Corridor 10-246

Dalles-Portland Corridor

Corridor Purpose and Rationale

The corridor provides a pathway for electricity transmission through Mt. Hood National Forest in Oregon into Portland. The corridor provides a viable link between energy supply and areas of high demand from Columbia River hydroelectric generation to Portland. Input regarding alignment from the Western Utility Group during the WWEC PEIS suggested following this route. There are no major pending ROWs for transmission line or pipeline projects within the corridor at this time. Reduced width and electric-only restrictions on some portions of this corridor are to protect fragile soils and community watershed values and are consistent with existing plan.

Corridor location:

Oregon (Hood River and Clackamas Co.) BLM: Cascades Field Office USFS: Mt. Hood National Forest Regional Review Region(s): Region 6

Corridor width, length:

Width 1,320 ft NF; 1,320 and 3,500 ft BLM 16 miles of designated corridor 34 miles of posted route, including gaps

Designated Use:

• corridor is electric-only

Corridor of concern (N)



Corridor history:

- Locally designated prior to 2009 (Y)
 Existing infrastructure (Y)
- Two 230-kV and two 500-kV transmission lines run along the entire length of corridor.
- Local road follows portions of the Corridor.
- Energy potential near the corridor (Y)
- 2 power plants within 5 mi.
- Corridor changes since 2009 (N)

Figure 1. Corridor 10-246



Figure 2. Corridor 10-246 and nearby electric transmission lines and pipelines

Conflict Map Analysis



Figure 3. Map of Conflict Areas in Vicinity of Corridor 10-246

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 10-246, 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 10-246 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	
USFS Jurisdiction: Mt. Hood National Forest Agency Land Use Plan: Mt. Hood NF LMP (1990)				
Northern Spotted Owl (ESA-listed threatened) critical habitat and the corridor intersect – The land use plan pre-dates the designation of Northern Spotted Owl critical habitat (1992) and does not have specific guidance or objectives.	MP 0 to MP 1	The USFS Final Supplemental EIS on Management of Habitat for Late- Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl was issued in 1994 but does not address utility corridors. The USFWS final rule for Northern spotted owl critical habitat was issued in 1992 and revised in 2012. The Revised Recovery Plan for the Northern Spotted Owl (2011) does not discuss conflicts between utility corridors and critical habitat. Reasonable and prudent measures identified by the USFWS during consultation will be incorporated in project plans to minimize habitat fragmentation. RFI comment: consult with USFWS to avoid adverse modification to designated Northern spotted owl critical habitat.	The Northern Spotted Owl critical habitat encompasses a broad area both north and south of the corridor, which cannot be avoided. The location appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. Existing IOPs would be required, including consultation with the USFWS.	

CORRIDOR 10-246 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	
		Comment on abstract: the LMP for this forest is dated 1990 and includes Northern Spotted owl habitat and does not have recommendations, objectives or guidance for handling utility corridors. Support shifting all corridor segments to avoid critical habitat.		
ROS Roaded Modified and the corridor intersect - Under this ROS class, vegetative and landform alterations typically dominate the landscape. There is little on-site control of users except for gated roads.	MP 0 to MP 1, MP 9 to MP 23, and MP 27		The corridor location appears to best meet the siting principles because of collocation with existing transmission lines and the absence of more preferable alternatives. The ROS Roaded Modified area encompasses lands both west and east of the corridor, which cannot be readily avoided.	
VQO – Modification and the corridor intersect - Management activities may visually dominate the original characteristic landscape. Activities which are predominantly the introduction of facilities should have visual characteristics that are compatible with the natural surroundings.	MP 0 and MP 9 to MP 21		The corridor location appears to best meet the siting principles because of collocation with existing transmission lines and the absence of more preferable alternatives. Between MP 9 and MP 17 the VQO – Modification area encompasses lands both west and east of the corridor, which cannot be readily avoided.	
VQO – Partial Retention intersects and is adjacent to the corridor - Management activities are to remain visually subordinate to the characteristic landscape.	MP 12 to MP 14 MP 17 to MP 22		Areas with the VQO Partial Retention designation may not be compatible with future development within the corridor. The Agencies could consider changing the VQO designation or could re-route the corridor at this location. The corridor is collocated with existing transmission lines at these locations. It might be possible to shift some segments of the corridor to minimize the area that intersects with the VQO – Partial Retention designation but maintains the collocation with existing transmission lines.	
Bull Trout (ESA-listed threatened) critical habitat and the corridor intersect — The land use plan pre- dates the designation of Bull Trout critical habitat (2010) and does not have specific guidance or objectives.	MP 13 to MP 14 and MP 16 to MP 17	The USFWS issued the Final Critical Habitat Rule for Bull Trout in 2010. The Recovery Plan for the Coterminous United States Population of Bull Trout was finalized in 2015. The recovery plan does not address utility corridors.	The critical habitat intersects the corridor at discreet locations at various angles. The corridor appears to best meet the siting principles because of collocation with several existing transmission lines, the small area of intersection, and the absence of more preferable alternatives. Existing IOPs would be required, including consultation with the USFWS.	

CORRIDOR 10-246 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
CONCERNS TO EXAMINE	(MP) ¹ MP 13 to MP 14, MP 16 to MP 17, and MP 22	OTHER RELEVANT INFORMATIONReasonable and prudent measuresidentified by the USFWS duringconsultation will be incorporated inproject plans to minimize habitatfragmentation.Comment on abstract: the LMP for thisforest is dated 1990 and includes BullTrout critical habitat which does not haverecommendations, objectives orguidance for handling utility corridors.Support shifting all corridor segments toavoid critical habitat.The USFWS issued the Final CriticalHabitat Rule for Chinook Salmon in 2000and NMFS published the Recovery Planfor Lower Columbia River ChinookSalmon in 2013. The plan does notreference utility corridors.Reasonable and prudent measuresidentified by the USFWS duringconsultation will be incorporated inproject plans to minimize habitatfragmentation.	The critical habitat intersects the corridor at discreet locations at various angles. The corridor appears to best meet the siting principles because of collocation with several existing transmission lines, the small area of intersection, and the absence of more preferable alternatives. Existing IOPs would be required, including consultation with the USFWS.
		forest is dated 1990 and includes Chinook salmon critical habitat which does not have recommendations, objectives or guidance for handling utility corridors. Support shifting all corridor segments to avoid critical habitat.	
Steelhead (ESA-listed endangered) critical habitat and the corridor intersect — The land use plan pre- dates the designation of Steelhead Salmon critical	MP 13 to MP 14, MP 16 to MP 19, and MP 22	The USFWS designated critical habitat for Steelhead salmon in 2005 and NMFS published the Recovery Plan for Lower	The critical habitat intersects the corridor at discreet locations at various angles. The corridor appears to best meet the siting principles because of collocation with

CORRIDOR 10-246 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	
habitat (2005) and does not have specific guidance or objectives.		Columbia River Steelhead in 2013. The plan does not reference utility corridors. Reasonable and prudent measures identified by the USFWS during consultation will be incorporated in project plans to minimize habitat fragmentation. Comment on abstract: the land management plan for this forest is dated 1990 and includes Steelhead salmon critical habitat and does not have recommendations, objectives or guidance for handling utility corridors. Support shifting all corridor segments to avoid critical habitat.	several existing transmission lines, the small area of intersection, and the absence of more preferable alternatives. Existing IOPs would be required, including consultation with the USFWS.	
Pacific Crest NST and the corridor intersect — The LMP states that the Pacific Crest NST is a Sensitivity Level I trail. It shall have prescribed VQOs of Retention, Partial Retention, and Modification in near foreground, far foreground, and middle ground distance zones, respectively. The LMP states that new utility rights of way for transmission lines should be located and designed to blend with the natural landscape character where Retention and Partial Retention VQOs are prescribed. (In areas under the Retention VQO, management practices should not be evident to the casual observer. In areas under the Partial Retention VQO, management practices should remain visually subordinate to the characteristic landscape.)	MP 17	The standards and guidelines for location, design, signing, user facilities, and management of the PCT will be in accordance with the criteria established in the Pacific Crest NST Comprehensive Management Plan, 1/18/82. The plan does not provide guidance or recommendations on new transmission lines being constructed across the NST. Comment on abstract: the trail emerges from a relatively serene, remote forest to cross through a 500-foot wide clear-cut under buzzing, high-voltage lines, with a clear view of the lines' long length all down the valley below. This corridor appears to more than double the width of the existing disturbance. If more utility lines were to be added to this corridor, it	The trail intersects the corridor and cannot be avoided. The location appears to best meet the siting principles because of collocation with several existing transmission lines, the minimal area of intersection with the trail, and the absence of more preferable alternatives. To the extent practicable, new transmission lines should be located as close as possible to existing infrastructure. Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.	

CORRIDOR 10-246 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
		would become even more challenging to meet the VQOs. Comment on abstract: propose the following mitigation measures at the intersection: narrowing of the corridor to the absolute minimum width within the trail's foreground or immediate foreground, an angular jog of the line to obscure from the observer the long length of the corridor, and an underground-only stipulation, with mandated vegetation management provision of visual screening such as tall shrubs within the intersection zone. Propose the following mitigation measures at other places along the PCT (besides the intersection) wherever the long length of the corridor is viewed within the middleground: vary the shape and width of the corridor, and feather edges of the clearing, to blend in better with the forms and lines of the landscape.	
Lake Roadless Area is adjacent to the corridor— The LMP does not prescribe restrictions for areas adjacent to roadless areas.	MP 17	The Roadless Area Conservation Rule (2001) prohibits road construction, reconstruction, and timber harvest in inventoried roadless areas.	The corridor is not located in the Roadless Area and development and management inside of the corridor would not be affected. Only a small portion of the roadless area is adjacent to the corridor, so impacts from future development would be minimal. The addition of an agency coordination IOP related to Roadless Areas could help in minimizing conflicts with the Roadless Rule.
the corridor intersect — The LMP does not prescribe restrictions for areas within the		buffer lands are known as the Bull Run Watershed Management Unit (BRWMU).	corridor at this location where it goes up and over Lolo Pass. The BRWMU supplies Portland with its municipal

CORRIDOR 10-246 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	
Watershed Management Unit. The LMP states that all management activities should consider viewers outside of the Watershed Management Unit looking into the drainage unless achievement would affect meeting the primary water quality objective.		No unauthorized public entry is allowed inside the BRWMU and all land management activities are limited to only those necessary to protect water quality and operate the water supply and hydroelectric power facilities. The BRWMU is carefully managed to sustain and supply clean drinking water to a quarter of Oregon's population.	water supply. The drainages feed creeks that are habitat to listed fish. The terrain is steep with significant riparian zones. To the east, portions of the line are close to federally designated wilderness. These issues would make future additional development challenging.	
The Sandy, Oregon WSR area and the corridor intersect —The LMP states that construction of new utility and or transmission lines should not be permitted in any river segment corridor.	MP 21 to MP 23	Comment on abstract: the land management plan for this forest is dated 1990 and includes the Oregon WSR and does not have recommendations, objectives or guidance for handling utility corridors. Support shifting the corridor segment to avoid the WSR area.	The WSR area runs parallel to and within the southern portion of the corridor for about one mile. The corridor could either be shifted slightly to the northwest or future development could be sited northwest of the existing transmission lines to avoid the WSR area. The conflict with the WSR is minimal considering the existing infrastructure, minimal area of intersection, and the absence of more preferable alternatives. Existing IOPs are in place to require proposed projects to mitigate impacts to wild and scenic river values. The location appears to best meet the siting principles.	
Coho salmon (ESA-listed threatened) critical habitat and the corridor intersect —The land use plan pre-dates the designation of Coho Salmon critical habitat (2016) and does not have specific guidance or objectives.	MP 22	The USFWS designated Coho Salmon critical habitat in 2016 and NMFS published the Recovery Plan for Lower Columbia River Coho Salmon in 2013. The plan does not reference utility corridors. Reasonable and prudent measures identified by the USFWS during consultation will be incorporated in project plans to minimize habitat fragmentation. Comment on abstract: the land management plan for this forest is dated	Only a small segment of the critical habitat intersects the corridor. The corridor could either be shifted slightly to the northwest or future development could be sited northwest of the existing transmission lines to avoid the critical habitat. Existing IOPs would be required, including consultation with the USFWS.	

CORRIDOR 10-246 REVIEW			
POTENTIAL			
COMPATIBILITY ISSUES or	MILEPOST	STAKEHOLDER INPUT and	POTENTIAL RESOLUTIONS BASED ON SITING
CONCERNS TO EXAMINE	(MP) ¹	OTHER RELEVANT INFORMATION	PRINCIPLE ANALYSIS ²
		1990 and includes Coho salmon critical	
		habitat which does not have	
		recommendations, objectives or	
		guidance for handling utility corridors.	
		Support shifting all corridor segments to	
		avoid critical habitat.	
BLM Jurisdiction: Salem Cascades Field Office			
Agency Land Use Plan: Northwestern and Coastal Or	egon RMP (2016)		
Sandy River ACEC and the corridor intersect— this	MP 25 to MP 34	Comment on abstract: Sandy River ACEC	ROW avoidance areas are not compatible with the
area is an avoidance area. Relevant and important		overlaps 559 and 727 acres of corridor.	corridor's purpose as a preferred location for
categories for this ACEC include historical, scenic,			infrastructure. The corridor could be shifted slightly to
fish and wildlife, and natural processes. While the			the north so that the existing transmission line is the
corridor does not intersect WSR segments, the			southern border of the corridor to further avoid the
ACEC is within the Sandy River designated "scenic"			WSR, but it would still be located within the avoidance
and 'recreational' WSR segments; within the Sandy			area. The corridor is collocated with existing
River suitable recreational wSR segment; and			infrastructure. To the extent practicable, new
within the Mit. Hood Corridor congressionally			transmission lines should be located as close as possible
reserved lands. The BLIVI manages these			to existing infrastructure.
preservation management needs of the designated			
and suitable Wild and Sconic Piver segments and			
congressional reservation and second for the			
special management needs of the ACEC			
designation. The Sandy WSR is managed under the			
Sandy Wild and Scenic River and State Scenic			
Waterway Management Plan (Salem District: USD)			
BIM 1993b)			
VRM Class II area and the corridor intersect - VRM	MP 25 to MP 29.		VRM Class II areas may not be consistent with future
Class II areas are considered ROW avoidance areas	MP 30 to MP 34		overhead transmission line development; however, the
in the RMP. In ROW avoidance areas. ROWs are			corridor is collocated with existing transmission lines.
granted only if the BLM determines that the ROW			There are no options to shift this corridor to other
proposals are compatible with the protection of			federal lands outside of the VRM Class II area while still
the values for which the land use was designated,			maintaining collocation with infrastructure. Future
or when no feasible alternative route or designated			underground development could minimize visual
ROW corridor is available as applicable with BLM			impacts. The Agencies could also consider changing the
laws and policy.			VRM class designation

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The VRM Class II in the Northwest and Coastal Oregon ROD/RMP (2016) includes ACECs in Visual Resource Inventory Class II outside of the Harvest Land Base. Management of activities will be seen but will not attract the attention of the casual observer. Changes will repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.			
Oregon Trail NHT and the corridor intersect – The RMP states the following regarding NHT management: Enhance, promote, and protect the scenic, natural, and cultural resource values associated with current and future designated NSTs and NHTs. The location of the trail intersection and approximately the western 8 miles of the corridor are within proximity to a listed High Potential Segment (Barlow Road).	MP 34	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 rights-of-way 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 rights-of-way 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 protection components and should receive special attention by managing agencies to enhance their trail-related values.	NHT high potential segments may not be compatible with the corridor's purpose as a preferred location for energy infrastructure. However, there are existing transmission lines within the corridor where the NHT intersects the corridor and the intersection with the NHT is tangential (minimizing impact on the trail values). Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.

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.

Ecology:

 Consult closely with state fish & game agencies and WGA to implement the full mitigation hierarchy of avoidance, minimization, and compensation for CHAT resources at "Very High" risk (RFI comment).

Analysis: Existing IOPs and BMPs would be required. 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.

Land Use:

• The corridor passes through an area with some small, limited holdings within the BLM Harvest Land Base and crisscrossed by riparian lands, Congressionally Reserved Lands and National Conservation Lands, and District Designated Reserve. BLM lands within the corridor are designated Oregon and California Railroad Revested Lands. Active timber sales, and associated timber harvest & hauling activities, will be conducted in the area in the near future, possibly requiring use of timber roads near and in the energy corridor. Oregon and California Railroad Revested Lands intersect the corridor at MP 26 to MP 29, MP 30, and MP 31 to 34.

Analysis: The corridor is within the area designated as Moderate Intensity Timber Area (thinning and regeneration harvest with retention of 5–15 percent) in the Northwestern and Coastal Oregon ROD/RMP, August 5, 2016. Stakeholder engagement with state fish and game agencies and timber operators during this regional review and input from these organizations will be considered and incorporated into the corridor abstract.

Abstract Acronyms and Abbreviations

ACEC = area critical environmental concern; BLM = Bureau of Land Management; BMP = best management practice; BRWMU = Bull Run Watershed Management Unit; CHAT = Crucial Habitat Assessment Tool; ESA = Endangered Species Act; GIS = geographic information system; IOP = interagency operating procedure; LMP = land management plan; MP = milepost; NHT = National Historic Trail; NMFS = National Marine Fisheries Service; NST = National Scenic Trail; OCD = Other Congressionally Designated Area; PCT = Pacific Crest Trail; PEIS = Programmatic Environmental Impact Statement; RFI = request for information; RMP = resource management plan; ROD = record of decision; ROS = recreation opportunity spectrum; ROW = right-of-way; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; VRM = visual resource management; VQO = visual quality objective; WGA = Western Governors' Association; WSR = Wild and Scenic River; WWEC = West-wide Energy Corridor.