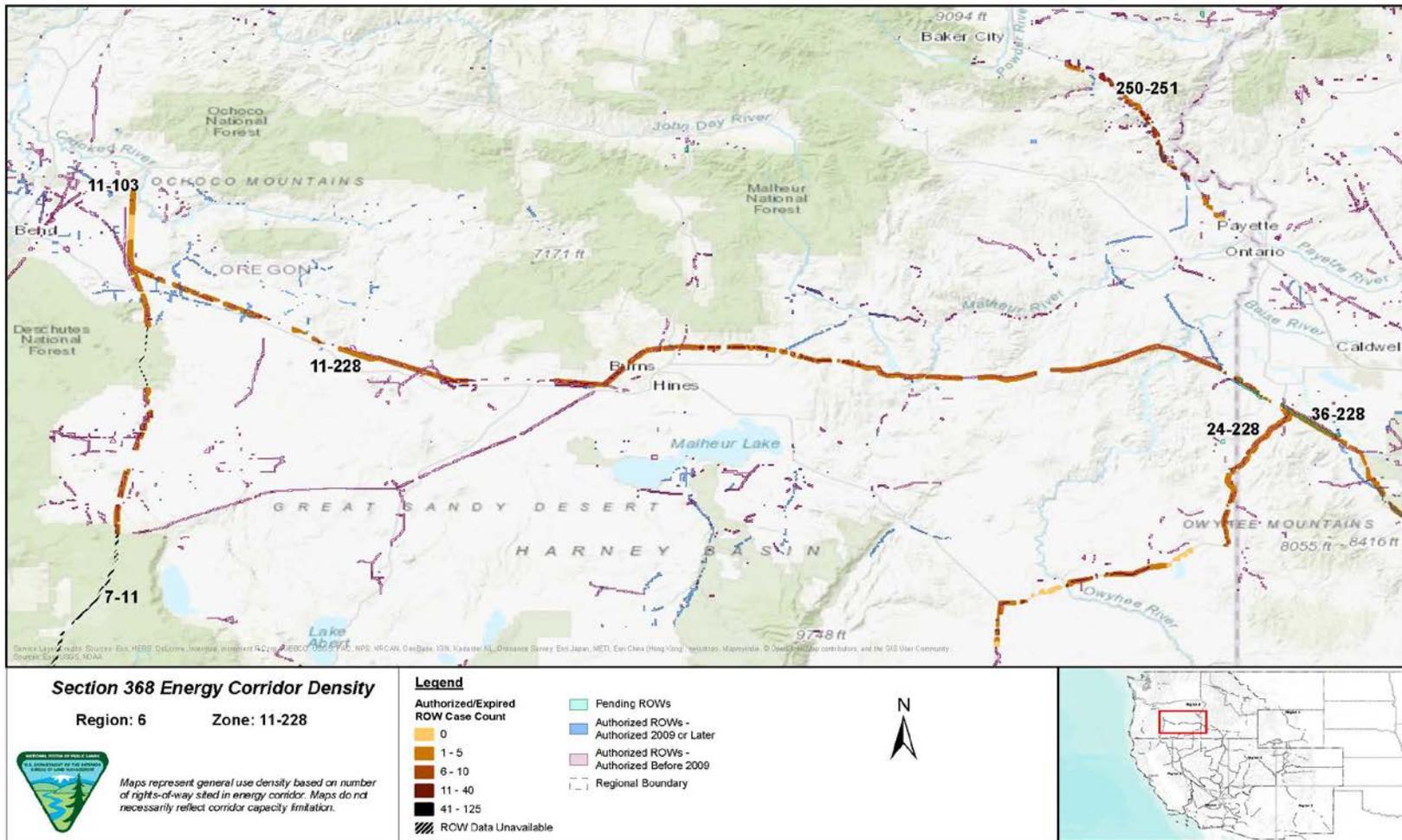


Figure 4. Corridor 11-228, Corridor Density Map

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 11-228 REVIEW			
POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE	MILEPOST (MP)¹	STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION	POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS²
<i>BLM Jurisdiction: Prineville and Deschutes Field Office</i>			
<i>Agency Land Use Plan: Upper Deschutes RMP (2005)</i>			
Lands with undetermined status for wilderness characteristics intersect the corridor.	MP 0 to MP 7, MP 8 to MP 17	BLM Manual Section 6320 (Considering lands with wilderness characteristics in the BLM Land Use Planning Process), 3/15, 2012, provides policy and guidance for considering lands with wilderness characteristics in land use planning under FLPMA.	The corridor location appears to best meet siting principles because it is collocated with an existing transmission line. The corridor cannot be shifted to avoid the potential lands with wilderness characteristics because those lands are located along both sides of the corridor. The BLM retains broad discretion regarding the multiple use management of lands possessing wilderness characteristics without Wilderness or WSA designations. Agencies could consider a new IOP to assist with avoiding and/or minimizing impacts to developing energy infrastructure on lands with wilderness characteristics.
Lower Crooked River BLM Back Country Byway and the corridor intersect – The RMP states that proponents will work with State and local governments to manage visual resources and interpretive opportunities along roads and highways including scenic byways. Identify and rehabilitate negative visual elements on public lands within the immediate foreground (0 to 0.25 mi) corridor of travel routes along designated scenic or backcountry byways, trails, and major travel routes through the planning area.	MP 10		The corridor intersection here appears to best meet the siting principles. While the corridor cannot be re-routed to avoid the byway, the corridor is collocated with existing infrastructure and the byway crosses the corridor at an angle (minimizing impacts)

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VRM Class II area and the corridor intersect – The RMP states that new ROWs will be designed to meet the VRM class of the affected area. The objective of VRM Class II designation is to retain the existing character of the landscape.	MP 32 to MP 33		Areas with the VRM Class II designation may not be compatible with future overhead transmission line development; however, the corridor is collocated with an existing transmission line. In order to best meet the siting principles, a change in the VRM class could be considered.
BLM Jurisdiction: Prineville Central Oregon Field Office Agency Land Use Plan: Brothers/LaPine RMP (1989)			
VRM Class II area and the corridor intersect – VRM class is not addressed in the RMP. However, MP 33 to MP 42 intersect with an area identified in the RMP as having high or sensitive visual qualities. Before BLM initiates or permits any major surface disturbing activity on public lands, an analysis will be completed to determine adverse effects on visual qualities. Activities within areas of high or sensitive visual quality may be permitted if they would not attract attention or leave long term adverse visual changes on the land. Areas having high or sensitive visual qualities will be avoided or appropriate mitigation measures taken. The objective of VRM Class II designation is to retain the existing character of the landscape.	MP 33 to MP 42		Areas with the VRM Class II designation may not be compatible with future overhead transmission line development; however, except at MP 42 the corridor is collocated with an existing transmission line. In order to best meet the siting principles, a change in the VRM class could be considered.
Hampton Butte WSA is adjacent to the corridor – WSAs are considered ROW exclusion areas, but there are no restrictions identified in the RMP for ROWs to be adjacent to WSAs.	MP 38	Under the Wilderness Act (1964), a WSA must be managed as Wilderness pending final determination by Congress. It is highly unlikely that utility ROWs could be approved in WSAs or WSAs.	The corridor appears to best meet the siting principles. The corridor is not located in the WSA and development and management inside of the corridor would not be affected. Collocation is preferred, and the corridor is collocated with an existing transmission line. Options to shift the corridor to federal lands further away from the WSA are limited.
Lands with undetermined status for wilderness characteristics intersect the corridor.	MP 42 to MP 53, MP 61 to MP 65	BLM Manual Section 6320 (Considering lands with wilderness characteristics in the BLM Land Use Planning Process), 3/15, 2012, provides policy and guidance for considering lands with wilderness	The corridor location appears to best meet siting principles because it is collocated with an existing transmission line. Between MP 42 and MP 53 the corridor cannot be shifted to avoid the potential lands with wilderness characteristics because those lands are located along both sides of the corridor. Between MP 61 and MP 65 the corridor could be

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		<p>characteristics in land use planning under FLPMA.</p>	<p>shifted to the south to avoid the potential lands with wilderness characteristics.</p> <p>The BLM retains broad discretion regarding the multiple use management of lands possessing wilderness characteristics without Wilderness or WSA designations.</p> <p>Agencies could consider a new IOP to assist with avoiding and/or minimizing impacts to developing energy infrastructure on lands with wilderness characteristics.</p>
<p>Four Trails Feasibility Study Trail and the corridor intersect— The RMP does not reference the Four Trails Feasibility Study Trail since it pre-dates the 2009 legislation designating the study trail (Public Law 111-11).</p>	<p>Between MP 50 to MP 51</p>	<p>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.</p> <p>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.</p>	<p>The corridor here appears to best meet the siting principles. While the corridor cannot be re-routed to avoid the Study Trail, the corridor is collocated with existing infrastructure and the Study Trail crosses the corridor at an angle (minimizing impacts).</p> <p>Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.</p>
<p>BLM Jurisdiction: Three Rivers Field Office Agency Land Use Plan: Three Rivers RMP/ROD (1992)</p>			
<p>South Fork John Day River BLM Back Country Byway and the corridor intersect – The RMP does not prescribe ROW avoidance or exclusions for backcountry byways.</p>	<p>MP 95 to MP 96</p>		<p>The corridor intersection here appears to best meet the siting principles. There are no management prescriptions preventing future development within the corridor. While the corridor cannot be re-routed to avoid the backcountry byway, the corridor is collocated with existing infrastructure and the byway crosses the corridor at an angle (minimizing impacts).</p>
<p>Lands with wilderness characteristics intersect the corridor.</p>	<p>MP 101 to MP 106, MP 112 to MP 132, and MP 136 to MP 148</p>	<p>BLM Manual Section 6320 (Considering lands with wilderness characteristics in the BLM Land Use Planning Process), 3/15, 2012, provides policy and guidance for considering lands with wilderness</p>	<p>The corridor location appears to best meet siting principles because it is collocated with an existing transmission line. The corridor cannot be shifted to avoid the potential lands with wilderness characteristics because those lands are located along both sides of the corridor.</p>

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		characteristics in land use planning under FLPMA.	The BLM retains broad discretion regarding the multiple use management of lands possessing wilderness characteristics without Wilderness or WSA designations. Agencies could consider a new IOP to assist with avoiding and/or minimizing impacts to developing energy infrastructure on lands with wilderness characteristics.
Four Trails Feasibility Study Trail and the corridor intersect— The RMP does not reference the Four Trails Feasibility Study Trail since it pre-dates the 2009 legislation designating the Study Trail (Public Law 111-11).	MP 122 to MP 123	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 intersection here appears to best meet the siting principles. While the corridor cannot be re-routed to avoid the Study Trail, the corridor is collocated with existing infrastructure and the Study Trail crosses the corridor at an angle (minimizing impacts). Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.
BLM Jurisdiction: Vale Malheur Field Office			
Agency Land Use Plan: Southeastern Oregon RMP (2002)			
VRM Class II area and the corridor intersect - Utility corridor widths may be reduced in size and may be limited to valid existing ROW widths or the accumulation of ROW widths where a particular utility corridor is bordered on both sides by VRM Class II areas. The objective of VRM Class II designation is to retain the existing character of the landscape.	MP 148 to MP 154, MP 196 to MP 199		Areas with the VRM Class II designation may not be compatible with future overhead transmission line development; however, the corridor is collocated with an existing transmission line. In order to best meet the siting principles, a change in the VRM class could be considered.
Owyhee Below Dam ACEC and the corridor intersect - Utility corridor widths may be reduced in size and may be limited to valid existing ROW widths or the accumulation of ROW widths where a particular utility corridor is bordered on both sides by ACECs.	MP 195 to MP 199	Comment on abstract: Owyhee Below Dam ACEC overlaps 584 acres of corridor.	The corridor appears to best meet the siting principles. The corridor cannot be easily re-routed to avoid the ACEC. Collocation is preferred and the corridor is collocated with existing infrastructure (transmission line). Additionally, the corridor’s width at this location is reduced to 1,500 ft to minimize impacts to Owyhee-Below-the-Dam ACEC.

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POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE	MILEPOST (MP) ¹	STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION	POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ²
<i>BLM Jurisdiction: Owyhee Field Office</i>			
<i>Agency Land Use Plan: Owyhee RMP (1999)</i>			
Jump Creek SRMA and the corridor intersect – The RMP does not prescribe ROW avoidance or exclusions for SRMAs.	MP 218 to MP 219		There are no management prescriptions preventing future development within the corridor, and only small slivers of BLM-administered lands are within the corridor where the intersection with the SRMA occurs. Options to shift this corridor to federal lands outside of the SRMA are limited.
<i>BLM Jurisdiction: Prineville and Deschutes Field Office, Prineville Central Oregon Field Office, Three Rivers Field Office, Vale Malheur Field Office</i>			
<i>Agency Land Use Plan: Oregon GRSR ROD and ARMPA – March 2019</i>			
GRSG GHMA (ROW avoidance) and the corridor intersect – The 2019 ARMPA did not make changes to GHMA in Oregon; designated utility corridors in GHMA may be available for utility ROWs with special stipulations.	MP 0 to MP 12, MP 32 to MP 34, MP 36 to MP 37, MP 42 to MP 50, MP 57 to MP 66, MP 82 to MP 127, MP 138 to MP 156, and MP 184 to MP 204	RFI comments: re-route or exclude new infrastructure ROWs and avoid all new energy infrastructure development within GRSR PACs (30% overlap). Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within four miles of important GRSR breeding areas.	ROW avoidance areas may not be compatible with the corridor's purpose as a preferred location for infrastructure. However, collocation is preferred and the corridor is collocated with the existing transmission line. In general, the GHMA encompasses a broad area surrounding the corridor which cannot be avoided.
GRSG PHMA (ROW avoidance) and the corridor intersect – The 2019 ARMPA did not make changes to PHMA in Oregon; designated utility corridors in PHMA may be available for utility ROWs with special stipulations.	MP 11 to MP 27, MP 50 to MP 57, MP 127 to MP 138, and MP 155 to MP 184	RFI comments: re-route or exclude new infrastructure ROWs and avoid all new energy infrastructure development within GRSR PACs (30% overlap). Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within four miles of important GRSR breeding areas.	ROW avoidance areas may not be compatible with the corridor's purpose as a preferred location for infrastructure. However, collocation is preferred and the corridor is collocated with the existing transmission line. The PHMA encompasses a broad area surrounding the corridor which cannot be avoided.
<i>BLM Jurisdiction: Owyhee Field Office</i>			
<i>Agency Land Use Plan: Idaho GRSR ROD and ARMPA – March 2019</i>			
GRSG AHMA (ROW avoidance) 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. Collocation in designated corridors can be built within the existing corridor or adjacent to the existing corridor.	MP 211 to MP 216 and MP 218 to MP 221		ROW avoidance areas are not compatible with the corridor's purpose as a preferred location for infrastructure. However, collocation with the existing transmission line minimizes disturbance to AHMA.

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

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.

Lands with wilderness characteristics:

- Citizens' Wilderness Proposal: Dry Creek, Freezout Ridge, Grassy Mountain, Keeney Ridge, and Middle River (RFI comment).

Analysis: 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. 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. Agencies could consider an IOP to provide guidance on the review process for applications within corridors with incomplete inventories. The potential IOP would assist with avoiding, minimizing, and/or mitigating impacts to lands with wilderness characteristics.

- Slaughter Gulch lands with wilderness characteristics overlaps 84 acres (MP 151, MP 153 to MP 155), there is opportunity to avoid by adjusting the corridor south. Granite Creek lands with wilderness characteristics overlaps 53 acres (MP 153). Prava Peak lands with wilderness characteristics overlaps 60 acres (MP 163 to MP 164), there is opportunity to avoid Prava Peak lands with wilderness characteristics by adjusting corridor at MP 163 to MP 164 South. Rufino Butte lands with wilderness characteristics overlaps 11 acres (MP 172). Hunter Springs lands with wilderness characteristics overlaps 178 acres (MP 177 to MP 199), there is opportunity to avoid Hunter Springs lands with wilderness characteristics by adjusting corridor south. Sourdough Mountains lands with wilderness characteristics overlaps 95 acres (MP 183 to MP 188), there is opportunity to avoid Sourdough Mountains lands with wilderness characteristics by adjusting corridor south. Sand Hollow lands with wilderness characteristics overlaps 525 and 228 acres (MP 192 to MP 194), there is opportunity to avoid Sand Hollow lands with wilderness characteristics by adjusting corridor north (comment on abstract).

Analysis: At some locations, the corridor cannot be shifted to avoid the potential lands with wilderness characteristics because those lands are located along both sides of the corridor. At other locations, the corridor could be slightly shifted to the south (MP 149 to MP 151, MP 162 to MP 171, and MP 177 to MP 188) or north (MP 192 to MP 194) to avoid potential lands with wilderness characteristics. The BLM retains broad discretion regarding the multiple use

management of lands possessing wilderness characteristics without Wilderness or WSA designations. Agencies could consider a new IOP to assist with avoiding and/or minimizing impacts to developing energy infrastructure on lands with wilderness characteristics.

Ecology:

- 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 (RFI comment).
- Currently managed under outdated RMPs. We urge the BLM to provide the best available science and management criteria for mitigating the impact associated with river crossings. Collocating ROWs within current corridors will help reduce extended and new ROW establishments that impact river and riparian habitat. The Abstracts must include watershed impacts as part of the corridor high impact assessment (comment on abstract).

Analysis: Existing IOPs and BMPs would be required, including those related to surface water resources during project construction. In general, the corridor follows existing infrastructure. The Agencies could consider an IOP for habitat connectivity so that transmission projects within Section 368 energy corridors are sited and designed in a manner that minimizes impacts on habitat connectivity.

Military and Civilian Aviation:

- SUA and the corridor intersect from MP 11 to MP 66.
- MTR – IR and the corridor intersect from MP 21 to MP 27, MP 62 to MP 66, and MP 130 to MP 150, and MP 191 to MP 208.
- MTR-VR intersects and is adjacent to the corridor from MP 26 to MP 66, MP 85 to MP 96, and MP 100 to MP 199.

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

ACEC = area of critical environmental concern; AHMA = Additional Habitat Management Area; ARMPA = Approved Resource Management Plan Amendment; BLM = Bureau of Land Management; BMP = best management practice; DoD = Department of Defense; FLPMA = Federal Land Policy and Management Act; 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; PAC = priority area of 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; SUA = Surface Use Airspace; USFS = U.S. Forest Service; VR = visual route; VRM = visual resource management; WSA = Wilderness Study Area; WWEC = West-wide Energy Corridor.