

Corridor 244-245

Lester to Easton Corridor

Corridor Purpose and Rationale

The corridor provides a path for transmitting generated energy from eastern Washington to the Puget Sound metropolitan area. 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.

Corridor location:

Washington (King and Kittitas Co.)
 USFS: Mount Baker-Snoqualmie and Okanogan Wenatchee NFs
 Regional Review Region: Region 6

Corridor width, length:

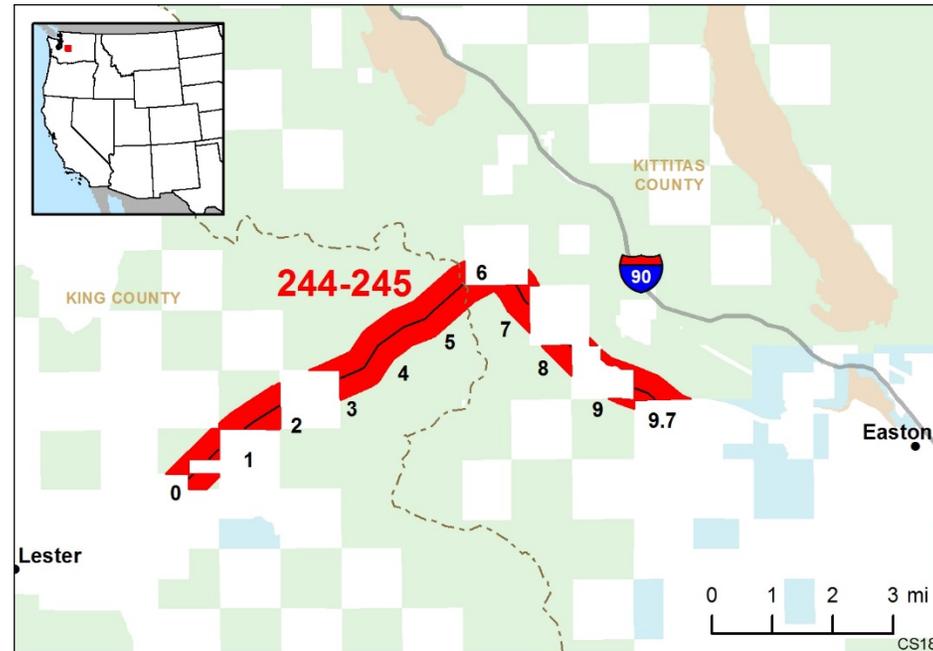
Width 3,500 ft
 4.5 miles of designated corridor
 9.7 miles of posted route, including gaps

Designated Use:

- corridor is multi-modal

Corridor of concern (Y)

Conflicts with Northwest Forest Plan, critical habitat, tracks America's Byway.



Corridor history:

- Locally designated prior to 2009 (N)
- Existing infrastructure (Y)
 - Multiple 230- and 500-kV transmission lines are within and adjacent to the corridor.
- Energy potential near the corridor (N)
- Corridor changes since 2009 (N)

Figure 1. Corridor 244-245

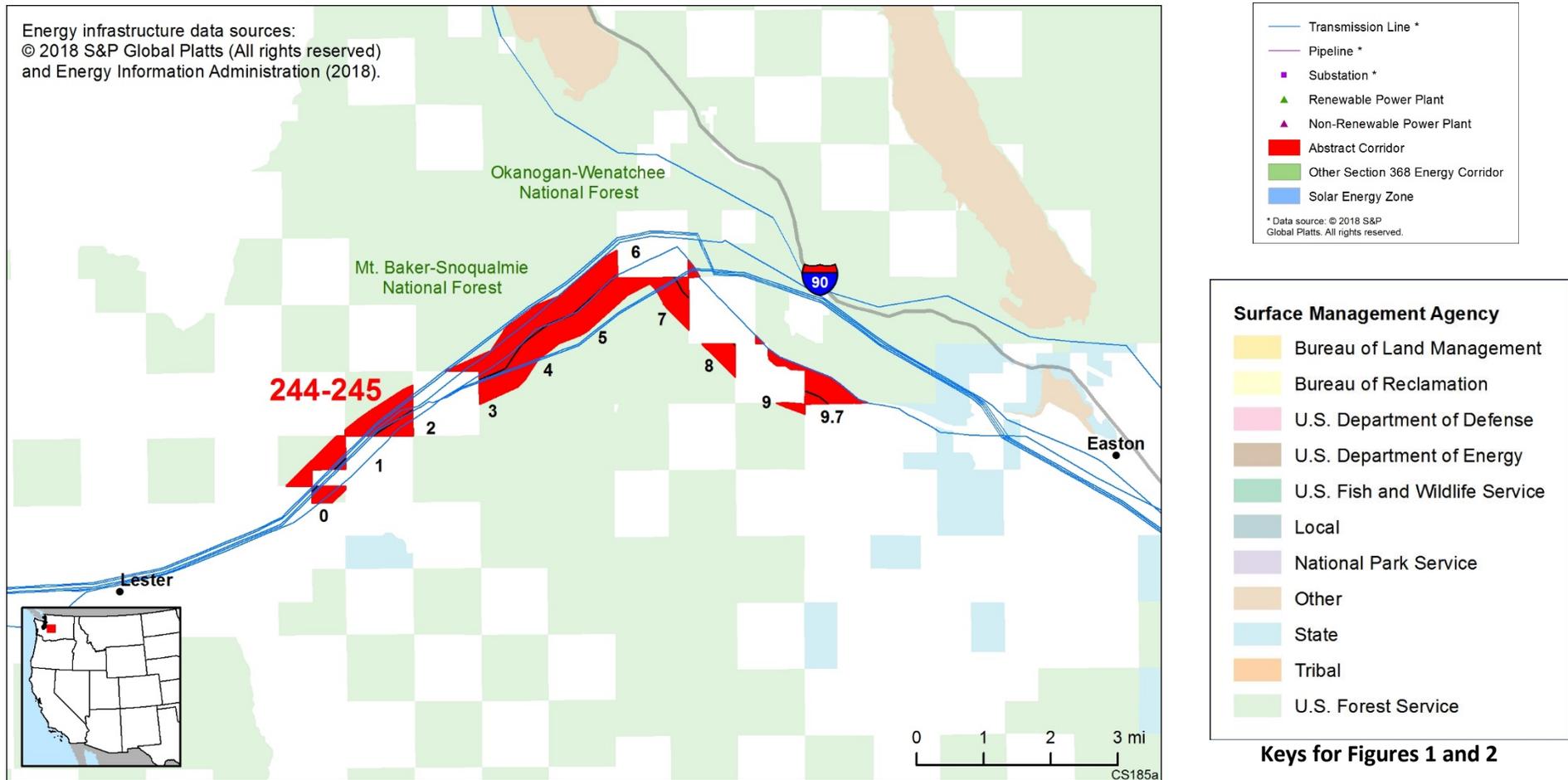


Figure 2. Corridor 244-245 and nearby electric transmission lines and pipelines

Conflict Map Analysis

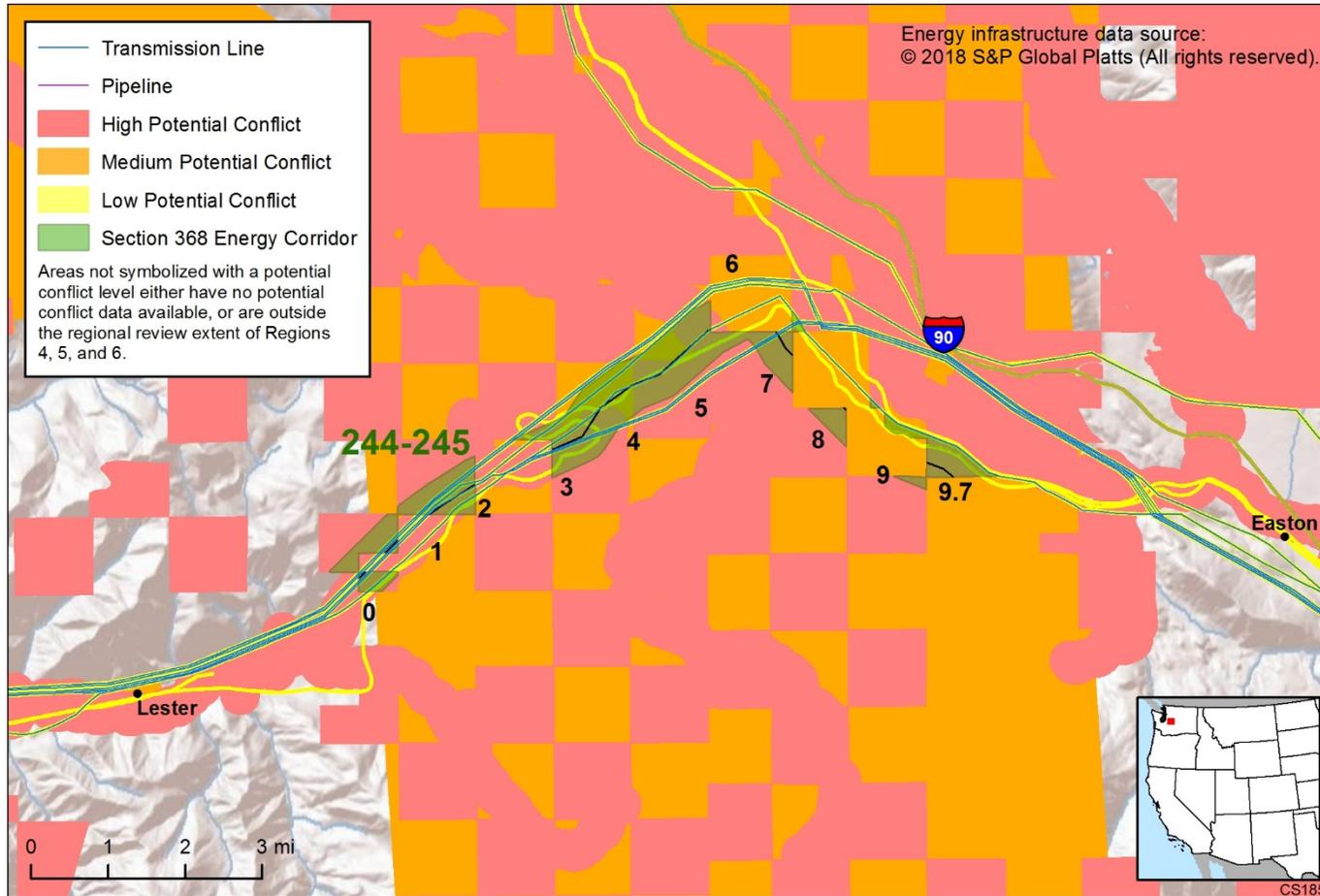


Figure 3. Map of Conflict Areas in Vicinity of Corridor 244-245

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/>)

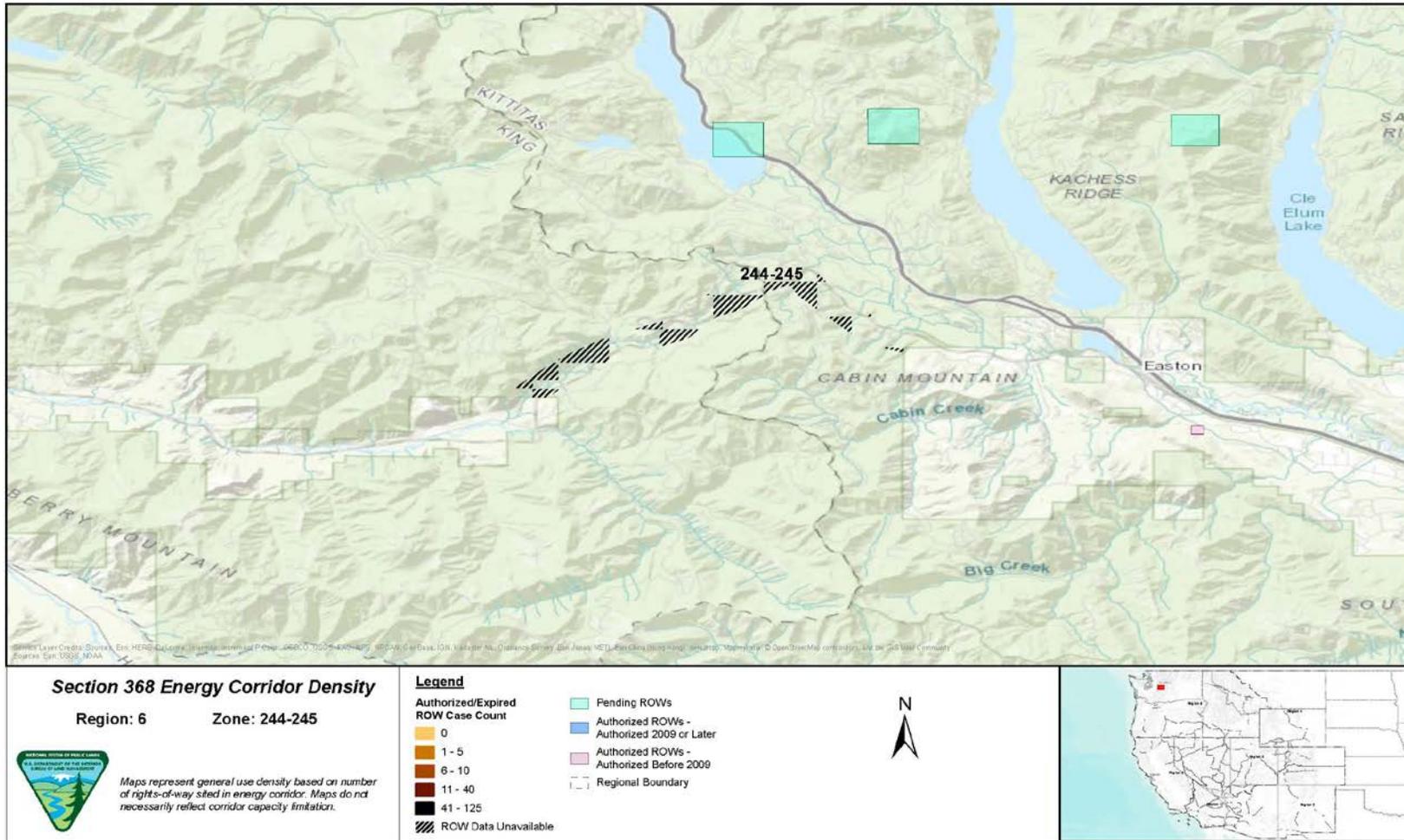


Figure 4. Corridor 244-245, Corridor Density Map

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 244-245 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: Mount Baker-Snoqualmie National Forest			
Agency Land Use Plan: Mount Baker-Snoqualmie NF LMP (1990)			
Chinook Salmon critical habitat and the corridor intersect – The land use plan pre-dates the listing of this species and does not have specific guidance or objectives.	MP 0 to MP 4	<p>The USFWS issued the Final Critical Habitat Rule for Chinook Salmon in 2000 and NMFS published the Recovery Plan for Lower Columbia River Chinook Salmon in 2013. The plan does not reference utility corridors.</p> <p>Reasonable and prudent measures identified by the USFWS during consultation will be incorporated in project plans to minimize habitat fragmentation.</p> <p>Comment on abstract: plan does not contain management measures or objectives for handling utility corridors, we urge the BLM to initiate and implement the strongest possible mitigation measurements that best protect critical habitat values.</p> <p>Comment on abstract: move the energy corridor out of the Sunday</p>	<p>Options to shift this corridor to federal lands outside of the critical habitat are limited because of the checkerboard pattern of USFS-administered lands in the area. The corridor runs parallel to the critical habitat and is collocated with existing utility infrastructure.</p> <p>Existing IOPs would be required, including consultation with the USFWS and NMFS.</p>

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		Creek drainage, Northern Spotted Owl habitat is immediately surrounding the corridor and a northern goshawk nest site very nearby. Recommend that the Agencies keep the corridor within and as close to the current ROW disturbance, as possible.	
ROS class Roded Natural and the corridor intersect – Areas may have resource modification and utilization practices evident, but harmonized with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.	MP 0 to MP 3		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The ROS class Roded Natural encompasses areas both north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because of the checkerboard pattern of USFS-administered lands in the area.
VQO Partial Retention and the corridor intersect – Management activities remain visually subordinate to the characteristic landscape. The visual characteristics of introduced infrastructure should remain subordinate to the visual strength of the characteristic landscape.	MP 0 to MP 3		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The VQO Partial Retention encompasses areas both north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because of the checkerboard pattern of USFS-administered lands in the area.
VQO Modification and the corridor intersect – Management activities may visually dominate the original characteristic landscape. The visual characteristics of introduced infrastructure should be compatible with the natural surroundings.	MP 0 to MP 6		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The VQO Modification encompasses areas both north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because of the checkerboard pattern of USFS-administered lands in the area.
ROS class Roded Modified and the corridor intersect - Vegetative and landform alterations typically dominate the landscape. There is little on-site control of users except for gated roads.	MP 0 to MP 6		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The ROS class Roded Modified encompasses areas both

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			north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because of the checkerboard pattern of USFS-administered lands in the area.
Northern Spotted Owl (ESA listed threatened) critical habitat and the corridor intersect – The land use plan pre-dates the listing of this species and does not have specific guidance or objectives.	MP 0 to MP 6	<p>The USFS/BLM 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.</p> <p>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.</p> <p>Reasonable and prudent measures identified by the USFWS during consultation will be incorporated in project plans to minimize habitat fragmentation.</p> <p>RFI comment: consult with USFWS to avoid adverse modification to Northern Spotted Owl designated critical habitat.</p> <p>Comment on abstract: plan does not contain management measures or objectives for handling utility corridors, we urge the BLM to initiate and implement the strongest possible</p>	<p>The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The critical habitat encompasses a broad area both north and south of the corridor, which cannot be avoided.</p> <p>Existing IOPs would be required, including consultation with the USFWS.</p>

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		mitigation measurements that best protect critical habitat values.	
<p>Pacific Crest NST and the corridor intersect – The trail will be maintained to the standards established and meet the objectives of the Pacific Crest NST Comprehensive Plan. Management of the foreground of the Pacific Crest NST will meet at least the level of the ROS environment that the trail passes through.</p> <p>The area where the trail intersects the corridor does not have a ROS designation however; a ROS Routed-Modified area is located less than 200 feet from the trail-corridor intersection area. The VQO category for a part of the area where the trail and the corridor intersects is Modification. In areas under the Modification VQO, management practices may dominate the landscape but activities should appear as natural occurrences in the fore- and middle-ground.</p>	MP 6	<p>The Pacific Crest NST Comprehensive Management Plan was finalized in 1982. The plan does not provide guidance or recommendations on new transmission lines being constructed across the NST.</p> <p>Comment on abstract: high potential conflict can be managed by reducing the corridor width to 500-feet and precisely collocating the proposed route with existing infrastructure.</p>	<p>The corridor location appears to best meet the siting principles considering the perpendicular intersection with the corridor, the collocation of the corridor with existing infrastructure, and the absence of more preferable alternatives. The conflict with the NST is minimal considering the designation of the intersection area is a VQO Modification area, where management practices may dominate the landscape.</p> <p>Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.</p>
<p>USFS Jurisdiction: Okanogan-Wenatchee National Forest Agency Land Use Plan: Wenatchee NF LMP (1990)</p>			
VQO Modification and the corridor intersect – Management activities may visually dominate the original characteristic landscape. The visual characteristics of introduced infrastructure should be compatible with the natural surroundings.	MP 6 to MP 8		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The VQO Modification encompasses areas both north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because of the checkerboard pattern of USFS-administered lands in the area.
VQO Partial Retention and the corridor intersect – Management activities remain visually subordinate to the characteristic landscape. The visual characteristics of introduced infrastructure should remain subordinate to the visual strength of the characteristic landscape.	MP 6 to MP 8		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The VQO Partial Retention encompasses areas both north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because

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			of the checkerboard pattern of USFS-administered lands in the area.
ROS Roded Modified and the corridor intersect – Vegetative and landform alterations typically dominate the landscape. There is little on-site control of users except for gated roads.	MP 6 to MP 8		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The ROS class Roded Modified encompasses areas both north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because of the checkerboard pattern of USFS-administered lands in the area.
ROS Roded Natural and the corridor intersect – Areas may have resource modification and utilization practices evident, but harmonized with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.	MP 6 to MP 8		The corridor appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The ROS class Roded Natural encompasses areas both north and south of the corridor, which cannot be readily avoided. Options to shift this corridor are limited because of the checkerboard pattern of USFS-administered lands in the area.
<p>Pacific Crest NST and the corridor intersect – The trail will be maintained to the standards established and meet the objectives of the Pacific Crest NST Comprehensive Plan. Management of the foreground of the Pacific Crest NST will meet at least the level of the ROS environment that the trail passes through.</p> <p>The VQO category for a part of the area where the trail and the corridor intersects is Modification. In areas under the Modification VQO, management practices may dominate the landscape but activities should appear as natural occurrences in the fore- and middle-ground.</p>	MP 6	<p>The Pacific Crest NST Comprehensive Management Plan was finalized in 1982. The plan does not provide guidance or recommendations on new transmission lines being constructed across the NST.</p> <p>Comment on abstract: request that the 3,500-foot wide corridor be reduced in size and moved north so that it would be parallel to transmission line 3337270832.</p> <p>Comment on abstract: move north, it could be placed more precisely within areas with a VQO of modification. By adjusting the corridor to follow the 3 existing 500kv lines in the area, future</p>	<p>Considering the perpendicular intersection with the corridor, the collocation of the corridor with existing infrastructure, and the absence of more preferable alternatives. The conflict with the NST is minimal considering the designation of the intersection area is a VQO Modification area, where management practices may dominate the landscape. Since establishment of the corridor, private lands near transmission line 3337270832 (one of the three collocated 500-kV lines) near MP 6 have become USFS-administered lands. Thus, there is potential to both move the corridor north to parallel that line and reduce the width of the corridor.</p> <p>Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor.</p>

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		developments would cross the PCT at a location that is less visually prominent and already heavily modified. This change would reduce the exposure of users to visual resource impacts and support the scenic quality of the PCT.	
Alpine Lakes Management Unit OCD and the corridor intersect – The LMP states that lands within view of scenic travel routes like the Alpine Lakes Unit will be managed under VQO categories of Retention and Partial Retention. Preserve and protect the natural character for future generations, and provide opportunities for solitude, challenge, inspiration, and scientific study.	MP 7 to MP 8		The corridor location appears to best meet the siting principles because of collocation with existing infrastructure and the absence of more preferable alternatives. The Alpine Lakes Management Unit OCD encompasses a broad area both north and south of the corridor, which cannot be avoided.
Northern Spotted Owl (ESA listed threatened) critical habitat and the corridor intersect – The land use plan pre-dates the listing of this species and does not have specific guidance or objectives.	MP 6 to MP 9.7	<p>The USFS/BLM 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.</p> <p>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.</p> <p>Reasonable and prudent measures identified by the USFWS during consultation will be incorporated in project plans to minimize habitat fragmentation.</p>	<p>The corridor location appears to best meet the siting principles because of collocation with several existing transmission lines and the absence of more preferable alternatives. The critical habitat encompasses a broad area both north and south of the corridor, which cannot be avoided.</p> <p>Existing IOPs would be required, including consultation with the USFWS.</p>

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		RFI comment: consult with USFWS to avoid adverse modification to Northern Spotted Owl designated critical habitat. Comment on abstract: plan does not contain management measures or objectives for handling utility corridors, we urge the BLM to initiate and implement the strongest possible mitigation measurements that best protect critical habitat values.	

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.

Potential Corridor Revisions:

- Removal of forest and ground disturbance for future new development on either side of the corridor would be a challenge due to steep unstable land forms, flood-prone rivers, and portions of riparian reserve habitat. A potential alternate route for a cross-Cascade transmission line corridor is located in the Pyramid Peak-Tacoma Pass area (south of Stampede Pass), although the USFS will only consider that route after existing corridors are built out to maximum capacity (Mt. Baker-Snoqualmie LMP, 1990). Development should stay within the area already disturbed by the existing powerlines. Collocate with existing infrastructure where possible (comment on abstract).

Analysis: Multiple existing transmission lines are located within the corridor. The Agencies could suggest collocating future development closely with the existing infrastructure to avoid the steep topography and river concerns on either side of the corridor.

Specially Designated Area:

- Re-route to avoid conflicts with Northwest Forest Plan and tracks America's Byway (RFI comment).

Analysis: The corridor does not cross a scenic byway.

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).
- Construction in existing and new corridors could exacerbate the spread of invasive weeds.
- Cascade crest down through Easton provides a high level on needed wildlife connectivity for animals moving north-south. A prime example of that is the long-running and heavily invested effort of the I-90 east project where the partnership, led by WSDOT and USFS is building multi-million dollar wildlife connectivity structures and studying their long-term use and effectiveness (comment on abstract).
- The Yakima River in this area is critical habitat for Steelhead and Bull Trout and known spawning habitat for Chinook. These tributaries provide important rearing habitat for these species and are vital for their survival (comment on abstract).
- Wildlife species of potential concern in this corridor: Listed species (State or Federal) who have or could have potential occurrence or habitat adjacent to the corridor include Marbled Murrelet, Fisher, Gray Wolf and Northern Spotted Owl (comment on abstract).
- Recommend that any crossing of stream body acquires a Hydraulic Project Approval from the State of Washington to address all of our concerns for specific fish and wildlife impacts (comment on abstract).
- During planning of additional infrastructure, please incorporate wildlife corridors into the plans to connect large species such as ungulates and large carnivores, such as bear, wolf, cougar, bobcat and smaller carnivores, such as weasels and foxes, and even the smallest mammals, amphibians, and reptiles (comment on abstract).

Analysis: Section 7 consultation with USFWS would be commensurate with agency determination of potential affect to threatened or endangered species. Adherence to existing IOPs for ecological resources, vegetation, soils, and water resources would be required.

Water Resources:

- There could be water quality concerns within the Tacoma Green River Watershed.
- Corridor is close to the Yakima River and crosses tributaries to the Yakima River near their junction with the Yakima. How vegetation and road crossings are managed has a huge impact on whether streams have basic functions such as fish passage, functional riparian habitat or not. Many places on the current energy corridors in the area, vegetation is cut/mowed to almost ground level and thus no ability for the stream to form a defined channel. This combined with road issues (undersized culverts, improperly placed fords etc.) have created numerous fish passage barriers along the energy corridors in this area (the 244-245 corridor and adjacent powerline corridors to the north). In addition to leaving more riparian habitat for stream function, leaving intact riparian habitat would also allow for increased wildlife connectivity as large corridors with mowed vegetation act as partial barriers to wildlife who are reluctant to venture into large wide open spaces for fear of predation or other aspects of the habitat needs (comment on abstract).

Analysis: New construction must meet water quality requirements of the City of Tacoma Green River Watershed. Adherence to existing IOPs for water resources would be required.

Military and Civilian Aviation:

- MTR – VR and the corridor intersect from MP 0 to MP 9.7.

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.

Public Access and Recreation:

- Road Management: A frequent problem in the energy corridors in this area is that they have roads that cross both tributaries and in a few places the Yakima River. These accesses are not gated or blocked off to the public, and thus we have witnessed the public driving through the streams impacting and destroying aquatic habitat. Improved road management and access could help to fix this problem (comment on abstract).

Analysis: Adherence to the existing IOP regarding stream crossings by access roads would be required.

Abstract Acronyms and Abbreviations

BLM = Bureau of Land Management; BMP = best management practice; CHAT = crucial habitat assessment tool; DoD = Department of Defense; EIS = Environmental Impact Statement; ESA = Endangered Species Act; FO = field office; GIS = geographic information system; IOP = interagency operating procedure; LMP = land management plan; MP = milepost; MTR = Military Training Route; NF = national forest; 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; ROS = Recreation Opportunity Spectrum; ROW = right-of-way; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; VR = visual route; VQO = visual quality objective; WSDOT = Washington State Department of Transportation; WGA = Western Governors' Association; WWEC = West-wide Energy Corridor.