



Appendix 3.1-1

# Mitigation Strategies

This Page Intentionally Left Blank

### Table of Contents

A3.1-1.1	Mitigation Strategies.....	1
A3.1-1.2	General Measures Identified in Section 3.1.....	5
A3.1-1.3	Avoidance Criteria Identified in Section 3.1 .....	23
A3.1-1.4	Mitigation Measures Identified in Section 3.2 Earth Resources .....	36
A3.1-1.5	Mitigation Measures Identified in Section 3.3 Air Quality.....	38
A3.1-1.6	Mitigation Measures Identified in Section 3.4 Water Resources.....	40
A3.1-1.7	Mitigation Measures Identified in Section 3.5 Vegetation.....	44
A3.1-1.8	Mitigation Measures Identified in Section 3.6 Habitat, Wildlife, and Fish .....	45
A3.1-1.9	Mitigation Measures Identified in Section 3.7 Energy and Natural Resources.....	58
A3.1-1.10	Mitigation Measures Identified in Section 3.8 Public Health and Safety .....	61
A3.1-1.11	Mitigation Measures Identified in Section 3.9 Land and Shoreline Use .....	63
A3.1-1.12	Mitigation Measures Identified in Section 3.10 Transportation.....	66
A3.1-1.13	Mitigation Measures Identified in Section 3.11 Public Services and Utilities .....	68
A3.1-1.14	Mitigation Measures Identified in Section 3.12 Visual Quality.....	69
A3.1-1.15	Mitigation Measures Identified in Section 3.13 Noise and Vibration .....	71
A3.1-1.16	Mitigation Measures Identified in Section 3.14 Recreation.....	73
A3.1-1.17	Mitigation Measures Identified in Section 3.15 Cultural and Historic Resources.....	75
A3.1-1.18	Mitigation Measures Identified in Section 3.16 Socioeconomics and Environmental Justice.....	79
References	.....	81

This Page Intentionally Left Blank

## A3.1-1.1 Mitigation Strategies

This appendix provides details for the different types of Mitigation Strategies identified throughout this Programmatic Environmental Impact Statement (EIS), including the following:

- General Measures
- Avoidance Criteria
- Mitigation Measures

If a project-specific application does not incorporate applicable Mitigation Strategies, the State Environmental Policy Act (SEPA) Lead Agency may determine that additional project-specific environmental analyses and mitigation are required.

Mitigation Measures identified in Section 3.2 through Section 3.16 of this Programmatic EIS are provided in this Appendix. These Mitigation Measures are designed to address the adverse environmental impacts associated with the new construction, operation and maintenance, upgrade, and modification of transmission facilities. The Mitigation Measures identified in this Programmatic EIS provide ways to:

- Minimize adverse environmental impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to reduce adverse environmental impacts.
- Rectify the adverse environmental impact by repairing, rehabilitating, or restoring the affected environment.
- Reduce or eliminate the adverse environmental impact over time by preservation and maintenance operations during the life of the project.
- Compensate for the adverse environmental impact by replacing, enhancing, or providing substitute resources or environments.
- Monitor the adverse environmental impact and take appropriate corrective measures.

## Programmatic Environmental Impact Statement

The SEPA Lead Agency is responsible for performing the following actions:

- Review project-specific applications to verify that all applicable Mitigation Measures have been implemented for adverse environmental impacts to the greatest extent practicable.
- Review project-specific applications to ensure that there are no additional impacts not analyzed in this Programmatic EIS.
- Review project-specific applications to ensure that the project would not result in a higher significance rating for any adverse environmental impacts already considered in this Programmatic EIS.
- Conduct additional project-specific environmental analyses for impacts not analyzed in this Programmatic EIS and identify mitigation measures, as appropriate, for those identified adverse environmental impacts. Determine if any of these impacts with the identified mitigation would result in a significant adverse environmental impact.

Each table within this appendix provides the following:

- The Mitigation Strategy identification and description.
- The rationale for implementing the Mitigation Strategy.
- Additional guidance for applicants or the SEPA Lead Agency when implementing the Mitigation Strategy in a project-specific application.
- The implementation schedule of each Mitigation Strategy is based on the different stages of transmission facility development described in Chapter 2. The implementation schedule is typically described as occurring “prior to” or “during” one of the following periods in the transmission facility’s life cycle:
  - **Initial Site Characterization:** Initial feasibility studies and field surveys for siting and planning transmission facilities
  - **Application and Permit Approvals:** Final design, environmental analysis, and construction permits
  - **Site Preparation:** Initial new construction activities, such as vegetation clearing, grading, and constructing access roads
  - **Site Construction:** Transmission facility assembly, testing, and start-up
  - **Post-Construction Restoration:** Backfill trenches, holes, or tunnels, all roadways (when required), restore and revegetate any disturbed areas

## Programmatic Environmental Impact Statement

- **Operation and Maintenance:** Post-construction monitoring and reporting, routine inspections, maintenance and repairs, right-of-way maintenance, and vegetation maintenance
- **Decommissioning:** Complete decommissioning-period environmental studies, dismantle and recycle or dispose of project components, remove access roads, and revegetate all disturbed areas, including access roads
- Implementation status dropdown options that may be used by the applicant or SEPA Lead Agency when implementing the project-specific application.

If the Mitigation Strategy or associated guidance is not applicable to a particular project, the following steps are recommended:

- Clearly document the rationale for inapplicability, including relevant details to support the SEPA Lead Agency's review and understanding.
- Provide supporting data and documentation, such as site history, maps, or prior assessments, to substantiate the determination and demonstrate why the Mitigation Strategy is not being incorporated.
- Engage with the SEPA Lead Agency early in the planning process for transparency, due diligence, and regulatory awareness. Early discussions regarding any Mitigation Strategies identified in this Programmatic EIS that are not applied or are not relevant will help minimize potential delays during the project-specific environmental review process.

Monitoring and documenting the implementation and completion of Mitigation Measures will be conducted as directed by the agency with jurisdiction. Unless otherwise noted, the cost of implementing the Mitigation Strategies outlined in this appendix shall be funded by the applicant.

This Page Intentionally Left Blank



# A3.1-1.2 General Measures Identified in Section 3.1

The analysis in this Programmatic EIS assumes that project-specific applications incorporate all General Measures identified below. Applicants would provide information in their project-specific application documenting the project’s consistency with or incorporation of these General Measures. Should a project be inconsistent with or determine that they cannot incorporate all General Measures, additional information would be provided in the project-specific application for the SEPA Lead Agency’s consideration. The SEPA Lead Agency may determine that additional project-specific environmental analyses and mitigation are required.

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Gen-1 – Review of this Programmatic EIS	<b>Gen-1 – Review of this Programmatic EIS:</b> Applicants planning and siting transmission facilities with a nominal voltage of 230 kilovolts or greater would consider this Programmatic Environmental Impact Statement (EIS), especially focusing on meeting the environmental Mitigation Strategies identified herein to the extent practicable. When applicants do not meet the General Measures and Avoidance Criteria defined in this Programmatic EIS, additional environmental analyses would be expected, and mitigation may be required. The final significance rating for adverse environmental impacts in this Programmatic EIS assumes that applicants would incorporate the applicable Mitigation Strategies identified within this Programmatic EIS.	The analysis and information in this Programmatic EIS, along with any future amendments, supplements, or replacement documents, are intended to support subsequent project-specific applications in meeting the requirements for adopting this Programmatic EIS <sup>1</sup> .	<ul style="list-style-type: none"><li>Project-specific applications can use this Programmatic EIS for phased reviews in several ways, even if all General Measures, Avoidance Criteria, and applicable Mitigation Measures are not incorporated. For more information, please refer to Chapter 1, Introduction, or the Programmatic EIS Manual developed for this Programmatic EIS.</li><li>Applicants and the SEPA Lead Agency may consider using the Programmatic EIS Conformance Checklist as a method for planning and evaluating project-specific application information and identifying its appropriate threshold determination.</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Gen-2 – Adhere to Laws and Regulations	<b>Gen-2 – Adhere to Laws and Regulations:</b> This Programmatic Environmental Impact Statement (EIS) assumes that projects will adhere to relevant federal, state, and local laws and regulations. Applicants would provide information in their project-specific applications to assist the State Environmental Policy Act (SEPA) Lead Agency in determining if the project adheres to all relevant laws and regulations.	The SEPA environmental review process conducts the environmental analysis assuming adherence to all laws and regulations. Because SEPA exists to identify and mitigate adverse environmental impacts of gaps in regulations, SEPA analysis is not limited to the review of a proposal’s regulatory compliance.	<p>If a project does not comply with a relevant law or regulation, then the applicant would provide an explanation. The SEPA Lead Agency would analyze whether any adverse environmental impacts would be associated with failure to adhere to relevant laws and regulations. That analysis would be documented by the SEPA Lead Agency as part of the environmental review for the specific project.</p> <p>When a project does not comply with a relevant law or regulation, the SEPA Lead Agency could identify requirements for compliance or deny the proposal (WAC 197-11-660).</p> <p>Recommended Tools and Resources:</p> <ul style="list-style-type: none"><li><b>SEPA Handbook</b> – Detailed procedural and legal guidance.</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.

<sup>1</sup> As detailed in Chapter 1.0 of the Programmatic EIS, there are several methods a project-specific application can use this Programmatic EIS for a phased review. These methods include adopting the Programmatic EIS in its entirety unchanged, adopting the Programmatic EIS and preparing an addendum, adopting the Programmatic EIS and preparing a supplemental EIS, or incorporating the Programmatic EIS by reference.

Programmatic Environmental Impact Statement

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Programmatic EIS Manual</b> – Details the four methods applicants and the SEPA Lead Agency may use the Programmatic EIS, recommendations, and additional guidance for project-specific environmental reviews.</li><li>▪ <b>Determining Applicability of the Programmatic EIS Form</b> - Helps applicants and the SEPA Lead Agency determine whether the Programmatic EIS applies to the proposal.</li><li>▪ <b>Programmatic EIS Conformance Checklist</b> – Helps applicants and the SEPA Lead Agency identify adverse environmental impacts related to the project-specific application, gaps in regulations, and applicable Mitigation Strategies.</li><li>▪ <b>Online Mapping Resources</b> – To assess land use, Tribal interests, water resources, and more.</li></ul>		
Gen-3 – Consistency with Policies, Development Regulations, and Ordinances	<b>Gen-3 – Consistency with Policies, Development Regulations, and Ordinances:</b> This Programmatic Environmental Impact Statement assumes that projects will be consistent with all applicable policies, development regulations, and ordinances. Applicants would provide information in their project-specific applications that the State Environmental Policy Act (SEPA) Lead Agency and local jurisdictions can use to determine consistency. If a project is not consistent with a relevant policy, development regulation, or ordinance, the applicant would provide an explanation. If the SEPA Lead Agency or local jurisdiction identifies one or more policies, development regulations, or ordinances with which the project is inconsistent, additional environmental analyses may be required, and mitigation may be identified per WAC 197-11-660.	<p>Additional policies, development regulations, and ordinances may be outlined by state, regional, county, or city agencies and jurisdictions. These may include, but are not limited to, the following:</p> <ul style="list-style-type: none"><li>▪ Comprehensive Plans</li><li>▪ Shoreline Master Programs</li><li>▪ Habitat Conservation Plans<sup>2</sup></li><li>▪ Active Transportation Plans</li><li>▪ Local Ordinances (e.g., noise)</li></ul> <p>Policies, development regulations, and ordinances with an environmental basis would be considered during the SEPA environmental review, and as a result, mitigation may also be identified.</p>	<ul style="list-style-type: none"><li>▪ Other county and city policies and ordinances may be applicable to projects and should be considered.</li><li>▪ These policies and ordinances can vary, so it is important to check with local jurisdictions for detailed information.</li><li>▪ Appendix 3.9-1 identifies relevant policies from countywide comprehensive plans and considerations for transmission facility development. The applicant should not assume this list to be comprehensive or current and should independently confirm their project’s consistency with all countywide comprehensive plans.</li><li>▪ Appendix 3.13-1 summarizes relevant noise and vibration ordinances or requirements at the county level. The applicant should not assume this list to be comprehensive or current and should independently confirm their project’s consistency with all county noise and vibration ordinances.</li><li>▪ If a project could impact state coastal resources or land uses, a notice of consistency with the state Coastal Zone Management Program would be required.</li><li>▪ Local county and city codes regulate development within shorelines of the state in accordance with Shoreline Master Programs and state Shoreline Management Act requirements.</li><li>▪ Consistency with every individual policy is not implied as a legal requirement. Additional environmental analyses may be required when adverse environmental impacts have not been adequately addressed by existing laws or regulations, as determined by the SEPA Lead Agency. For example, additional project-specific environmental analyses may be required when an inconsistency with a policy qualifies as an impact on an environmental resource analyzed by SEPA.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

<sup>2</sup> A plan developed by applicants to conserve the habitat of a species at risk if their project is expected to cause incidental take of the species.

Programmatic Environmental Impact Statement

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Gen-4 – Design Considerations	<p><b>Gen-4 – Design Considerations:</b> Applicants would document compliance with all applicable design considerations identified throughout Chapter 3. Applicants would also identify the following in the project-specific application:</p> <ul style="list-style-type: none"><li>▪ Any instances where the project does not comply with applicable design considerations</li><li>▪ The rationale for not following the design considerations</li><li>▪ The planned approach</li></ul>	<p>This Programmatic Environmental Impact Statement outlines design considerations at the beginning of each section in Chapter 3. Design considerations may include guidance documents, manuals, and/or best management practices. Design considerations are typically standardized practices designed to prevent adverse environmental impacts and are often included in regulatory compliance programs or implemented as routine practices.</p>	<p>If applicable design considerations cannot be incorporated, the applicant would provide additional information for the SEPA Lead Agency's consideration. The SEPA Lead Agency may determine that additional environmental analyses or design modifications are warranted.</p> <p>Applicants would ensure that any updates to a design consideration or its associated documents are identified and used in their project-specific applications.</p>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Gen-5 – Compliance with Avoidance Criteria	<p><b>Gen-5 – Compliance with Avoidance Criteria:</b> This Programmatic EIS assumes that all project-specific applications would incorporate and comply with the Avoidance Criteria<sup>3</sup> identified in it. If a project-specific application does not comply with the identified Avoidance Criteria, the State Environmental Policy Act (SEPA) Lead Agency would conduct additional environmental analyses and identify mitigation, if appropriate.</p>	<p>Avoidance Criteria aim to prevent probable significant adverse environmental impacts on sensitive environmental resources identified in this Programmatic EIS while providing project-specific applications an opportunity to adequately evaluate and address site-specific adverse environmental impacts.</p>	<p>Applicants should carefully evaluate the Avoidance Criteria outlined in this Programmatic EIS during initial site characterization and throughout project planning. If full compliance is not feasible due to site constraints, existing infrastructure, or other limiting factors, the following steps are recommended:</p> <ul style="list-style-type: none"><li>▪ <b>Document the rationale for non-compliance</b>, including site-specific conditions or constraints that prevent adherence.</li><li>▪ <b>Provide supporting data</b> such as maps, site history, prior assessments, or technical studies to substantiate the determination.</li><li>▪ <b>Engage early with the SEPA Lead Agency</b> to discuss potential deviations and collaboratively identify alternative mitigation strategies.</li><li>▪ <b>Consider proportional mitigation</b> where full avoidance is not possible, ensuring that adverse environmental impacts are minimized and appropriately addressed.</li><li>▪ <b>Use the Programmatic EIS Conformance Checklist</b> to track and communicate compliance status with Avoidance Criteria across project phases.</li></ul> <p>This approach promotes transparency, regulatory alignment, and environmental stewardship while allowing flexibility for site-specific conditions.</p> <p>The SEPA Lead Agency would determine whether project-specific environmental analyses and mitigation would be required. Mitigation identified may be mitigation found in the Programmatic EIS or may be new project-specific mitigation.</p>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

<sup>3</sup> Avoidance Criteria are a form of mitigation that were developed for this Programmatic EIS to allow for its application to a variety of project types and locations. Projects may not be able to fully implement all Avoidance Criteria. The project-specific impacts and mitigation associated with the affected resource(s) and Avoidance Criteria, would be more appropriately addressed through project-specific environmental review.



Programmatic Environmental Impact Statement

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Gen-6 – Project Implementation Details	<p><b>Gen-6 – Project Implementation Details:</b> Applicants would incorporate the following into their project-specific applications and design plan details, or document compliance with them, where applicable:</p> <ul style="list-style-type: none"><li>▪ No temporary staging, stockpiles of materials, temporary buildings, or equipment can remain on the project site unless written approval is obtained from the parcel owner.</li><li>▪ Effort would be made to coordinate construction activities with other construction in the area.</li><li>▪ Appropriate property rights or access would be acquired before new construction, operation, and/or maintenance activities can occur.</li><li>▪ All temporary construction areas disturbed during construction or other work associated with the project would be restored to preconstruction conditions once the work is complete.</li><li>▪ Excavations and drilling would meet federal, state, and local criteria; engineering standards; and Occupational Safety and Health Administration standards.</li><li>▪ The applicant is responsible for protecting the environment from damage by construction vehicles, equipment, construction activities, and storage of materials.</li></ul>	<p>These conditions collectively ensure that the project is conducted safely, legally, and responsibly, benefiting both the community and the environment.</p>	<p>For responsible and compliant project execution, applicants should incorporate the following best practices and planning considerations into their project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Coordinate with local jurisdictions and landowners</b> to confirm access rights, staging areas, and construction timelines.</li><li>▪ <b>Develop a Construction Management Plan</b> that outlines how temporary impacts will be minimized and how restoration will be completed post-construction.</li><li>▪ <b>Include environmental protection protocols</b> for construction vehicles, equipment, and material storage, especially in sensitive areas.</li><li>▪ <b>Identify any deviations from standard implementation practices</b>, and provide justification along with proposed mitigation or alternative measures to the SEPA Lead Agency.<ul style="list-style-type: none"><li>○ Ensure compliance with applicable engineering and safety standards, including the Occupational Safety and Health Administration, and document how these standards are met.</li><li>○ Monitor and report ROW maintenance activities to confirm they remain within the approved easement and do not result in unauthorized adverse environmental impacts.</li></ul></li></ul> <p>Early coordination with the SEPA Lead Agency and other permitting entities will help streamline approvals and reduce the risk of delays or non-compliance.</p>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	<p>Select descriptor.</p>
Gen-7 – Cumulative Impact Assessment	<p><b>Gen-7 – Cumulative Impact Assessment:</b> Provide information to support a project-specific cumulative impact assessment as directed by the SEPA Lead Agency. The project-specific cumulative impact assessment can add to the baseline cumulative impact analysis provided in this Programmatic EIS.</p>	<p>The Washington Energy Facility Site Evaluation Council has determined that the appropriate scope and level of detail for this Programmatic EIS cumulative effects analysis (the Study Area) may not be sufficient for a project-specific cumulative effects analysis (Washington Administrative Code 197-11-060(5) Phased Review). This Programmatic EIS analyzes cumulative effects and recognizes that significant cumulative effects are possible for many environmental resources. However, the actual context for a specific project</p>	<ul style="list-style-type: none"><li>▪ As project-specific applications are prepared, the projects used in this cumulative impact analysis may progress to completion or construction. Similarly, actions unforeseen at the time of the publication of this Programmatic EIS could be developed or proposed. Therefore, applicants should prepare an updated reasonably foreseeable action (RFA) list. The RFA list should be based on the geographic setting associated with the project within a determined geographic boundary, as determined in coordination with the SEPA Lead Agency.</li><li>▪ It should be noted that RFAs in the states of Idaho and Oregon, and/or in Canada, could have overlapping cumulative impacts in Washington. While SEPA and this Programmatic EIS are limited to the geographic boundary of</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	<p>Select descriptor.</p>

Programmatic Environmental Impact Statement

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
		would vary with the physical setting and timing, and would therefore affect the analysis of cumulative effects for that specific project and make it more feasible to identify appropriate mitigation for any identified project-specific cumulative impacts.	<p>the state of Washington, cumulative effects from RFAs external to this state should be included if they may have overlapping impacts within this state.</p> <ul style="list-style-type: none"><li>▪ Applicants and the SEPA Lead Agency may refer to the Cumulative Impact Assessment Methodology document that was prepared to support subsequent project-specific cumulative impact assessments.</li></ul>		
Gen-8 – Decommissioning Analyses	<b>Gen-8 – Decommissioning Analyses:</b> The analysis of adverse environmental impacts during the decommissioning stage is outside the scope of this Programmatic Environmental Impact Statement. State Environmental Policy Act (SEPA) environmental review under Revised Code of Washington 43.21C would be required for the decommissioning stage. Project-specific applicants would consult with the SEPA Lead Agency to determine what decommissioning information they want, if any, at the time of project application.	An environmental analysis of decommissioning a transmission facility is required. However, a transmission facility would be decommissioned following the end of its useful life, which generally ranges from 40 to 80 years. As part of a phased review, the SEPA Lead Agency may decide to postpone SEPA analysis of decommissioning to a point in time closer to actual decommissioning, when information about the existing condition would be current. At that time, the SEPA Lead Agency would identify necessary environmental and socioeconomic studies pertinent to the decommissioning of transmission facilities.	<ul style="list-style-type: none"><li>▪ The SEPA Lead Agency may elect to include the decommissioning analysis in the project-specific application. In this scenario, the project-specific application should verify that there are no unique aspects to the proposal such that decommissioning could result in significant adverse environmental impacts.</li><li>▪ The SEPA Lead Agency may elect to defer the decommissioning analysis to a later date as part of phased review (WAC 197-11-060[5]). This flexibility allows the SEPA Lead Agency to address decommissioning in a more detailed and accurate manner when more specific and current information is available, and when the project is closer to the decommissioning period.</li><li>▪ Environmental analyses may include socioeconomic studies or environmental assessments to better determine applicable mitigation measures.</li><li>▪ Decommissioning plans and environmental review should be consistent with the requirements outlined in WAC 463-60.</li><li>▪ Decommissioning mitigation measures could include, but are not limited to, the removal of above- and below-ground infrastructure, soil and habitat restoration, management of hazardous materials, long-term monitoring, and land use compatibility.</li><li>▪ Decommissioning plans should be developed in discussion with affected Tribes and local jurisdictions, particularly where cultural or ecological resources may be impacted.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ Prior to Decommissioning, if SEPA review of decommissioning is deferred</li></ul>	Select descriptor.
Gen-9 – Preconstruction Surveys and Assessments	<b>Gen-9 – Preconstruction Surveys and Assessments:</b> Applicants would complete preconstruction surveys and assessments, as listed in Appendix 3.1-1.	Surveys and assessments provide project-specific information that helps identify project-level probable significant adverse environmental impacts and inform the development of project-specific mitigation measures. This includes the affected environment, potential constraints, and existing infrastructure, which are essential for siting, design, and environmental analysis.	<ul style="list-style-type: none"><li>▪ Applicants should work with applicable agencies, organizations, stakeholders, and the SEPA Lead Agency to ensure concurrence on their methodology for conducting preconstruction surveys and assessments.</li><li>▪ Consider providing documentation identifying any previously identified transmission facility routes or alternatives early in the planning and development process. If an alternatives analysis has not been conducted, determine whether one is needed, consistent with WAC 197-11-440(5)(b). It is recommended that applicants prioritize collocation with existing infrastructure and avoid sensitive land uses (e.g., residential neighborhoods, schools, overburdened communities) where feasible.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>The following would be completed during initial site characterization and prior to construction. If a preconstruction survey or assessment does not apply to a specific project, the inapplicability should be documented by providing the SEPA Lead Agency with additional information for consideration.</p> <ul style="list-style-type: none"><li>▪ <b>Geotechnical Surveys:</b> If a project requires earthworks, appropriate geotechnical surveys should be conducted, including thorough geotechnical investigations to assess soil, rock, and groundwater conditions prior to new construction. These surveys are essential for identifying geotechnical hazards such as landslides, sinkholes, or soil liquefaction. Understanding these conditions supports the avoidance of hazardous areas and informs mitigation strategies, ensuring safety and stability. This is a required component of project-specific applications and supports SEPA Lead Agencies in evaluating baseline site conditions.</li><li>▪ <b>Geotechnical Environmental Assessments:</b> If a project requires earthworks, appropriate geotechnical environmental assessments should be conducted. Detailed environmental assessments would be conducted to identify potential contamination and geologic instability from prior land uses such as underground mining or landfilling. These assessments are a required component of project-specific applications and support SEPA Lead Agencies in evaluating baseline site conditions. Applicants should commit to a Phase 1 Environmental Site Assessment prior to constructing high-voltage transmission facilities to detect contamination risks from hazardous substances, underground storage tanks, or previous industrial activities. Identifying and documenting recognized environmental conditions early ensures informed siting decisions and reduces the likelihood of encountering unexpected contamination.</li><li>▪ <b>Plant Priority Species and Sensitive Ecosystem Assessments:</b> If a project requires ground-disturbing activities, appropriate plant and ecosystem assessments should be conducted. During the design and siting of transmission facilities, a desktop assessment should be performed with publicly available spatial data for plant priority species and sensitive ecosystems. Identify areas where priority species and sensitive ecosystems have the potential to occur. Many plant priority species are incompatible with disturbance. Avoidance is the best way to protect populations, as other mitigation measures may not be successful or may not have been tested for most plant species at risk (e.g., translocation or propagation from seed</li></ul>		

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>collection). This includes reviewing the Priority Habitat and Species database available from the WDFW and requesting sensitive data and the lists of vascular and nonvascular species generated by the Washington Natural Heritage Program.</p> <p>If plant priority species or sensitive ecosystems are identified within a project's anticipated ground disturbance area, mitigation measures would be developed to specifically address the adverse environmental impacts from the transmission facilities. Measures may include avoidance buffers, compensation, habitat enhancement, and pre-disturbance surveys to confirm locations to avoid direct disturbance to the occurrence.</p> <ul style="list-style-type: none"><li>▪ <b>Desktop Analysis of High-Risk Collision Areas:</b> When siting new transmission facilities, a desktop analysis of bird species occurrences, habitat, and congregations (e.g., breeding colonies) should be performed along the proposed route to identify areas and species potentially at high risk for collisions. When siting new transmission facilities in areas where collision risk is high, a field assessment of bird activity should be completed that includes surveys in different seasons, especially during migration, to increase the chances of detecting susceptible bird species. The results of this survey would be incorporated into the project-specific fish and wildlife resources and habitat protection plan. This assessment would help to identify areas of potential avian collision risk to help inform mitigation measures for reducing avian mortality.</li><li>▪ <b>Site Reconnaissance to Identify the Potential Presence of Wetlands, Seeps, and Intermittent or Ephemeral Streams on the Site:</b> A wetland delineation should be performed, using the 1987 USACE Wetland Delineation Manual and the appropriate regional supplement produced by the USACE for the wetlands on the site. Delineations need to identify and map the boundaries of wetlands on the site and indicate where they continue off the site. Assess wetland functions and rate all on-site wetlands using the appropriate Washington Wetland Ratings System method to determine their category and local buffer requirements. Examine adjacent properties for the presence of off-site wetlands that could be affected by facility construction and operation, map their locations, and identify any off-site connections to surface waters. Additional delineation resources may be found at: <a href="https://ecology.wa.gov/water-shorelines/wetlands/tools-resources/delineation-resources">https://ecology.wa.gov/water-shorelines/wetlands/tools-resources/delineation-resources</a></li><li>▪ <b>Pre-disturbance Surveys for Plant Priority Species and Sensitive Ecosystems:</b> If a project has the potential to result in adverse environmental impacts on suitable habitat for</li></ul>		



General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>plant priority species, sensitive ecosystems, or Tribally important species, appropriate pre-disturbance surveys should be conducted. Pre-disturbance surveys for plant priority species, sensitive ecosystems, and Tribally important species would be conducted prior to new construction in permanent and temporary footprint areas where suitable habitat occurs. Completing this pre-disturbance survey would reduce the likelihood of plant priority species being directly lost during new construction activities.</p> <p>If plant priority species or sensitive ecosystems are identified, a management plan would be developed. The management plan would identify mitigation measures specific to the species and follow the hierarchy of avoid, minimize, restore, and offset. Mitigation measures may include avoidance buffers, compensation, habitat enhancement, and exploring opportunities for translocation of populations or seed propagation.</p> <ul style="list-style-type: none"><li>▪ <b>Pre-Construction Surveys for Occupied Sensitive Wildlife Features:</b> Applicants should conduct preconstruction surveys for occupied sensitive wildlife features when it is not possible to avoid suitable habitat during the sensitive windows or setbacks of important wildlife habitat identified in Appendix 3.6-1. Methods for preconstruction surveys (e.g., preconstruction bird nesting survey, burrow surveys for mammals) should be developed in consultation with WDFW and approved by the SEPA Lead Agency.</li><li>▪ <b>Pre-Disturbance Surveys for Special Status Wildlife:</b> If a project has the potential to result in adverse environmental impacts on suitable habitat for special status wildlife or species of cultural importance identified by Tribes during project-specific consultation, appropriate pre-disturbance surveys should be conducted. Pre-disturbance surveys for special status wildlife would be conducted prior to construction in permanent and temporary footprint areas where suitable habitat occurs. These surveys would reduce direct and indirect adverse environmental impacts on special status wildlife species, including habitat loss, mortality, and barriers to movement. Surveys would be developed in consultation with WDFW. The results of surveys would be used to develop species-specific management plans for approval by the SEPA Lead Agency.</li><li>▪ <b>Pre-Construction Surveys for Aquatic Environments:</b> If a project has the potential to result in adverse environmental impacts on aquatic environments, such as streams, springs, riparian areas, or waterbodies, appropriate surveys should be conducted. These surveys would identify unique flora and fauna and/or their habitats as part of project</li></ul>		



General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>characterization and design should be conducted prior to new construction activities.</p> <ul style="list-style-type: none"><li>▪ <b>Complete a TIA:</b> Complete a TIA to ensure public safety and identify any negative effects. A TIA is not automatically required for all projects, and the scope and scale of the project, including whether it involves new corridors or significant construction activity, would determine whether a TIA is appropriate. For projects with minimal or no anticipated transportation impacts, a TIA may be unnecessary, and a more limited transportation assessment may suffice. For new construction, this is a required component of project-specific applications necessary for SEPA Lead Agencies to evaluate baseline conditions. During the completion of a TIA:<ul style="list-style-type: none"><li>○ <b>Consult with local planning authorities</b> regarding increased traffic during construction.</li><li>○ <b>Assess potential increases in traffic volume</b>, changes in traffic flow, and the adverse environmental impact on public transit and pedestrian pathways.</li><li>○ <b>Identify and address specific issues of concern</b> (e.g., location of school bus routes and stops) in the traffic management plan.</li></ul></li><li>▪ <b>Visual Impact Assessment:</b> If a project has the potential to result in adverse environmental impacts on visual quality, a visual impact assessment should be conducted during project planning. The visual impact assessment should define the project’s viewshed and identify an assessment zone large enough to capture all non-negligible visual impacts. Conducting a visual impact assessment would help to preserve scenic quality by identifying potential adverse environmental impacts on visual quality and developing mitigation strategies to address these impacts early in the planning process. This assessment also contributes to broader environmental stewardship by ensuring that infrastructure development is balanced with the preservation of natural and cultural landscapes.</li><li>▪ <b>Paleontological Resource Assessment:</b> If a project requires ground-disturbing activities, the applicant, in coordination with the SEPA Lead Agency, qualified paleontologists, and appropriate Tribes, should evaluate the potential for encountering fossils. If the potential is considered high, appropriate mitigation measures should be identified and implemented. These mitigation measures may include pre-construction surveys, monitoring, and following curation protocols for historic and cultural resources. It is encouraged to coordinate with qualified paleontologists and consult with the appropriate Tribes to ensure that any</li></ul>		

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>adverse environmental impacts on these resources are properly addressed.</p> <ul style="list-style-type: none"><li>▪ <b>Economic Impact Analysis:</b> An EIA would estimate the total impact of the project on regional output, value added, employment earnings, and jobs. The types of expenditures generated by a specific project would need to be considered when analyzing a project's impact on the local economy. The following types of expenditures should be considered in a project-specific EIA:<ul style="list-style-type: none"><li>○ <b>Local direct expenditures:</b> These are expenditures that are spent locally to implement a project during its new construction and operational stages (e.g., materials and supplies purchased to construct the project, payrolls for a project's construction and operation).</li><li>○ <b>Indirect expenditures:</b> These expenditures represent the additional economic impact of increases in the demand for goods and services (e.g., material manufacturers, excavation companies).</li><li>○ <b>Induced expenditures:</b> These expenditures represent the additional economic impact of increased demand for consumer goods and services attributable to labor earnings. Induced expenditures would cause a temporary beneficial impact by creating the potential for employment opportunities for local workers in other service areas besides construction, such as transportation and retail.</li></ul></li></ul>		
Gen-10 – Mitigation and Management Plans	<b>Gen-10 – Mitigation and Management Plans:</b> Applicants would prepare and implement project-specific mitigation and management plans, as outlined in Appendix 3.1-1.	Detailed mitigation and management plans demonstrate regulatory compliance and risk management, which would facilitate efficient environmental analysis.	<p>The following mitigation and management plans may be provided to the SEPA Lead Agency as part of a project-specific application, where applicable. These project-level documents are intended to build on the environmental mitigation strategy framework provided in the Programmatic EIS to help inform project-specific applications. They should support the SEPA Lead Agency's decision on the project's threshold determination, and they may be required to address probable significant adverse environmental impacts. However, they do not preclude additional regulatory review or mitigation measures. If a mitigation or management plan does not apply to a specific project, the inapplicability should be documented by providing the SEPA Lead Agency with additional information for consideration.</p> <ul style="list-style-type: none"><li>▪ <b>Earth Resources Monitoring and Maintenance Plan:</b> If a project requires earthworks, applicants should prepare and implement a comprehensive Monitoring and Maintenance Plan as part of their project-specific mitigation and management strategy. This plan supports the protection and sustainable management of earth resources during and after construction activities and is required to demonstrate</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>regulatory compliance and risk management. The plan should include, at a minimum:</p> <ul style="list-style-type: none"><li>○ Baseline assessment of site conditions</li><li>○ Monitoring program to track environmental performance</li><li>○ Maintenance activities to address observed issues</li><li>○ Adaptive management strategies to respond to changing conditions</li><li>○ Reporting and documentation protocols</li><li>○ Public involvement mechanisms, where applicable</li></ul> <p>▪ Sustainable management refers to practices that balance environmental, economic, and social factors, ensuring efficient and responsible use of natural resources to prevent depletion. This plan should be submitted to the SEPA Lead Agency prior to:</p> <ul style="list-style-type: none"><li>○ Post-Construction Restoration</li><li>○ Operation and Maintenance</li></ul> <p>▪ <b>Vegetation Management Plan:</b> If a project requires ground-disturbing activities, applicants should prepare and implement a VMP as part of their project-specific application. This plan should be tailored to the specific habitat(s) affected during new construction, operation and maintenance, upgrade, and modification. The VMP would demonstrate regulatory compliance and effective risk management.</p> <p>Mitigation measures within the VMP should follow the hierarchy of avoid, minimize, restore, and offset, and include BMPs such as:</p> <ul style="list-style-type: none"><li>○ Reducing native vegetation loss</li><li>○ Using construction techniques that preserve native soil and soil quality</li><li>○ Implementing specific mitigation for plant species at risk within or adjacent to the transmission facility</li></ul> <p>For operational vegetation management, applicants should:</p> <ul style="list-style-type: none"><li>○ Use targeted techniques (e.g., hand-cutting) to minimize disturbance</li><li>○ Avoid or minimize mowing in areas where low-growing native vegetation has been restored, unless necessary for safety</li></ul> <p>▪ <b>Invasive Species Management Plan:</b> All project-specific applications should create and implement an invasive species management plan. This plan would inform contractors' procedures for managing invasive species and reduce the spread of invasive species on the ROW, adjacent construction sites, and access roads. This plan could include the following components:</p>		

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>Procedures for inspecting vehicles and workers' equipment, as well as resources to educate workers on species identification and control measures.</li><li>Potential options for invasive species removal that would be explored, depending on the infestation size, and would include manual removal, herbicide application, and biocontrol options. If herbicides are selected for use, an herbicide mitigation plan should be developed to identify areas for treatment and BMPs to reduce herbicide drift and non-target impacts.</li><li>Species-specific treatment plans that would provide specific methods for treating noxious weeds observed on site.</li><li>An herbicide management plan that would reduce indirect impacts on non-target species by minimizing adverse environmental impacts such as herbicide drift. This would include measures to limit the spread of invasive species during construction and prevent the introduction of new species to construction sites, and methods for treating species based on BMPs specific to each invasive species identified for the project.</li><li>Management and monitoring plans for those invasive plants, as determined by state or local requirements, that may require management during new construction and operation. The applicant would be responsible for developing species-specific management plans to manage invasive plants and noxious weeds, including BMPs. Species-specific management plans would be developed by a qualified person, such as a biologist familiar with invasive plant management. The plans would include strategies for reducing the occurrence of invasive plants and noxious weeds.</li><li>For any ground-disturbing activities, applicants should prepare a revegetation plan for areas of temporary disturbance from the new construction, operation and maintenance, upgrade, or modification of a transmission facility. This plan would reduce direct and indirect loss of vegetation by revegetating disturbed construction areas with native species. Native plants provide important ecosystem services and would impede or slow the propagation of invasive plant species. The revegetation plan should include the following components and measures.  Identification of portions of the ROW that can be restored to the same or similar ecosystem that existed prior to disturbance, where possible and compatible with the transmission facility. This could include naturally low-growing ecosystems, such as grasslands or shrub-</li></ul>		

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>steppe. In areas where the pre-construction ecosystems are not compatible with operation (e.g., mature or old forest is typically not compatible with transmission facility ROWs outside permanent features), the applicant would develop measures to restore some of the ecological functions the ecosystem provided. For example, in forested ecosystems, coarse woody debris could be laid across the ROW, and tall shrubs could be planted to restore some of the complexity and minimize line of sight in ecosystems where these may be important for wildlife.</p> <p>Methods to preserve soil quality, including retaining topsoil to be reused when re-seeding to preserve some of the native seedbank.</p> <p>Protocols to revegetate using weed-free, habitat-appropriate seed mixes. The seed mixes would use native vegetation and would be developed in consultation with the WDFW.</p> <p>A monitoring plan to monitor restored areas to determine the success of restoration.</p> <p>The best available science at the time of preparation and a plan for amendment if required prior to implementation.</p> <p>▪ <b>Habitat Mitigation Plan:</b> An HMP would be developed to quantify the project’s adverse environmental impacts on sensitive ecosystems and wildlife habitat, and the compensatory requirements. Direct loss of habitat from a project would require compensation to achieve “no net loss” of sensitive ecosystems and wildlife habitat. The HMP would provide the required offset or compensatory quantity and a framework for how the applicant would meet the obligations. The HMP would:</p> <ul style="list-style-type: none"><li>○ Identify sensitive ecosystems by including WDFW priority habitat and/or vegetation associations that are rated as S1, S2, S3, SX, and SH.</li><li>○ Consider strategies and actions outlined in recovery and management plans for special status species.</li><li>○ Be prepared in consultation with WDFW and/or USFWS, and approved by SEPA prior to implementation.</li><li>○ Define offset or compensatory ratios to be applied to temporary and permanent disturbance.</li><li>○ Include other ecosystems that provide important habitat for wildlife species, whether or not the vegetation community is listed.</li><li>○ Consider instances where habitat modification would occur. Habitat modification may occur in some cases, whereby an ecosystem present prior to new construction</li></ul>		



General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>persists through operation but is altered to a different native ecosystem. Habitat modification of a sensitive ecosystem would need to be considered as to whether the modification qualifies as a temporary or permanent disturbance. This determination would be made by the SEPA Lead Agency based on whether the modified habitat provides ecological functions similar to the original sensitive ecosystem and the length of time the project is anticipated to operate. For example, a forest may be revegetated to an alder thicket under an overhead transmission line. While the area is revegetated with native vegetation following new construction, it may not provide all the structure and function of the previous ecosystem.</p> <ul style="list-style-type: none"><li>○ Identify how the applicant would fulfill offsetting obligations through, in order of preference, restoration, land acquisition, or financial contribution.</li><li>○ Identify opportunities for like-for-like offsetting and take into consideration time lag (i.e., the period between an adverse environmental impact occurring and an offset providing similar ecosystem services).</li></ul> <p>▪ <b>Wildlife Species-Specific Mitigation Plan:</b> When adverse environmental impacts on wildlife species are identified, a wildlife species-specific mitigation plan would be developed. This mitigation plan would be developed with input from appropriate professionals and in consultation with WDFW and Washington State Department of Ecology, as appropriate. Plans would be approved by the SEPA Lead Agency. Plans could include, but are not limited to:</p> <ul style="list-style-type: none"><li>○ Fish and wildlife resources and habitat protection plan (new construction and operation)</li><li>○ Revegetation and restoration plan (see the Programmatic Environmental Impact Statement, Section 3.5, Vegetation)</li><li>○ Special status species management plan</li><li>○ Riparian Management Zones plan</li></ul> <p>▪ <b>Avian Protection Plan:</b> When adverse environmental impacts on avian species are identified, develop or follow an existing corporate APP. The APP should be consistent with guidelines outlined by the APLIC. Following the best management strategies published by APLIC is expected to reduce avian mortality. The APP should incorporate management strategies outlined in the following publications:</p> <ul style="list-style-type: none"><li>○ Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC 2012)</li></ul>		

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>○ Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006)</li><li>○ Sage-groups BMPs: Best Management Practices for Electric Utilities in Sage-grouse Habitat (APLIC 2015)</li><li>○ New management strategies and updates published by APLIC.</li></ul> <p>The APP should also describe avian mortality monitoring to be conducted during operation and maintenance. The APP and associated monitoring plans should be provided to WDFW for review and to the SEPA Lead Agency for approval.</p> <ul style="list-style-type: none"><li>▪ <b>Fire Mitigation Plan:</b> All project-specific applications should develop a fire mitigation plan that includes both preventative and remedial measures for potential ignition sources operations. This mitigation plan would reduce the potential of wildfire ignition and increase the efficiency and effectiveness of emergency communication and coordination. Measures may include, but are not limited to, the following:<ul style="list-style-type: none"><li>○ Identifying local emergency responders, restricting vehicle operations and hot-work activities to designated vegetation cleared areas, using spark arrestors<sup>4</sup> for combustion engines, and reviewing weather forecasts for potential fire danger before operating any sources of fire ignition.</li><li>○ Limiting project activities to occur during low potential fire seasons (typically between fall and early spring).</li><li>○ Ensuring construction vehicles carry fire protection and remedial tools, such as extinguishers and shovels.</li><li>○ Minimizing vehicle idling to reduce engine temperatures and the potential for fire ignition.</li><li>○ Immediate fire suppression efforts and notification of emergency responders.</li><li>○ In the event of defined climate conditions, such as periods of high winds, low humidity, increased dry ground materials, or red flag warnings from the National Weather Service, public safety power shutoffs may be encouraged to reduce the potential for a catastrophic wildfire event.</li></ul></li><li>▪ <b>Hazardous Material and Waste Management Plan:</b> All project-specific applications should develop and implement a project-specific Hazardous Material and Waste Management Plan. The plan should include, but is not limited to, the following:<ul style="list-style-type: none"><li>○ Procedures for air contaminants, contaminated soils, or groundwater encountered incidentally during new</li></ul></li></ul>		

<sup>4</sup> A device designed to prevent the emission of flammable debris, such as sparks or hot particles, from combustion sources like internal combustion engines.

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>construction, including emergency notification and suspension of construction activities in the suspected area until the type and extent of contamination are determined</p> <ul style="list-style-type: none"><li>○ The type, amount, and disposal location of solid waste that is expected during the new construction, operation and maintenance, upgrade, or modification of transmission facilities</li><li>○ The type and amount of potentially hazardous waste materials, waste storage locations, disposal and recycling requirements, disposal locations, or recycling centers</li><li>○ Any additional measures to minimize potential solid-waste-related adverse environmental impacts</li></ul> <p>This management plan would reduce the adverse environmental impacts of hazardous material exposure to personnel and public health and ensure that local landfills have sufficient capacity for waste associated with project construction.</p> <ul style="list-style-type: none"><li>▪ <b>Transportation Plan:</b> Prepare a comprehensive transportation plan for transmission component materials and large construction equipment. This plan aims to enhance transportation safety and efficiency through compliance with state regulations and industry best practices. For new construction, this is a required component of project-specific applications necessary for SEPA Lead Agencies to evaluate baseline conditions.</li><li>▪ <b>Emergency Management Plan:</b> All project-specific applications should develop and implement a project-specific emergency management plan to address safety-related standards and procedures for potential emergency-related incidents during construction and through operation and maintenance. The plan should also outline coordination requirements to address adverse environmental impacts on law enforcement and emergency response times, accessibility, and general operations. Applicants, in consultation with the SEPA Lead Agency, should contact local law enforcement and emergency management departments to identify and address potential issues. This management plan would enhance worker safety through streamlined emergency response procedures and increased emergency coordination.</li><li>▪ <b>Site Security Plan:</b> All project-specific applications should develop and implement a project-specific site security plan to minimize public access to construction areas and permanent structures. This management plan would reduce the demand for police and law enforcement services. The</li></ul>		



General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>plan should include measures such as identifying areas where temporary and permanent fencing, lighting, security patrols, or security cameras should be implemented.</p> <ul style="list-style-type: none"><li>▪ <b>Archaeological Avoidance, Monitoring, and Discovery Plan:</b> All project-specific applications should develop and adhere to an archaeological monitoring plan and discovery plan. Implementing this plan would address impacts on cultural resources within or near the ROW during new construction, operation and maintenance, upgrade, or modification activities. The plan should consider the following:<ul style="list-style-type: none"><li>○ Interested parties, particularly DAHP and affected Tribes, should be consulted in the development of these plans.</li><li>○ Following a cultural resource survey, monitoring may be required if avoidance of physical adverse environmental impacts is not possible.</li><li>○ The archaeological avoidance, monitoring, and discovery plan would include procedures for avoiding and minimizing adverse environmental impacts on cultural resources, such as flagging cultural resources, laying protective matting, or rerouting vehicles to avoid site boundaries within or near the ROW during new construction when applicable.</li><li>○ The plan would include an inadvertent discovery plan that includes clear procedures for halting work and notifying Tribal and state authorities if unanticipated human remains, burial features, historic or cultural resources that may meet the listing criteria for eligibility on the National Register of Historic Places, or other resources of Tribal importance are encountered.</li></ul></li><li>• Archaeologists should retain an on-site copy of the prepared Inadvertent Discovery Plan and be prepared to educate the crew on the plan if requested.</li><li>• Tribal monitors may be requested; contractors should submit 4-week look-ahead schedules to Tribal monitors.</li><li>▪ <b>Communication Plan:</b> All project-specific applications should prepare and implement a communication plan that includes a mechanism for handling complaints from project stakeholders, such as residents, affected Tribes, and interested organizations. This plan would address the potential adverse environmental impacts of stress and annoyance caused by changes in nuisance noise, dust, odor, and visual landscape by providing affected residents with a structured means of providing feedback. This plan should outline procedures for accurately and promptly notifying</li></ul>		

Programmatic Environmental Impact Statement

General Measure ID	General Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			the community about construction and repair activities that generate noise, dust, or a visual change.		
Gen-11 – Pre-Application	<b>Gen-11 – Pre-Application:</b> Project-specific applicants should engage with the SEPA Lead Agency as early as possible and follow the SEPA Lead Agency’s pre-application process when one is available.	A pre-application meeting enables an honest exchange of information and data early in the project planning process. Additionally, completing the SEPA Lead Agency’s pre-application process can better prepare the applicant and improve the efficiency of the application review by outlining the required methodology, format, and timing of baseline surveys, assessments, and evaluations.	<ul style="list-style-type: none"><li>Coordinate with the SEPA Lead Agency to determine whether they have a Pre-Application Process.</li><li>Consult with the SEPA Lead Agency as early as possible in the planning process to determine whether a project’s entrance into the Pre-Application Process is appropriate.</li></ul>	<ul style="list-style-type: none"><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.

**APLIC** = Avian Power Line Interaction Committee; **APP** = Avian Protection Plan; **BMP** = best management practice; **DAHP** = Washington State Department of Archaeology and Historic Preservation; **EIS** = Environmental Impact Statement; **HMP** = Habitat Mitigation Plan; **RFAs** = reasonably foreseeable actions; **ROW** =right-of-way; **SEPA** = State Environmental Policy Act; **USFWS** = U.S. Fish and Wildlife Service; **VMP** = Vegetation Management Plan; **WAC** = Washington Administrative Code; **WDFW** = Washington Department of Fish and Wildlife

# A3.1-1.3 Avoidance Criteria Identified in Section 3.1

When the following avoidance criteria cannot be met, additional environmental analyses and mitigation measures outside the scope of this Programmatic EIS would be required to address related project-specific adverse environmental impacts.

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
AVOID-1 – Hazardous Areas	<b>AVOID-1 – Hazardous Areas<sup>5</sup>:</b> Avoid having equipment or infrastructure within known hazardous areas, including, but not limited to, contaminated soils, geologically hazardous areas, landfills, and cutbanks.	Avoiding hazardous areas provides safety for workers, the public, and infrastructure, as well as environmental protection. Disturbing sites of known contamination or other hazards may require the development of remediation plans.	<p>While not all geological hazards pose the same level of risk, site-specific mitigation measures would need to be considered to prevent or eliminate adverse environmental impacts. During site-specific evaluations, mitigation measures would be screened and adopted as the SEPA Lead Agency deems applicable.</p> <p>The following would be completed during initial site characterization to identify hazardous areas to be avoided when possible:</p> <ul style="list-style-type: none"><li>▪ <b>Geotechnical Surveys:</b> These geotechnical investigations to assess soil, rock, and groundwater conditions are essential for identifying geotechnical hazards such as landslides, sinkholes, or soil liquefaction.</li><li>▪ <b>Environmental Assessments:</b> Applicants should commit to a Phase 1 Environmental Site Assessment prior to constructing high-voltage transmission facilities to detect contamination risks from hazardous substances, underground storage tanks, or geologic instability from previous industrial activities.</li></ul>	▪ During Initial Site Characterization	Select descriptor.
AVOID-2 – Wetland Disturbance	<b>AVOID-2 – Wetland Disturbance:</b> Avoid having equipment or infrastructure within 300 feet of all wetlands.	Protecting wetlands would decrease the chances of wetland degradation during new construction activities, as these areas are important for sustained wetland function. Wetlands within the project footprint would be delineated following the U.S. Army Corps of Engineers wetland delineation methodology and rated using the ECY’s Western Washington, Version 2, and Eastern Washington, Version 1.	<p>Although the 300-foot buffer is not a regulatory requirement, it is intended to be a planning-level tool for applicants and a project-specific environmental review tool for the SEPA Lead Agency.</p> <p>Project-specific applications should comply with all applicable local, state, and federal regulations, including local Critical Area Ordinances developed under the Growth Management Act.</p> <p>When identifying wetlands in and around project sites, the 1987 Army Corps of Engineers Federal Wetland Delineation Manual and appropriate regional supplement should be used. Wetlands should be rated using the ECY’s Western Washington, Version 2 and Eastern Washington, Version 1 (<a href="#">Rating system - Washington State Department of Ecology</a>).</p> <p>The following should be considered first to mitigate adverse environmental impacts:</p> <ul style="list-style-type: none"><li>▪ Avoid direct disturbance by using non-destructive techniques such as clear spanning (for overhead) or directional drilling (for underground) to reduce direct disturbance.</li><li>▪ Avoid fragmentation by not bisecting wetlands.</li></ul>	▪ During Initial Site Characterization	Select descriptor.

<sup>5</sup> Areas susceptible to erosion, sliding, earthquakes, or other geological events or areas that could pose a threat to health and safety when incompatible commercial, residential, or industrial development is sited in areas of significant hazard (e.g., landfills, underground mines, cutbanks, etc.).

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ Avoid disturbance within 300 feet of known wetlands to reduce edge effects.</li></ul> Should adverse environmental impacts on wetlands be unavoidable, compensatory mitigation would be required to ensure no net loss of wetland functions and values. Applicants should coordinate with the SEPA Lead Agency to complete a thorough review, analysis, and agreement of adverse environmental impacts on water resources and the compensatory mitigation proposed.  It should be noted that Washington State has several compensatory mitigation strategies for large projects, particularly those impacting wetlands and other aquatic resources. Mechanisms include mitigation banking, in-lieu fee programs, permittee-responsible mitigation, and advance mitigation.		
<b>AVOID-3 – Sensitive Water Features</b>	<b>AVOID-3 – Sensitive Water Features:</b> Avoid impacting areas sensitive to degradation, including adjusting the layout of new transmission facilities to steer clear of sensitive water features. <sup>6</sup>	Avoiding sensitive water features that are susceptible to degradation from new construction activities, including changes to the water features’ physical characteristics (e.g., banks, bathymetry, and substrate <sup>7</sup> ), as well as chemical properties. Avoiding these areas helps preserve their structure and function.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Conduct early site characterization</b> to identify and map sensitive water features using available datasets, field surveys, and consultation with resource agencies.</li><li>▪ <b>Use best available science and hydrologic modeling</b> to assess potential adverse environmental impacts and guide facility siting.</li><li>▪ <b>Document avoidance efforts</b> in the project-specific application, including rationale for facility placement and any constraints that limit full avoidance.</li><li>▪ <b>If avoidance is not feasible</b>, provide justification and propose mitigation measures such as buffer zones, erosion control, stormwater management, and habitat restoration.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and relevant water resource agencies</b> to ensure compliance with applicable water protection regulations and permitting requirements.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.
<b>AVOID-4 – Floodplains</b>	<b>AVOID-4 – Floodplains:</b> Avoid having equipment or infrastructure within floodplains.	This Avoidance Criterion would eliminate the potential for damage to infrastructure and electrical safety hazards because of inundation and would avoid some riparian ecosystems.	<ul style="list-style-type: none"><li>▪ <b>Applicants should demonstrate compliance</b> with applicable federal, state, and local floodplain regulations, including those adopted under the National Flood Insurance Program and local critical areas ordinances.</li><li>▪ <b>Document the locations of identified floodplains</b>, avoid any project-related disturbance within those boundaries, and provide additional information to the SEPA Lead Agency when project activities are not expected to adhere to the Avoidance Criterion.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.

<sup>6</sup> Washington does not have a single, unified legal definition for “sensitive water features,” but the concept is addressed through several statutes and regulatory frameworks that define and protect critical areas and water resources. Washington’s Growth Management Act (RCW 36.70A.030) defines five types of critical areas, which include water-related features considered sensitive: wetlands, areas with a critical recharging effect on aquifers used for potable water, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas. These areas must be designated and protected using best available science, and local governments are required to adopt development regulations to preserve their functions and values. While the Washington State Department of Ecology does not offer a definition for “sensitive water features,” areas such as fish-critical basins, instream flows, and water quality and quantity compliance zones may be identified to protect water features (RCW 90.54).

<sup>7</sup> A layer of material or surface where an organism could live.



Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
<b>AVOID-5 – Channel Migration Zones (CMZs)</b>	<b>AVOID-5 – Channel Migration Zones (CMZs):</b> Avoid having equipment or infrastructure in Channel Migration Zones (CMZs), defined in WAC 222-16-010 as areas where the active channel of a stream is prone to move, resulting in a potential near-term loss of riparian function and associated habitat adjacent to the stream, except as modified by a permanent levee or dike. Avoidance of CMZs is recommended where feasible, but compliance with applicable shoreline, floodplain, and critical areas regulations will guide project-level decisions.	This Avoidance Criterion would eliminate potential damage to infrastructure caused by erosion of soil or foundations for infrastructure, if a channel were to migrate. Additionally, placing equipment or personnel within CMZs poses safety risks due to unstable ground conditions, sudden changes in stream flow, and increased likelihood of flooding or debris movement. Avoidance reduces the risk of injury, equipment loss, and costly emergency responses, while supporting compliance with shoreline, floodplain, and critical area regulations.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify CMZs early</b> during site characterization using available mapping tools, geomorphic assessments, and consultation with local and state agencies.</li><li>▪ <b>Document avoidance efforts</b> in the project-specific application, including any constraints that limit full avoidance and the rationale for siting decisions.</li><li>▪ <b>Assess potential risks</b> to infrastructure and personnel from erosion, flooding, and unstable ground conditions, and incorporate this into the project’s risk management and safety planning.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and local jurisdictions</b> to ensure consistency with shoreline management plans, floodplain regulations, and critical area ordinances.</li><li>▪ <b>If avoidance is not feasible</b>, provide justification and propose mitigation measures such as bank stabilization, elevated structures, or relocation of temporary facilities outside the CMZ.</li></ul>	▪ During Initial Site Characterization	Select descriptor.
<b>AVOID-6 – Old-Growth and Mature Forests</b>	<b>AVOID-6 – Old-Growth and Mature Forests:</b> Avoid old-growth forests, which include forests older than 200 years in western Washington and greater than 150 years in eastern Washington, and mature forests, which include forests greater than 80 years.	This Avoidance Criterion would reduce direct loss of old-growth and mature forests, which have already lost the majority of their historical extent. Old-growth and mature forests are particularly susceptible to long-term adverse environmental impacts due to the time lag to reestablish current ecological functions if clearing occurs. In addition, linear features through old and mature forest stands increase the adverse environmental impacts from edge effects, <sup>8</sup> such as the spread of invasive plants.	<ul style="list-style-type: none"><li>▪ <b>Preserve mature native trees whenever feasible</b>, especially those identified as culturally modified or located in sensitive habitats.</li><li>▪ <b>Document avoidance efforts</b> in the project-specific application, including any constraints that limit full avoidance and the rationale for siting decisions.</li><li>▪ <b>If avoidance is not feasible</b>, provide justification and propose mitigation measures such as woody debris salvage and restoration, and compensatory habitat mitigation.</li></ul>	▪ During Initial Site Characterization	Select descriptor.
<b>AVOID-7 – Rare, Endangered, or Threatened Plant Species and Sensitive Ecosystems</b>	<b>AVOID-7 – Rare, Endangered, or Threatened Plant Species and Sensitive Ecosystems:</b> Avoid having equipment or infrastructure in areas occupied by rare, endangered, or threatened plant species and sensitive ecosystems.	Avoiding rare, endangered, or threatened plant species and sensitive ecosystems would reduce both direct and indirect impacts on, and fragmentation of, these communities whose populations are at-risk of disappearing.	Conduct a project-specific Section 7 consultation for any transmission facility project with the potential to affect rare, endangered, or threatened plant species and sensitive ecosystems. These consultations should be initiated early in the project planning process and include coordination with agencies to identify appropriate conservation measures, minimize adverse environmental impacts, and streamline permitting timelines.  The following should be considered first to mitigate adverse environmental impacts: <ul style="list-style-type: none"><li>▪ Avoid direct disturbance by using non-destructive techniques such as clear spanning (for overhead) or directional drilling (for underground) to reduce direct disturbance.</li></ul>	▪ During Initial Site Characterization ▪ During Operation and Maintenance	Select descriptor.

<sup>8</sup> A phenomenon in which species composition changes near the boundary of a habitat. This term is typically used in the context of habitat degradation, where intact habitat contains less diversity near the point of contact with disturbed areas, such as clearcuts or agricultural land.

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ Avoid fragmentation by not bisecting populations of rare, endangered, or threatened plant species or sensitive ecosystems.</li><li>▪ Minimize disturbance within 775 feet of known occurrences to reduce edge effects.</li></ul>		
<b>AVOID-8 – Important Habitat</b>	<b>AVOID-8 – Important Habitat:</b> Avoid having equipment or infrastructure in areas occupied by important and sensitive wildlife habitat, such as those listed in Appendix 3.1-1.	This Avoidance Criterion aims to reduce habitat loss and fragmentation that can be caused by linear features such as transmission facilities.	<ul style="list-style-type: none"><li>▪ Important and sensitive wildlife habitat includes, but is not limited to, the following:<ul style="list-style-type: none"><li>○ National wildlife refuges, parks, and other state or federally protected areas</li><li>○ Washington State lands managed as wildlife areas, conservation easements, and other state-managed lands for conservation, including the Washington State Department of Natural Resources protected lands (NAPs and NRCAs)</li><li>○ Important Bird Areas</li><li>○ Known stopover locations for migratory species</li><li>○ Mapped critical habitat for federally listed species and habitat identified in state or federal management plans for state-listed species</li><li>○ Mapped ungulate winter and summer range</li><li>○ Mapped habitat concentration areas</li><li>○ Wetlands, including a 300-foot buffer</li><li>○ Known bat maternity colonies and hibernacula</li><li>○ Known snake hibernacula</li><li>○ Greater sage-grouse core and corridor areas addressed by the Washington Shrubsteppe Restoration and Resiliency Initiative</li></ul></li><li>▪ Although these important habitat designations are not regulatory requirements, they are intended to be a planning-level tool for applicants and a project-specific environmental review tool for the SEPA Lead Agency.</li><li>▪ Applicants could prepare a management plan to supplement this Programmatic EIS for review by WDFW and approval by the SEPA Lead Agency if project components are sited in these habitats.</li><li>▪ The management plan would provide rationale for siting features in these areas, design changes to avoid habitat adverse environmental impacts, additional mitigation measures to reduce adverse environmental impacts on the species associated with these habitats, a restoration plan specific to these habitat types, and offsetting ratios specific to the loss of habitat.</li><li>▪ An important Bird Area is a site that provides an essential service for bird populations during a part of their annual movement cycle.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ Mapped habitat concentration areas are described as areas that are important or suspected to be important to a species of focus based on surveys or modelling data (WHCWG 2012).</li><li>▪ The important and sensitive wildlife habitat outline in this avoidance criterion is based on WDFW’s WSRRI Spatial Map Portal.</li><li>▪ Projects with adverse environmental impacts on the State Trust Lands HCP should account for the commitments of the HCP and associated costs. These commitments may require mitigation, remediation, and/or the purchase of replacement land to account for the conversion of these lands out of their conservation status. All costs associated with consulting the USFWS and National Marine Fisheries Service, required mitigation, and incidental take should be a requirement and responsibility of the applicant.</li></ul>		
<b>AVOID-9 – Movement Corridors</b>	<b>AVOID-9 – Movement Corridors:</b> Avoid having equipment or infrastructure in modeled landscape connectivity areas that are characterized as having high connectivity value in the Washington Habitat Connectivity Action Plan, unless the project is sited within or adjacent to an existing right-of-way or linear feature (e.g., a roadway).	This Avoidance Criterion aims to reduce wildlife barriers to movement.	<ul style="list-style-type: none"><li>▪ If a Project is proposed within a modeled movement corridor identified by the Washington Wildlife Habitat Connectivity Working Group, WDFW, or another agency, applicants could prepare a wildlife movement management plan that describes the modeled corridor, the species that are expected to use the corridor, potential adverse environmental impacts, and mitigation measures specific to maintaining wildlife connectivity.</li><li>▪ The management plan would be developed in consultation with WDFW and approved by the SEPA Lead Agency.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.
<b>AVOID-10 – Buffer Setbacks for Wildlife and Wildlife Features</b>	<b>AVOID-10 – Buffer Setbacks for Wildlife and Wildlife Features:</b> Avoid having equipment or infrastructure within the setbacks identified for wildlife and wildlife features, as outlined in Appendix 3.6-1. Applicants would verify and update the setbacks as new buffers are recommended by Washington State (e.g., Washington Department of Fish and Wildlife [WDFW] and Washington State Department of Ecology). Buffers and setbacks would be reviewed with WDFW prior to the submittal of a project-specific application.	This Avoidance Criterion reduces direct and indirect habitat loss and mortality of special status species. <sup>9</sup>	<ul style="list-style-type: none"><li>▪ The applicant would propose setbacks for special status species that do not have published guidelines or are not included in Appendix 3.6-1.</li><li>▪ Applicants would develop a species-specific management plan as a supplement to this Programmatic EIS for implementation during project new construction and operation if these setbacks cannot be adhered to.</li><li>▪ The species-specific management plan would be developed in consultation with WDFW and approved by the SEPA Lead Agency prior to implementation.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.
<b>AVOID-11 – Oil-Containing Conductor Cables</b>	<b>AVOID-11 – Oil-Containing Conductor Cables:</b> When installing underground transmission lines, avoid the use of oil-containing equipment for cooling.	This avoidance criterion aims to eliminate the risk of insulation fluid leaks associated with oil-containing equipment underground.	Cooling should be achieved through XLPE insulation material or other best available technology. The following would be completed during initial site characterization:	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.

<sup>9</sup> For this Programmatic EIS, special status fish and freshwater invertebrate species are defined as either listed under the federal Endangered Species Act or Bald and Golden Eagle Protection Act or listed by Washington State as endangered, threatened, sensitive, or candidate.

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Environmental Assessments:</b> Applicants should commit to a Phase 1 Environmental Site Assessment prior to constructing high-voltage transmission facilities to detect contamination risks from hazardous substances, underground storage tanks, or geologic instability from previous industrial activities.</li></ul>		
<b>AVOID-12 – Heat Sources</b>	<b>AVOID-12 – Heat Sources:</b> Avoid collocation with other heat sources like steam mains.	This Avoidance Criterion aims to eliminate the risks associated with excess heat generation, such as thermal stress of nearby structures and soil stability.	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Identify and map heat sources</b> during initial site characterization using utility records, thermal imaging, or consultation with local agencies and facility operators.</li><li>▪ <b>Assess thermal risks</b> to transmission infrastructure, including potential impacts on conductor performance, insulation degradation, and equipment lifespan.<ul style="list-style-type: none"><li>○ <b>Document avoidance efforts</b> in the project-specific application, including any constraints that limit full avoidance and the rationale for siting decisions.</li><li>○ <b>If avoidance is not feasible</b>, provide justification and propose mitigation measures such as thermal shielding, increased separation distances, or alternative routing.</li><li>○ <b>Coordinate with the SEPA Lead Agency and relevant utility providers</b> to ensure safe and compliant siting near heat sources.</li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.
<b>AVOID-13 – Land Use and Zoning Incompatibility and Conflicts</b>	<b>AVOID-13 – Land Use and Zoning Incompatibilities:</b> Avoid incompatible land uses and adhere to all applicable zoning and development regulations. Demonstrate that there are no direct or indirect adverse land use incompatibilities with private property owners or public land administrators.	This Avoidance Criterion aims to avoid conflicts associated with land use and zoning designations. Avoiding land use and zoning conflicts would also help reduce adverse environmental impacts on property owners, agricultural landowners, noise, neighboring viewers, and socioeconomics.	<ul style="list-style-type: none"><li>▪ Incompatibilities with land uses beyond regulatory requirements could include, but are not limited to, the following:<ul style="list-style-type: none"><li>○ Reducing the overall land use type, which impacts the ability to accommodate future growth in Urban Growth Areas</li><li>○ Reducing the overall land use type beyond identified baseline or target numbers found in planning goals, policies, programs, or initiatives for implementing comprehensive plans subject to the GMA (Fully Planning Counties)</li><li>○ Limit the desirability or allowable uses for future development within or adjacent to the subject site</li><li>○ An adverse environmental impact on surrounding land uses, particularly in areas that have ongoing natural resource operations</li></ul></li><li>▪ While there may be practical limitations to avoiding all land use incompatibilities, particularly for large-scale infrastructure, consulting with local authorities, city planners, zoning boards, and other relevant authorities, as well as property owners, is a critical step to understanding sensitive land uses or land use conflicts, rules that govern development locally, and land use concepts specific to the region. Coordination could also result in identifying the need for minor changes to the project proposal, including pole heights, specific pole locations, and construction timing.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.



Programmatic Environmental Impact Statement

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ When siting within Fully Planning Counties, consider conducting a comprehensive land use analysis that includes a review of zoning maps and ensuring the proposed transmission facility aligns with the applicable land use plans.</li><li>▪ It is important to coordinate early in the planning process with relevant agencies and local authorities when a site-specific project may impact soils designated as prime farmland or is identified as having the potential to be prime farmland. Although soils may have these designations, additional analysis and coordination are recommended to confirm their designation.</li><li>▪ Helpful resources to review and consider may include:<ul style="list-style-type: none"><li>○ Local comprehensive plans<sup>10</sup></li><li>○ Natural resource initiatives, plans, or programs<sup>11</sup></li><li>○ Mapping tools and databases<sup>12</sup></li></ul></li><li>▪ Coordinate with commercial landowners to ensure that access road enhancements, gates, and construction and maintenance activities would minimize disruptions to commercial operations.</li><li>▪ Applicants should create and implement an agreement that contains all avoidance, minimization, and/or mitigation measures developed in coordination with property owners.</li></ul>		
<b>AVOID-14 – Civilian Airports and Military Installations</b>	<b>AVOID-14 – Civilian Airports and Military Installations:</b> Avoid having equipment or infrastructure near civilian airports, surrounding runway protection zones, special-use airspaces that have a surface-level floor elevation, and the Boardman Geographic Area of Concern.	This Avoidance Criterion aims to avoid adverse environmental impacts on designated areas within which some forms of transmission facility development could have an adverse environmental impact on airport and military operations and/or readiness.	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Identify and map restricted or sensitive zones</b> around airports and military installations during initial site characterization, using FAA data, Department of Defense resources, and local planning documents.</li><li>▪ <b>Assess potential impacts</b> on airspace, radar systems, flight paths, and military readiness, especially for tall structures or electromagnetic interference.</li><li>▪ <b>Coordinate early with relevant agencies</b>, including the FAA, Department of Defense, and local airport authorities, to determine siting constraints and obtain necessary clearances or approvals.</li><li>▪ <b>Document avoidance efforts</b> in the project-specific application, including any constraints that limit full avoidance and the rationale for siting decisions.</li><li>▪ <b>If avoidance is not feasible</b>, provide justification and propose mitigation measures such as reduced structure height, shielding, or relocation of facilities outside critical zones.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.

<sup>10</sup> A list of goals and policies from county-wide comprehensive plans that are relevant to the development of transmission facilities can be found in **Appendix 3.9-1**. City comprehensive plans should also be considered.

<sup>11</sup> Examples include, but are not limited to, 1) Washington State Department of Agriculture’s [Strategic Plan 2020 and Beyond](#), 2) King County’s [Local Food Initiative](#), and 3) [Skagit County’s Farmland Legacy Program](#).

<sup>12</sup> Examples include, but are not limited to, 1) the [Natural Resources Conservation Service’s mapping](#) of prime farmland, unique farmland, and land of statewide or local importance, 2) [Washington State Department of Agriculture’s](#) Agricultural Land Use geodatabase, 3) [American farmland Trust’s](#) national, state, and county mapping data and statistics, 4)

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
<b>AVOID-15 – Non-Compliance with Utilities Accommodation Policy</b>	<b>AVOID-15 – Non-Compliance with Utilities Accommodation Policy:</b> Avoid planning, siting, and constructing transmission facilities that are not properly accommodated within highway rights-of-way (ROWs).	Comprehensive analysis of adverse environmental impacts and mitigation strategies would be required by the Washington State Department of Transportation when transmission facilities are planned or designed within ROWs. In cases where utility providers are noncompliant with the Utilities Accommodation Policy, the utility company would submit a detailed variance application to the applicable department for review. The variance application requires an environmental analysis and, if approved, additional mitigation measures may be required.	<ul style="list-style-type: none"><li>▪ If a proposed project is noncompliant with established highway ROW, a detailed variance application would be prepared that would justify the need for the variance and demonstrate that all alternatives have been considered.</li><li>▪ The variance application would be approved by the Washington State Department of Transportation and the SEPA Lead Agency prior to construction.</li></ul>	▪ During Initial Site Characterization	Select descriptor.
<b>AVOID-16 – Decrease in LOS below Acceptable Levels</b>	<b>AVOID-16 – Decrease in LOS below Acceptable Levels:</b> Avoid a decrease in level of service (LOS) below level C on roads used during all stages of transmission facilities.	This avoidance criterion is intended to apply to long-term operational impacts on transportation systems. Temporary reductions in LOS during construction are recognized as common and may be acceptable when managed through appropriate mitigation measures and coordination with local transportation authorities.	<ul style="list-style-type: none"><li>▪ <b>Complete a TIA:</b> Complete a TIA to ensure public safety and identify any negative effects. For new construction, this is a required component of project-specific applications necessary for SEPA Lead Agencies to evaluate baseline conditions.</li><li>▪ <b>Transportation Plan:</b> Prepare a comprehensive transportation plan for transmission component materials and large construction equipment. For new construction, this is a required component of project-specific applications necessary for SEPA Lead Agencies to evaluate baseline conditions.</li></ul>	▪ During Initial Site Characterization	Select descriptor.
<b>AVOID-17 – Night Sky</b>	<b>AVOID-17 – Night Sky:</b> Avoid the installation of overhead transmission facilities that require lighting in areas where night sky preservation is a documented resource concern and managed for the protection of the night sky.	This avoidance criterion aims to protect designated night sky areas.	<ul style="list-style-type: none"><li>▪ Adverse environmental impacts on the night sky should be minimized using appropriate lighting BMPs where avoidance is not feasible.</li><li>▪ Consider lifeways and cultural practices that depend on darkened skies.</li><li>▪ Consider the ecological benefits of reduced artificial light for nocturnal wildlife and pollinators.</li></ul>	▪ During Initial Site Characterization	Select descriptor.
<b>AVOID-18 – Exceptional Recreation Assets</b>	<b>AVOID-18 – Exceptional Recreation Assets:</b> Avoid having equipment or infrastructure near or within the viewshed <sup>13</sup> of exceptional recreation assets, as defined by the Washington State Recreation and Conservation Office (RCO) and listed in Appendix 3.1-1.	This Avoidance Criterion aims to guide early transmission facility planning efforts to protect exceptional recreational assets. These places provide a unique experience or activity that may not be available in all areas of the state, such as rock climbing, whitewater rafting, and backcountry horseback riding.	<ul style="list-style-type: none"><li>▪ Refer to the Recreational Assets of Statewide Significance in Washington State Study Report (2019) or any more current version for a comprehensive list of exceptional recreation assets identified by the RCO.</li><li>▪ <b>Document avoidance efforts</b> in the project-specific application, including any constraints that limit full avoidance and the rationale for siting decisions.</li><li>▪ <b>If avoidance is not feasible</b>, provide justification and propose mitigation measures such as design measures to limit visual impacts and ground disturbance on exceptional recreation assets or development of compensatory recreation resources.</li></ul>	▪ During Initial Site Characterization	Select descriptor.

<sup>13</sup> The geographical area that is visible from a specific location.

Programmatic Environmental Impact Statement

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Coordinate</b> with the SEPA Lead Agency, the RCO, and local governments early in the project planning process to identify opportunities to avoid sensitive recreational resources.</li></ul>		
<b>AVOID-19 – Wilderness Areas</b>	<b>AVOID-19 – Wilderness Areas:</b> Avoid having equipment or infrastructure near or within the viewshed of designated wilderness areas.	This Avoidance Criterion aims to protect the scenic integrity of wilderness areas. Wilderness areas are valued for their untouched natural beauty. The Wilderness Act of 1964 mandates the preservation of the natural conditions of designated wilderness areas.	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Identify designated wilderness areas and their viewsheds</b> during initial site characterization using federal land management data, visual impact modeling, and consultation with agencies such as the U.S. Forest Service or Bureau of Land Management.</li><li>▪ <b>Assess potential visual and ecological impacts</b> of proposed transmission infrastructure, including tower height, line visibility, access roads, and construction activities.</li><li>▪ <b>Document avoidance efforts</b> in the project-specific application, including siting alternatives considered and the rationale for final placement.</li><li>▪ <b>If full avoidance is not feasible</b>, provide justification and propose mitigation measures such as visual screening, low-profile structures, non-reflective materials, and strategic routing to minimize visibility from wilderness areas.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and federal land managers</b> to ensure consistency with wilderness protection policies and visual resource management objectives.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.
<b>AVOID-20 – Closure of Recreation Resources</b>	<b>AVOID-20 – Limit Closure of Recreation Resources:</b> Consider closure and restrictions only after other mitigation strategies and alternatives have been explored. Avoid long-term closure and restriction of recreation resources lasting more than 24 months.	This Avoidance Criterion establishes the definition of “long-term closure” in relation to adverse environmental impacts on recreation resources from the new construction, operation and maintenance, and upgrade or modification of transmission facilities.	<ul style="list-style-type: none"><li>▪ If closure or restricted access is unavoidable, the limited duration of 24 months or less helps ensure that recreational resources are available to the public as much as possible.</li><li>▪ Temporary closures should be scheduled around peak times (e.g., scheduling outside of the primary hunting seasons).</li><li>▪ If closure of recreation resources longer than 24 months is proposed for a project, provide justification and propose mitigation measures such as the development of compensatory recreation resources.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
<b>AVOID-21– Physical Impacts on Historic and Cultural Resources</b>	<b>AVOID-21 – Physical Impacts on Historic and Cultural Resources:</b> Avoid having equipment or infrastructure in areas occupied by historic and cultural resources.	Physical impacts within the boundaries of historic and cultural properties may be considered an adverse effect if the feature impacted contributes to the significance of the property. Avoiding physical impacts would preserve the integrity of the resource.	<ul style="list-style-type: none"><li>▪ In general, physical impacts within the boundaries of historic and cultural properties (i.e., buildings, archaeological sites, etc.) may be considered an adverse effect if the feature impacted contributes to the significance of the property.</li><li>▪ Historic and cultural resources should be identified by conducting surveys for the project-specific application within five years of the project.</li><li>▪ During initial site characterization of transmission facility development, obtain a desktop review of historic and cultural resources. If cultural resources are present within the proposed project area, consider an alternative location or modify design components to avoid potential physical adverse environmental impacts.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ Applicants should coordinate with affected Tribes and DAHP to better understand the boundary of any property and avoid physical adverse environmental impacts within the boundary.</li><li>▪ Any physical adverse environmental impact within the boundary of an NHL would be considered an adverse effect, and thus physical adverse environmental impacts to NHLs should be avoided to the greatest extent possible.</li><li>▪ Any physical adverse environmental impact, including ground-disturbing activities and compaction from equipment and/or materials, within the boundary of an archaeological resource may result in an adverse effect and should be avoided to the greatest extent possible.</li><li>▪ During operation and maintenance, obtain a desktop review of the project area to identify known cultural and historic resources, if this has not previously been conducted within the last five years. Coordinate with the SEPA Lead Agency, affected Tribes, and DAHP to determine if archaeological monitoring would be needed. If no monitor is necessary, conduct all work under the advisement of an IDP<sup>14</sup> and consider having crew trained on the IDP and cultural resources.</li><li>▪ An avoidance, monitoring, and discovery plan can include procedures for avoiding and minimizing adverse environmental impacts on cultural resources, such as flagging cultural resources, laying protective matting, or rerouting vehicles to avoid site boundaries within or near the ROW during construction when applicable.</li></ul>		
<b>AVOID-22 – Visual Impacts on Historic and Cultural Resources</b>	<b>AVOID-22 – Visual Impacts on Historic and Cultural Resources:</b> Avoid having equipment or infrastructure near or within the viewshed of historic and cultural resources.	Visual impacts may be considered an adverse effect if the integrity of the historic or cultural property’s setting and feeling are important to its significance. Avoiding visual intrusions or alterations to the viewshed of the property would maintain the integrity of its significant historic features.	<ul style="list-style-type: none"><li>▪ Not all historic and cultural resources are subject to visual adverse environmental impact concerns. Understanding the nature of a resource’s significance is key, and efforts should be made at the planning level to gather this information. Project-specific environmental review, in coordination with the Washington State DAHP and affected Tribes, will determine whether a project will result in visual impacts on historic and cultural resources, and whether the impact would be considered significant for a given resource.</li><li>▪ While setting and feeling may be important to any cultural or historic resource, resources such as NHLs, historic districts, farmsteads, and parks/landscapes that are listed in the NRHP/WHR are more likely to have setting and/or feeling as an important aspect of integrity. Thus, new construction, modification, or upgrading of facilities within the viewshed of these resources should be avoided to the greatest extent practicable.</li><li>▪ During initial site characterization of transmission facility development, conduct a desktop review of historic and cultural</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ During Site Preparation</li><li>▪ During Post-Construction Maintenance Activities</li></ul>	Select descriptor.

<sup>14</sup> A document that outlines the procedures to follow when unexpected archaeological materials or human remains are discovered during construction or other ground-disturbing activities.



Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>resources through a viewshed analysis. The viewshed analysis should follow the criteria identified below:</p> <ul style="list-style-type: none"><li>○ For overhead transmission facilities under 200 feet tall, the viewshed analysis should include a 0.5-mile radius.</li><li>○ For overhead transmission facilities between 200 and 400 feet tall, the viewshed analysis should include a 0.75-mile radius.</li><li>■ For overhead transmission facilities over 400 feet, the viewshed analysis should include a 1.5-mile radius.</li><li>■ Minimize vegetation clearing as much as possible while remaining in compliance with the North American Electric Reliability Corporation’s Requirements (FAC-003-4).</li></ul>		
<b>AVOID-23 – Physical Impacts on Tribal Resources and TCPs</b>	<b>AVOID-23 – Physical Impacts on Tribal Resources and TCPs:</b> Avoid having equipment or infrastructure in areas occupied by Tribal resources, including first foods, and Traditional Cultural Places (TCPs).	The significant setting, feeling, and association of Tribal resources make them susceptible to adverse physical environmental impacts. Avoiding physical impacts would preserve the integrity of these resources.	<ul style="list-style-type: none"><li>■ Physical impacts within the boundaries of Usual and Accustomed Areas, TCPs, and Tribal areas of interest may be considered an adverse effect if the feature being impacted within these areas contributes to the significance of the property. Understanding the nature of a resource’s importance to the traditions of the Tribe and overall significance is key, and efforts should be made at the planning level to gather this information. Early engagement with affected Tribes to identify these resources is critical to this process.</li><li>■ The SEPA Lead Agency would uphold its government-to-government consultation responsibilities by providing early notice, sufficient time for review, and culturally appropriate engagement methods. This consultation would be consistent with protocols specific to each Tribe and would be conducted in accordance with applicable laws and executive orders. Tribal consultation would be conducted independently of the public comment process to ensure that Tribal rights, interests, and knowledge are fully considered.</li><li>■ Applicants should provide project-specific transmission facility routing maps, impact assessments, and cultural resource surveys to affected Tribes as early in the planning process as possible, and before the final route decision has been made.</li><li>■ Any physical adverse environmental impact, including ground-disturbing activities and compaction from equipment and/or materials, within the boundary of a TCP or Tribal resource may result in an adverse effect and should be avoided to the greatest extent possible.</li><li>■ Undertake early and meaningful consultation with affected Tribes to determine if TCPs or Tribal Resources could be located within a proposed project area.</li><li>■ Relocate physical impacts away from and outside of the boundaries of a TCP or Tribal Resource.</li><li>■ Certain vegetation may be considered an important Tribal resource. For resources such as first foods or Traditional</li></ul>	<ul style="list-style-type: none"><li>■ During Initial Site Characterization</li><li>■ Prior to Application and Permit Approvals</li></ul>	Select descriptor.



Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<p>Cultural Plants, coordination with affected Tribes to develop access plans, vegetative management plans, or similar agreements should be completed.</p> <ul style="list-style-type: none"><li>▪ Areas for clearing should be submitted to the SEPA Lead Agency for government-to-government consultation with affected Tribes to mitigate adverse environmental impacts to culturally important species.</li><li>▪ If clearing of Tribal Resource vegetation is expected, consider working with affected Tribes to identify options for delaying clearing until after harvest, potential transplanting, or re-planting options.</li><li>▪ If vegetation contributes to the visual significance of a TCP, avoid clearing.</li><li>▪ If clearly visually significant vegetation within a TCP is expected, work with affected Tribes to identify alternate mitigation.</li><li>▪ If a tree is likely to be a culturally modified tree, the affected Tribe should be notified and given the opportunity to participate in the evaluation process.</li><li>▪ Avoidance of culturally modified trees should be prioritized, and any proposed removal should be preceded by consultation with the affected Tribe(s) and appropriate documentation.</li><li>▪ Traditional plant studies and documentation by Tribes may be a mitigation option to consider.</li><li>▪ The use of an archaeological monitor during construction would help to mitigate adverse environmental impacts on vegetation.</li><li>▪ Post-construction vegetation documentation may be required.</li></ul>		
<b>AVOID-24 – Visual Impacts on Tribal Resources and TCPs</b>	<b>AVOID-24 – Visual Impacts on Tribal Resources and TCPs:</b> Avoid visual impacts on Tribal resources and Traditional Cultural Places (TCPs).	The significant setting, feeling, and association of Tribal resources make them susceptible to adverse visual impacts. Avoiding visual intrusions or alterations to the viewshed of these resources would maintain their integrity and physical features within the property’s setting that contribute to its historic significance.	<ul style="list-style-type: none"><li>▪ Visual impacts on resources within the boundaries of Usual and Accustomed Areas, TCPs, and Tribal areas of interest may be considered adverse if the integrity of a property’s setting and feeling are important to its significance. While these resources can be highly susceptible, not all Tribal resources and TCPs are subject to visual impact concerns. Understanding the nature of the resource’s importance to the traditions of the Tribe and overall significance is key, and efforts should be made at the planning level to gather this information. Early engagement with affected Tribe(s) to identify these resources is critical to this process. Project-specific environmental review, in coordination with the Washington State DAHP and affected Tribes, would determine whether visual impacts are relevant and significant for a given resource.</li><li>▪ Setting and feeling are likely to be important aspects of the integrity of Tribal resources, including certain vegetation and TCPs, and adverse environmental impacts on these resources should be avoided to the greatest extent possible.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

Programmatic Environmental Impact Statement

Avoidance Criteria ID	Avoidance Criterion	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>It should be noted that Camano Island, Fir Island, Oak Harbor, and the Skagit River Valley are recognized for their environmental, cultural, and community value.</li><li>Obtain a viewshed analysis for any known TCPs and Tribal Resources.</li><li>Undertake early and meaningful consultation with affected Tribes to determine if TCPs or Tribal Resources could be located within the viewshed of the project.</li></ul>		
<b>AVOID-25 – Disproportionate Impacts on Environmental Justice Communities</b>	<b>AVOID-25 – Disproportionate Impacts on Environmental Justice Communities:</b> Avoid disproportionate impacts on vulnerable populations and overburdened communities.	This avoidance criterion aims to reflect and build upon existing legal and planning frameworks to avoid a disproportionate impact on vulnerable populations and overburdened communities.	<ul style="list-style-type: none"><li>Review online mapping tools provided by the Washington State Department of Health or Office of Financial Management to avoid disproportionate impacts on environmental justice communities, including vulnerable populations and overburdened communities. These tools may include, but are not limited to, the Environmental Health Disparities interactive map and the Overburdened Communities of Washington State online map.</li><li>Prepare an environmental justice assessment and socioeconomic analysis. Applicants would coordinate with the SEPA Lead Agency regarding the scope and detail required for both the assessment and analysis.</li><li>Consider using the Washington State Department of Health’s Environmental Justice Assessment Report Template.</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.
<b>AVOID-26 – Displacing Residents or Housing Units</b>	<b>AVOID-26 – Displacing Residents or Housing Units:</b> Avoid land acquisitions that result in the loss of housing units and the displacement of residents.	Long-term housing availability could be impacted if the new construction of transmission facilities requires land acquisition that results in the displacement of residents or housing units. Changes in housing availability could lead to adverse environmental impacts on the economic environment, social conditions, and general welfare of communities, including vulnerable populations and overburdened communities. This Avoidance Criterion aims to avoid impacts on long-term housing availability.	For project-specific applications: <ul style="list-style-type: none"><li><b>Identify residential areas early</b> during site characterization using zoning maps, parcel data, and local housing inventories.</li><li><b>Assess potential displacement risks</b>, including direct removal of housing units and indirect impacts such as reduced housing affordability or increased development pressure.</li><li><b>Document avoidance efforts</b> in the project-specific application, including alternative siting options considered and the rationale for final decisions.</li><li><b>Engage with local jurisdictions and community stakeholders</b> to understand housing needs, community concerns, and potential socioeconomic impacts.</li><li><b>Coordinate with the SEPA Lead Agency</b> to ensure consistency with housing policies, equity goals, and environmental justice considerations.</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.

**BMP** = best management practice; **CMZ** = Channel Migration Zone; **DAHP** = Washington State Department of Archaeology and Historic Preservation; **EIS** = environmental impact statement; **FAA** = Federal Aviation Administration **IDP** = inadvertent discovery plan; **LOS** = level of service; **NAP** = Natural Area Preserve; **NHL** = National Historic Landmark; **NRCA** = Natural Resource Conservation Area; **NRHP/WHR** = National Register of Historic Places and the Washington Heritage Register; **RCO** = Recreation and Conservation Office; **RCW** = Revised Code of Washington; **RFA** = reasonably foreseeable action; **SEPA** = State Environmental Policy Act; **TCP** = Traditional Cultural Place; **WDFW** = Washington Department of Fish and Wildlife; **WSRRI** = Washington Shrubsteppe Restoration and Resiliency Initiative; **XLPE** = cross-linked polyethylene

# A3.1-1.4 Mitigation Measures Identified in Section 3.2 Earth Resources

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Geo-1 – Minimize Soil Disturbance	<b>Geo-1 – Minimize Soil Disturbance:</b> Minimize soil disturbance, including footprints related to access roads and permanent structures, to the greatest extent practicable. Minimize the use of construction techniques that would be harmful to topsoil composition, where feasible.	Minimizing the footprint of access roads and permanent transmission facilities would reduce direct and indirect adverse environmental impacts on vegetation, including vegetation clearing, spread of invasive plant species or dust, and required ongoing vegetation maintenance.  Minimizing soil disturbance helps maintain the natural structure of the soil, which is essential for water infiltration, root growth, restoration activities, and the habitat of soil organisms.	<ul style="list-style-type: none"><li>Minimize soil disturbance and degradation by ensuring that best management practices are in place, adhering to soil management practices, and scheduling construction activities during dry seasons.</li><li>Attempt to site transmission facilities in areas that have already been disturbed, such as fallow agricultural lands or Brownfields sites, to the extent practicable and where hazardous conditions have not been identified.</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li><li>During Site Construction</li></ul>	Select descriptor.
Geo-2 – Slope Stabilization	<b>Geo-2 – Slope Stabilization:</b> Use retaining walls, terracing, and vegetation to stabilize slopes and prevent landslides when appropriate to do so.	Slope stabilization ensures safety and protects infrastructure, property, and natural resources. Unstable slopes can lead to landslides, which pose risks to human life, property, and infrastructure.	For project-specific applications: <ul style="list-style-type: none"><li><b>Conduct geotechnical assessments</b> during site characterization to identify areas with unstable or steep slopes, high erosion potential, or landslide risk.</li><li><b>Select appropriate stabilization methods</b> based on site-specific conditions, including soil type, slope angle, hydrology, and vegetation cover.</li><li><b>Document slope stabilization measures</b> in the project-specific application, including engineering designs, materials, and maintenance plans.</li><li><b>Coordinate with local and state agencies</b> to ensure compliance with applicable geotechnical, safety, and environmental regulations.</li><li><b>If slope stabilization is not feasible</b>, provide justification and propose alternative siting or mitigation strategies for the SEPA Lead Agency to consider.</li></ul>	<ul style="list-style-type: none"><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Geo-3 – Drainage Control	<b>Geo-3 – Drainage Control:</b> Implement effective drainage systems and manage water runoff to reduce soil saturation.	This Mitigation Measure aims to manage water effectively to prevent a range of environmental and structural issues.	For project-specific applications: <ul style="list-style-type: none"><li><b>Conduct hydrologic assessments</b> during site characterization to identify natural drainage patterns, areas prone to pooling or saturation, and potential runoff pathways.</li><li><b>Design and implement site-specific drainage systems</b>, such as swales, culverts, retention basins, and erosion control structures, tailored to the terrain and expected water volumes.</li><li><b>Incorporate vegetation and permeable surfaces</b> where feasible to enhance infiltration and reduce runoff velocity.</li><li><b>Document drainage control measures</b> in the project-specific application, including engineering designs, maintenance plans, and contingency strategies for extreme weather events.</li></ul>	<ul style="list-style-type: none"><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Coordinate with local and state agencies</b> to ensure compliance with stormwater management regulations and best practices.</li></ul>		
<b>Geo-4 – Minimize Impacts on Sensitive Soils</b>	<b>Geo-4 – Minimize Impacts on Sensitive Soils:</b> Design projects to minimize adverse environmental impacts on high erodibility zones and areas sensitive to degradation.	Minimizing adverse environmental impacts on high-erodibility zones and sensitive soils offers environmental protection, stability, and safety. Sensitive soils, such as those with high organic content or unique properties, are more susceptible to degradation from new construction activities. Minimizing impacts on these areas helps preserve their structure and function.	<ul style="list-style-type: none"><li>▪ All projects should include a geology and soils analysis, identifying possible sensitive soil areas or high-erodibility zones. Applicants should map higher erodibility zones and plan new construction activities accordingly.</li><li>▪ NRCS, USGS, or Washington Department of Ecology may identify specific soils within site-specific areas considered sensitive.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

**NRCS** = U.S. Natural Resources Conservation Service; **SEPA** = State Environmental Policy Act; **USGS** = U.S. Geological Survey



# A3.1-1.5 Mitigation Measures Identified in Section 3.3 Air Quality

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Air-1 – Traffic Speeds	<b>Air-1 – Traffic Speeds:</b> Limit traffic speeds to 15 miles per hour on unpaved areas that do not have designated speed limits.	Limiting traffic speeds on unpaved roads is a key strategy to reduce dust emissions. Access-road-related fugitive dust from vehicle traffic on unpaved roads is a large source of PM <sub>10</sub> and PM <sub>2.5</sub> emissions. Road-related fugitive dust emissions increase with increasing vehicle speed on unpaved roads. Limiting the speed on unpaved roads would reduce dust generation, improve air quality, and provide better visibility and safety.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify unpaved access roads and work areas</b> during site characterization and construction planning.</li><li>▪ <b>Implement signage and physical controls</b> (e.g., speed bumps, posted limits) to enforce speed restrictions.</li><li>▪ <b>Monitor vehicle activity</b> during construction to ensure compliance, and adjust traffic management plans as needed.</li><li>▪ <b>Document speed control measures</b> in the project-specific application, including enforcement strategies and expected air quality benefits.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure consistency with air quality regulations and mitigation goals.</li><li>▪ <b>Consider additional dust suppression techniques</b>, such as water spraying or surface stabilization, in high-traffic areas.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Air-2 – Use Low-Emission Construction Equipment and Vehicles	<b>Air-2 – Use Low-Emission Construction Equipment and Vehicles:</b> Use low-emission construction equipment and vehicles, such as those meeting the latest emission standards.	This Mitigation Measure aims to reduce exhaust emissions.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Inventory all construction equipment and vehicles</b> planned for use and identify their emission ratings.</li><li>▪ <b>Prioritize low-emission or zero-emission technologies</b>, including electric, hybrid, or alternative fuel vehicles where feasible.</li><li>▪ <b>Document emission control measures</b> in the project-specific application, including equipment specifications, maintenance schedules, and operational practices.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure consistency with air quality regulations and mitigation goals.</li><li>▪ <b>Consider additional strategies</b>, such as limiting idling time, scheduling equipment upgrades, and using retrofit technologies to reduce emissions from older equipment.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Air-3 – SF <sub>6</sub> Emission Reduction Partnership	<b>Air-3 – SF<sub>6</sub> Emission Reduction Partnership:</b> Participate in the SF <sub>6</sub> Emission Reduction Partnership for Electric Power Systems.	This Mitigation Measure aims to reduce emissions of SF <sub>6</sub> . Participants in the program benefit from shared best practices, technical guidance, and support from the Environmental Protection Agency to enhance their emission reduction efforts.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Document participation or intent to participate</b> in the SF<sub>6</sub> Emission Reduction Partnership in the project-specific application.</li><li>▪ <b>Implement best practices</b> for SF<sub>6</sub> handling, storage, and leak detection as recommended by the EPA and industry standards.</li><li>▪ <b>Track and report SF<sub>6</sub> emissions</b> using standardized methodologies to support transparency and continuous improvement.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with state climate goals and greenhouse gas reduction strategies.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Site Preparation</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Consider alternatives to SF<sub>6</sub>-based equipment</b> where feasible, including newer technologies that use lower-emission or SF<sub>6</sub>-free insulating gases.</li></ul>		
<b>Air-4 – Counties with Exceedances</b>	<b>Air-4 – Counties with Exceedances:</b> Minimize emissions in counties with air quality exceedances during the new construction and upgrade or modification of transmission facilities.	Minimizing emissions in counties with air quality exceedances during the new construction, upgrade, or modification of transmission facilities is crucial for public health, regulatory compliance, environmental protection, and to minimize contributing factors to climate change.	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Identify nonattainment or maintenance areas</b> using EPA and state air quality designations during site selection and planning.</li><li>▪ <b>Incorporate enhanced emission control measures</b>, such as:<ul style="list-style-type: none"><li>○ Use of low-emission or electric construction equipment (see Air-2)</li><li>○ Dust suppression techniques</li><li>○ Limiting idling time and optimizing equipment use</li></ul></li><li>▪ <b>Document emission reduction strategies</b> in the project-specific application, including how they align with local air quality improvement plans or State Implementation Plans.</li><li>▪ Air quality is regulated through a partnership between Ecology and seven regional clean air agencies, including Northwest Clean Air Agency, Olympic Regional Air Agency, Puget Sound Clean Air Agency, Southwest Clean Air Agency, Spokane Regional Clean Air Agency, and the Benton Clean Air Agency. Coordinate with the SEPA Lead Agency and regional air quality agencies based on the project location to ensure compliance with applicable air quality regulations and permitting requirements.</li><li>▪ <b>Consider scheduling construction activities</b> to avoid periods of poor air quality or high pollutant concentrations, especially during wildfire season or temperature inversions.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.

EPA = U.S. Environmental Protection Agency; **PM<sub>2.5</sub>** = particulate matter up to 2.5 microns in diameter; **PM<sub>10</sub>** = particulate matter up to 10 microns in diameter; **SEPA** = State Environmental Policy Act; **SF<sub>6</sub>** = sulfur hexafluoride

# A3.1-1.6 Mitigation Measures Identified in Section 3.4 Water Resources

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
W-1 – Minimize Water Use	W-1 – Minimize Water Use: Minimize water use, to the greatest extent practicable.	Minimizing water use during new construction and operation and maintenance of transmission facilities in Washington is essential for both environmental sustainability and cost efficiency.	<ul style="list-style-type: none"><li>Identify anticipated water sources within project-specific application materials.</li><li>Project applicants should demonstrate legal water availability from an onsite well, offsite well, watershed, or water vendor. Include documentation such as water right priority date, point of diversion or withdrawal, period of use, and source.</li><li>Provide evidence that anticipated water sources have sufficient availability to meet project needs.</li><li>If available, provide an executed agreement for water use in project-specific application materials.</li><li>Consider alternative methods for dust control during construction, such as applying soil stabilizers or using water-efficient spray systems, to ensure the effective use of water. The installation of low-water-use facilities during operation and maintenance reduces water requirements.</li><li>If applicable, an executed agreement with identified water sources should be provided to the SEPA Lead Agency as part of the application materials. Having an executed agreement in place helps ensure that all parties involved in the construction project understand their responsibilities and that water resources are managed sustainably and legally.</li></ul>	<ul style="list-style-type: none"><li>Prior to Application and Permit Approvals</li><li>During Site Preparation</li><li>During Site Construction</li><li>During Operation and Maintenance</li></ul>	Select descriptor.
W-2 – Clear Spanning or Trenchless Methods for Water Crossings	W-2 – Clear Spanning or Trenchless Methods for Water Crossings: When feasible, use clear spanning for overhead transmission or trenchless construction for underground transmission to minimize disturbance to riparian areas, wetlands and wetland buffers, and surface waters.	<p>By clear spanning with overhead transmission lines, water resources and associated vegetation would remain intact and continue to provide ecological functions and habitat for wildlife.</p> <p>Trenchless construction methods involve significantly less surface disruption than traditional trenching methods and help prevent soil erosion and sedimentation in waterbodies.</p> <p>Maintaining intact vegetation also helps minimize soil erosion and sedimentation and provides bank stability. The closed nature of trenchless methods reduces the risk of contaminants entering waterbodies and minimizes adverse environmental impacts on the surrounding environment, including vegetation and wildlife habitats.</p>	<ul style="list-style-type: none"><li>Site transmission facility infrastructure away from aquatic and wetland habitats, or other sensitive habitats such as riparian habitats.</li><li>Design overhead transmission facilities such that they provide adequate height clearance for riparian vegetation to grow beneath, including riparian trees.</li><li>If towers were placed in aquatic habitats, they should be designed and installed not to impede flows or fish passages, and to mitigate adverse environmental impacts on aquatic species.</li></ul>	<ul style="list-style-type: none"><li>During Site Construction</li><li>During Operation and Maintenance</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
W-3 – Phased Construction	<b>W-3 – Phased Construction:</b> Sequence and schedule new construction, maintenance, and upgrade/replacement activities when near surface waterbodies to minimize erosion and sediment transport.	Construction sequencing, in which activities are planned and executed in stages, helps limit the amount of exposed soil at any given time. This approach reduces the risk of erosion and sediment transport by allowing disturbed areas to be stabilized before moving to new sections. The scheduling of activities during seasonal dry periods would minimize adverse environmental impacts associated with high water, as well as adverse effects on the environment related to working in wet conditions or in water.	For project-specific applications: <ul style="list-style-type: none"><li>▪ Plan <b>construction activities in stages</b>, prioritizing stabilization of disturbed areas before initiating work in adjacent zones.</li><li>▪ Schedule work during seasonal dry periods to reduce the risk of erosion, runoff, and sedimentation associated with high water levels or wet conditions.</li><li>▪ Incorporate erosion and sediment control measures such as silt fences, sediment basins, and temporary vegetation to protect nearby waterbodies.</li><li>▪ Document the phased construction approach in the project-specific application, including sequencing plans, timing, and stabilization strategies.</li><li>▪ Coordinate with the SEPA Lead Agency and local water resource agencies to ensure compliance with water quality protection standards and permitting requirements.</li><li>▪ Monitor and adjust construction sequencing as needed based on weather conditions, site performance, and environmental observations.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
W-4 – Store Chemicals, Operate Equipment, and Conduct Maintenance Away from Water	<b>W-4 – Store Chemicals, Operate Equipment, and Conduct Maintenance away from Water:</b> Store fuel, oils, and lubricants away from watercourses. Maintain, repair, and/or service vehicles and equipment away from watercourses and at designated repair facilities whenever possible. Operate equipment and machinery from the top of the bank and outside of riparian areas, wetlands and wetland buffers, and surface waters.	This Mitigation Measure aims to reduce adverse environmental impacts on water quality (contaminants, sediment), fish, and aquatic habitat.	<ul style="list-style-type: none"><li>▪ Store fuel, oils, and lubricants at least 100 feet away from watercourses.</li><li>▪ Refuel construction and operation vehicles and equipment at least 100 feet from watercourses.</li><li>▪ Use the following practices to reduce the potential for discharge of pollutants to watercourses or streams from vehicle and equipment maintenance, service, and repair operations:<ul style="list-style-type: none"><li>○ Prohibit discharge of any wastewater to stormwater drains. Do not pour materials down drains or hose down work areas. Use either dry sweeping or damp mopping.</li><li>○ Remove buildup of oils and grease on equipment.</li><li>○ Perform equipment and vehicle maintenance in areas that prevent discharges to the storm drain system.</li><li>○ Use drip pans under equipment when maintaining, repairing, or servicing in the field or when being stored for extended periods of time (i.e., overnight).</li><li>○ Use non-toxic solvents whenever possible.</li><li>○ Clean maintenance area storm drains and grates regularly.</li><li>○ Collect and properly manage (recycle or dispose of) used materials: grease, oil, oil filters, antifreeze, cleaning solutions, lead-acid batteries, tires, and hydraulic and transmission fluids.</li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
W-5 – Implement Erosion and Sediment Control Measures	W-5 – Implement Erosion and Sediment Control Measures: Implement effective and appropriate erosion control measures in new construction and operation to mitigate runoff into streams.	This Mitigation Measure aims to reduce sediment loading into stream reaches and maintain water quality and fish habitat quality.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Conduct site-specific erosion risk assessments</b> during initial planning to identify vulnerable areas and tailor control strategies accordingly.</li><li>▪ <b>Incorporate BMPs such as:</b><ul style="list-style-type: none"><li>○ Silt fences, straw wattles, and sediment basins</li><li>○ Stabilized construction entrances</li><li>○ Temporary and permanent vegetation cover</li><li>○ Mulching and erosion control blankets</li></ul></li><li>▪ <b>Schedule construction activities</b> to avoid periods of heavy rainfall or high runoff potential.</li><li>▪ <b>Document erosion and sediment control measures</b> in the project-specific application, including installation plans, maintenance schedules, and contingency procedures.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and local water resource agencies</b> to ensure compliance with stormwater and water quality regulations.</li><li>▪ <b>Monitor and maintain control measures</b> throughout construction and operation to ensure continued effectiveness and adapt to changing site conditions.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Post-Construction Monitoring and Reporting</li><li>▪ During Post-Construction Maintenance Activities</li></ul>	Select descriptor.
W-6 – Minimize Hydrology Changes	W-6 – Minimize Hydrology Changes: Minimize water diversions and changes to natural hydrology or hydroelectric dam flow regimes to the greatest extent possible.	Minimizing changes in hydrology would reduce the effects of transmission facility development on plant communities within and adjacent to the right-of-way (ROW). Minimizing changes to hydroelectric dam flow regimes would ensure that adequate flows are maintained for fish.	<ul style="list-style-type: none"><li>▪ In addition to adhering to WAC 220-660-120(9) and WAC 220-660-250, the applicant should minimize hydrology changes.</li><li>▪ Restore the site’s natural hydrology once construction is completed.</li><li>▪ If hydroelectric dam flow regimes may be altered, conduct flow change modelling under different dispatch scenarios for the operation and maintenance of the proposed project. This modelling would be conducted during initial site characterization to establish environmental flow requirements. It would also determine the flow requirements that would need to be maintained regardless of grid needs. The applicant, in coordination with appropriate professionals and agencies, would develop and implement measures for real-time monitoring of flow and fish passage conditions during the operation and maintenance of the proposed project. Adaptive management frameworks would be developed and implemented to adjust the dam operations if probable adverse environmental impacts are identified.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
W-7 – SWPAs, SPAs, and WHPAs	W-7 – SWPAs, SPAs, and WHPAs: Locate substations, underground vaults, and any facility where materials that could degrade groundwater quality are used or stored, outside of surface water protection areas (SWPAs), special protected areas (SPAs), and wellhead protection areas (WHPAs) to the greatest extent possible.	This Mitigation Measure aims to mitigate potential groundwater contamination that could result in a water supply well being removed from service temporarily or permanently.	<ul style="list-style-type: none"><li>Areas may include 303(d) listed waterbodies in Washington.</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.

ROW = right-of-way; SEPA = State Environmental Policy Act; SWPAs = surface water protection areas; SPAs = special protected areas; WHPAs = wellhead protection areas



A3.1-1.7 Mitigation Measures Identified in Section 3.5 Vegetation

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Veg-1 – Site Transmission Facilities in Existing ROW or Disturbed Areas	Veg-1 – Site Transmission Facilities in Existing ROW or Disturbed Areas: Site transmission facilities in existing right-of-way (ROW) or disturbed areas, to the greatest extent practicable.	Using existing ROW or disturbed areas would minimize the loss of vegetation and habitat and reduce fragmentation that can be caused by linear features, such as transmission facilities. This Mitigation Measure also addresses impacts on historic and cultural properties.	<ul style="list-style-type: none"><li>▪ Preferentially select transmission facility corridor routes that parallel or expand on existing anthropogenic linear features such as roads, highways, rail lines, existing ROWs, and seismic lines or are sited in anthropogenically modified and regenerating habitats such as cleared forest.</li><li>▪ Document in application materials efforts to use these features.</li></ul> <p><b>Cultural and Historic Resources:</b></p> <ul style="list-style-type: none"><li>▪ Existing ROW may be unsurveyed, and unknown cultural resources, Tribal Resources, and TCPs may be present.</li><li>▪ While implementation of this Mitigation Measure may reduce visual impacts, it may not assist with reducing physical impacts on Tribal Resources and TCPs if these resources are already present within existing corridors.</li><li>▪ Obtain a desktop review to identify if previous surveys intersect with the project area, if cultural resources, Tribal Resources, and TCPs are known in the ROW, and if the ROW is within a High or Very High Probability area according to DAHP’s predictive model.</li><li>▪ Widening ROW and improving access to existing ROW may physically and visually impact known and/or unknown cultural and historic resources (including historically significant transmission facilities), Tribal Resources, and/or TCPs.</li><li>▪ Surveys that intersect with the ROW may not be considered adequate for the undertaking if they were conducted more than five years ago; work with DAHP to determine if a re-survey is required.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.

BMPs = best management practices; DAHP = Department of Archaeology and Historic Preservation; HMP = habitat mitigation plan; ROW = right-of-way; SEPA = State Environmental Policy Act; TCPs = Tribal Cultural Properties; VMP = vegetation management plan; WDFW = Washington Department of Fish and Wildlife

# A3.1-1.8 Mitigation Measures Identified in Section 3.6 Habitat, Wildlife, and Fish

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Hab-1 – Use of Pesticides, Herbicides, and Fungicides	<b>Hab-1 – Use of Pesticides, Herbicides, and Fungicides:</b> Minimize the use of harmful chemicals, including pesticides, herbicides, and fungicides, during the new construction and operation and maintenance stages of transmission facility projects.	This Mitigation Measure aims to reduce the mortality of non-target species and contamination of wildlife features and aquatic waters.	<ul style="list-style-type: none"><li>▪ If chemical treatments are required during these stages of transmission facility development, then the use of them should avoid known sensitive habitats and wildlife features such as wetlands, amphibian breeding areas, and riparian areas, as well as in or around streams, ditches, wetlands, or other areas of stream runoff that support or drain into fish habitat. Do not use petroleum-based substances to reduce dust on rural unpaved roads. Where these chemicals are required, a project-specific management plan would be developed as a supplement to this Programmatic EIS and provided to the SEPA Lead Agency for approval.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Hab-2 – Minimize Transmission Line Crossings at Canyons and Riparian Habitat and Parallel to Rivers and Ridge Lines	<b>Hab-2 – Minimize Transmission Line Crossings at Canyons and Riparian Habitat and Parallel to Rivers and Ridge Lines:</b> Minimize transmission line crossings of canyons and draws, along ridge lines, parallel to rivers, and within riparian habitat.	This Mitigation Measure reduces potential barriers to wildlife movement from transmission facility development and employs methods to reduce disturbance and conflicts between wildlife and transmission lines.	<ul style="list-style-type: none"><li>▪ Where crossings are required, applicants would provide the SEPA Lead Agency with a rationale for siting projects in these areas and propose additional mitigation measures to reduce potential barriers to movement (e.g., retaining vegetation under transmission lines) and wildlife collisions (e.g., installing flight diverters on overhead lines).</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Hab-3 – Decommission Nonpermanent Roads	<b>Hab-3 – Decommission Nonpermanent Roads:</b> Decommission and restore any access roads not required for operation and maintenance.	This Mitigation Measure aims to restore affected habitat and reduce habitat loss, as well as reduce human access and barriers to movement.	For project-specific applications: <ul style="list-style-type: none"><li>▪ Identify nonpermanent roads during project planning and clearly distinguish them from roads needed for ongoing operations.</li><li>▪ Develop a decommissioning plan that includes removal of road materials, regrading, soil stabilization, and revegetation using native species.</li><li>▪ Document restoration efforts in the project-specific application, including timelines, methods, and monitoring protocols.</li><li>▪ Coordinate with landowners and resource agencies to ensure restoration aligns with local habitat conservation goals and land use plans.</li><li>▪ Monitor restored areas post-decommissioning to ensure successful habitat recovery and address any erosion or invasive species concerns.</li></ul>	<ul style="list-style-type: none"><li>▪ During Post-Construction Restoration</li><li>▪ During Post-Construction Maintenance Activities</li></ul>	Select descriptor.
Hab-4 – Woody Debris Salvage and Restoration	<b>Hab-4 – Woody Debris Salvage and Restoration:</b> Salvage and retain large, coarse, woody debris during construction and in-stream works. The post-construction revegetation and restoration plan would include planting native shrubs and replacing woody debris unless prohibited by a state	This Mitigation Measure aims to reduce habitat loss and barriers to movement for small mammals, amphibians, and reptiles. During in-stream works, this Mitigation Measure aims to retain and provide habitat for juvenile salmonids.	<ul style="list-style-type: none"><li>▪ The post-construction revegetation and restoration plan would include planting native shrubs and the replacement of woody debris. Post-construction revegetation and restoration plans would be provided to WDFW for review prior to approval by the SEPA Lead Agency.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
	authority due to fire risk. Post-construction revegetation and restoration plans would be provided to the Washington Department of Fish and Wildlife for review prior to approval by the State Environmental Policy Act Lead Agency.			▪ During Operation and Maintenance	
Hab-5 – Vehicle and Equipment Use and Maintenance	<b>Hab-5 – Vehicle and Equipment Use and Maintenance:</b> Prohibit vehicles and other equipment from idling when not in use during construction. Vehicles and other equipment would be inspected daily for leaks and would be kept in good condition. Vehicles and equipment would only be stored with proper spill protection measures in place and in areas where contaminants would not enter the environment, watercourses, or riparian areas if spills were to occur.	This Mitigation Measure aims to reduce the chances of contaminants entering the environment if spills or leaks were to occur and would reduce indirect habitat loss from light, noise, and odor pollution to nearby wildlife.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Implement a no-idling policy</b> for all vehicles and equipment, and post signage at construction sites to reinforce compliance.</li><li>▪ <b>Conduct daily inspections</b> of vehicles and equipment for leaks, wear, and mechanical issues, and maintain detailed inspection logs.</li><li>▪ <b>Store equipment only in designated areas</b> with spill containment systems such as drip pans, absorbent mats, or bermed storage zones.</li><li>▪ <b>Avoid equipment storage near sensitive habitats</b>, waterbodies, or riparian areas unless protective measures are in place.</li><li>▪ <b>Document maintenance and spill prevention protocols</b> in the project-specific application, including emergency response procedures for accidental releases.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with habitat protection goals and pollution prevention regulations.</li></ul>	▪ During Site Preparation ▪ During Site Construction ▪ During Post-Construction Restoration ▪ During Operation and Maintenance	Select descriptor.
Hab-6 – Worker Education Program	<b>Hab-6 – Worker Education Program:</b> Develop a worker education program for implementation during new project construction and operation. The program would train workers on operating near sensitive wildlife habitat and features, sensitive wildlife periods, working around watercourses and riparian features, management of wildlife attractants, management of special status species, wildlife reporting, and wildlife mortality reporting.	This Mitigation Measure aims to reduce incidental loss of wildlife habitat and features, as well as wildlife mortality.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Include training modules</b> on the following topics:<ul style="list-style-type: none"><li>○ Identification of sensitive wildlife habitats and features.</li><li>○ Awareness of sensitive wildlife periods (e.g., breeding, nesting, migration).</li><li>○ Best practices for working near watercourses and riparian zones.</li><li>○ Management of wildlife attractants (e.g., food waste, lighting).</li><li>○ Procedures for avoiding and minimizing impacts to special status species.</li><li>○ Wildlife observation, reporting protocols, and mortality documentation.</li></ul></li><li>▪ <b>Ensure training is site-specific</b>, reflecting the unique ecological characteristics and species present in the project area.</li><li>▪ <b>Conduct training prior to site mobilization</b>, with refresher sessions scheduled regularly and as needed based on seasonal changes or new findings.</li></ul>	▪ Prior to Site Preparation ▪ During Site Preparation ▪ During Site Construction	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Document the education program</b> in the project-specific application, including training materials, attendance records, and evaluation procedures.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and wildlife management agencies</b> to ensure alignment with conservation goals and regulatory requirements.</li></ul>		
<b>Hab-7 – Retain Wildlife Trees where Practicable</b>	<b>Hab-7 – Retain Wildlife Trees where Practicable:</b> Wildlife trees are trees with features that are especially beneficial to wildlife. These typically include living and dead trees that are decaying and those that have cavities or good conditions for cavity creation, sloughing bark that can provide roost sites for bats, branches for perching, basal cavities for denning, and foraging opportunities for woodpeckers and other wildlife. Wildlife trees would be retained where safe to do so.	This Mitigation Measure aims to reduce the direct habitat loss for wildlife species.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify wildlife trees during initial site characterization</b> through ecological surveys and consultation with qualified biologists or ecologists.</li><li>▪ <b>Assess safety risks</b> associated with retaining wildlife trees, especially in proximity to transmission infrastructure, and document findings.</li><li>▪ <b>Prioritize retention of trees</b> that offer high habitat value and pose low safety or operational risks.</li><li>▪ <b>Document tree retention efforts</b> in the project-specific application, including maps, species associations, and rationale for any removals.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and local wildlife agencies</b> to ensure consistency with habitat conservation goals and applicable regulations.</li><li>▪ <b>If removal is necessary</b>, consider compensatory mitigation such as installing artificial nesting structures, enhancing nearby habitat, or preserving other high-value habitat features.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
<b>Wild-1 – Wildlife Timing Windows</b>	<b>Wild-1 – Wildlife Timing Windows:</b> Schedule vegetation clearing and grubbing and other activities that could destroy or disturb wildlife to occur outside of the sensitive timing windows in appropriate habitat as listed in Appendix 3.6-1. This list and timing periods would be verified with the Washington Department of Fish and Wildlife and updated as needed prior to implementation.	This Mitigation Measure aims to reduce potential disturbance and mortality of wildlife. This measure is site-specific, and not all disturbance windows will apply to every project.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Conduct site-specific wildlife surveys</b> to identify species and habitats that may be present and determine which timing windows apply.</li><li>▪ <b>Consult with WDFW early in the planning process</b> to confirm applicable timing restrictions and any updates to Appendix 3.6-1.</li><li>▪ <b>Incorporate timing restrictions into construction schedules</b> and clearly communicate them to contractors and field crews.</li><li>▪ <b>Document timing window compliance</b> in the project-specific application, including species of concern, applicable windows, and any deviations with justification and mitigation.</li><li>▪ <b>If work must occur within a sensitive timing window</b>, coordinate with the WDFW and the SEPA Lead Agency to develop and implement appropriate mitigation measures (e.g., biological monitoring, buffer zones, or seasonal restrictions).</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Construction</li><li>▪ Prior to Site Preparation</li><li>▪ During Site Preparation</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
<b>Wild-2 – Construction Occurs during Daylight Hours</b>	<b>Wild-2 – Construction Occurs during Daylight Hours:</b> Schedule construction activities during daylight hours, when feasible, to reduce the disturbance to	This Mitigation Measure aims to reduce wildlife disturbance and mortality.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify nocturnal species</b> that may be present in or near the project area during site characterization, especially those that are sensitive to light, noise, or human activity.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
	nocturnal species and reduce the risk of wildlife-vehicle collisions.		<ul style="list-style-type: none"><li>▪ <b>Incorporate daylight-only work schedules</b> into construction planning and contractor agreements, particularly in areas with known wildlife activity.</li><li>▪ <b>Avoid use of artificial lighting</b> at night near sensitive habitats unless necessary for safety, and use directional, shielded lighting to minimize light spill if lighting is required.</li><li>▪ <b>Document construction timing protocols</b> in the project-specific application, including any exceptions and associated mitigation measures.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and wildlife agencies</b> to ensure alignment with species protection goals and timing restrictions.</li></ul>	<ul style="list-style-type: none"><li>▪ During Post-Construction Restoration</li></ul>	
<b>Wild-3 – Incidental Take Permit</b>	<b>Wild-3 – Incidental Take Permit:</b> Apply for and obtain an Eagle Incidental Take Permit, in accordance with the Bald and Golden Eagle Protection Act, when constructing transmission facilities.	This Mitigation Measure aims to reduce the potential mortality of eagles.	<p>Additionally, this permit requires the development of the following four separate plans:</p> <ul style="list-style-type: none"><li>▪ <b>Collision Response Strategy:</b> Describes how the permittee will identify eagle collision occurrences, identify factors that could have led to the collision, and implement risk-reduction measures.</li><li>▪ <b>Proactive Retrofit Strategy:</b> Describes measures to convert existing infrastructure to be avian safe. The existing infrastructure baseline would include unsafe poles in areas of high risk for eagles, and the strategy would identify poles that must be retrofitted.</li><li>▪ <b>Shooting Response Strategy:</b> Describes potential measures to be taken by the permittee if an eagle were to be found shot near the transmission facility, including communication with law enforcement and shooting reduction measures.</li><li>▪ <b>Reactive Retrofit Strategy:</b> Describes measures to be taken to identify how electrocution took place if an eagle were to be electrocuted by the transmission lines. A pole that electrocutes an eagle would be retrofitted, unless it has already been identified as avian-safe, and the surrounding 1/2 mile or 13 poles, whichever is less, would additionally be retrofitted or confirmed to be avian-safe.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
<b>Wild-4 – Wildlife Entrapment in Open Trenches</b>	<b>Wild-4 – Wildlife Entrapment in Open Trenches:</b> Minimize areas where wildlife could be trapped during and following construction. These can include trenches, open containers, borrow pits, netting, damaged fencing, open pipes, and test pits. During the new construction of underground transmission facilities, applicants would develop a site-specific plan and mitigation to prevent wildlife from becoming trapped in open trenches. The plan would include measures for	This Mitigation Measure aims to reduce potential wildlife injury and mortality during new transmission facility construction.	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Develop a site-specific Wildlife Entrapment Prevention Plan</b> that includes:</li><li>▪ <b>Measures to prevent wildlife access</b>, such as temporary fencing, trench covers, or exclusion barriers.</li><li>▪ <b>Escape routes</b> (e.g., gently sloped ends, ramps, or wildlife ladders) in open trenches.</li><li>▪ <b>Daily monitoring protocols</b> to inspect trenches and other open features for trapped wildlife.</li><li>▪ <b>Response procedures</b> for safely removing and reporting trapped animals.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li></ul>	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
	preventing wildlife from entering trenches, wildlife escape routes, and monitoring requirements of trenches.		<ul style="list-style-type: none"><li>▪ <b>Train construction personnel</b> on wildlife safety protocols and response procedures.</li><li>▪ <b>Avoid leaving trenches open overnight</b> where feasible, or ensure they are securely covered.</li><li>▪ <b>Document entrapment prevention measures</b> in the project-specific application, including trench dimensions, monitoring frequency, and coordination with wildlife agencies.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and WDFW</b> to ensure consistency with wildlife protection standards and mitigation expectations.</li></ul>		
Wild-5 – Line Markers on Transmission Lines over Rivers	<b>Wild-5 – Line Markers on Transmission Lines over Rivers:</b> Install line markers on overhead transmission lines that cross rivers to improve their visibility to flying birds or site them on bridges or similar infrastructure.	This Mitigation Measure aims to reduce bird collisions with transmission lines near rivers, which attract birds that are susceptible to collision such as waterbirds, pelicans, and wading birds.	<ul style="list-style-type: none"><li>▪ <b>Identify river crossings</b> and birds that may move along the system</li><li>▪ <b>Develop a line marker plan</b> that outlines suitable marker types for each crossing, marker spacing, and installation methods.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Wild-6 – Wildlife-Resistant Waste Containers	<b>Wild-6 – Wildlife-Resistant Waste Containers:</b> Use only waste containers that are wildlife resistant.	This Mitigation Measure aims to reduce the potential human-wildlife conflicts, therefore reducing the potential for wildlife mortality.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Select containers designed to resist access</b> by local wildlife species (e.g., bears, raccoons, coyotes), including locking lids and reinforced materials.</li><li>▪ <b>Place containers in secure, designated areas</b> away from sensitive habitats and wildlife corridors.</li><li>▪ <b>Ensure regular waste removal and container maintenance</b> to prevent overflow and reduce odors that attract wildlife.</li><li>▪ <b>Train personnel</b> on proper waste disposal practices and the importance of keeping containers closed and secure.</li><li>▪ <b>Document waste management protocols</b> in the project-specific application, including container specifications, placement strategies, and maintenance schedules.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and local wildlife agencies</b> to ensure consistency with regional wildlife protection and waste management standards.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Wild-7 – Wildlife Monitoring	<b>Wild-7 – Wildlife Monitoring:</b> Document wildlife mortalities during work activities (e.g., from vehicle collisions, strikes, clearing) to the State Environmental Policy Act Lead Agency or an appropriate designee, along with adaptive management strategies to reduce mortality.	This Mitigation Measure aims to reduce wildlife mortalities. Reporting wildlife mortalities related to transmission facility development would enable better management decisions.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Develop a Wildlife Monitoring Plan</b> that includes:<ul style="list-style-type: none"><li>○ Procedures for identifying and documenting wildlife mortalities.</li><li>○ Roles and responsibilities for field staff and environmental monitors.</li><li>○ Reporting protocols and timelines.</li><li>○ Adaptive management strategies to reduce repeat incidents.</li></ul></li><li>▪ <b>Train construction personnel</b> to recognize signs of wildlife injury or mortality and to follow proper reporting procedures.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Coordinate with the SEPA Lead Agency and wildlife agencies</b> to ensure consistency with species protection requirements and data-sharing expectations.</li><li>▪ <b>Use monitoring data to inform mitigation</b>—for example, adjusting construction timing, modifying traffic patterns, or enhancing exclusion measures.</li><li>▪ <b>Include wildlife monitoring results</b> in post-construction reporting or compliance documentation, as required.</li></ul>		
Wild-8 – Road Rules during Critical Periods for Wildlife	<b>Wild-8 – Road Rules during Critical Periods for Wildlife:</b> During critical periods for wildlife (e.g., amphibian migration or ungulate calving season), implement mitigation strategies such as slower speed limits, no-stop areas, and potential road closures in or adjacent to suitable habitat.	This Mitigation Measure aims to reduce adverse environmental impacts on wildlife during life stages when they are most vulnerable.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify critical wildlife periods and habitats</b> during initial site characterization in coordination with the WDFW and other relevant agencies.</li><li>▪ <b>Implement mitigation strategies</b>, which may include:<ul style="list-style-type: none"><li>○ Reduced speed limits in sensitive areas.</li><li>○ No-stop zones to prevent disturbance or attraction.</li><li>○ Temporary road closures or rerouting during peak activity periods.</li><li>○ Wildlife crossing signage and awareness training for drivers.</li></ul></li><li>▪ <b>Document road use restrictions</b> in the project-specific application, including timing, location, enforcement methods, and coordination with wildlife agencies.</li><li>▪ <b>Monitor effectiveness</b> of mitigation measures and adjust as needed through adaptive management.</li><li>▪ <b>Engage with local communities and stakeholders</b> to communicate the purpose and importance of these restrictions.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Wild-9 – No Hunting or Pets	<b>Wild-9 – No Hunting or Pets:</b> Prohibit construction crews from hunting while on the work site. Do not allow pets at construction sites.	This Mitigation Measure aims to reduce potential injury and mortality of wildlife during construction.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Include clear policies in contractor agreements</b> prohibiting hunting and pets on site, and communicate these rules during worker orientation and training.</li><li>▪ <b>Post signage at access points</b> and staging areas to reinforce the no-hunting and no-pets policy.</li><li>▪ <b>Monitor compliance</b> through regular site inspections and reporting mechanisms.</li><li>▪ <b>Document enforcement protocols</b> in the project-specific application, including disciplinary actions for violations and coordination with local wildlife enforcement agencies if needed.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with wildlife protection goals and site-specific mitigation measures.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Wild-10 – Access Management Plan	<b>Wild-10 – Access Management Plan:</b> Develop an access management plan to manage human and predator access on the right-of-way (ROW).	This Mitigation Measure aims to reduce wildlife mortality and disturbance through controlling human and predator use of the ROW.	<ul style="list-style-type: none"><li>▪ The access management plan would list roads to be decommissioned after construction and access control measures to be implemented during new construction and operation. The access management plan would also describe</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			measures to reduce predator sightlines <sup>15</sup> on the ROW and allow for prey movement (e.g., breaks in berms). The type and location of control features would vary depending on habitat and location. The access management plan would be implemented during new construction and operation and would include follow-up monitoring protocols. The plan would be developed in consultation with the WDFW and approved by the SEPA Lead Agency.		
Wild-11 – Wildlife Crossing Opportunities Along Open Trenches	<b>Wild-11 – Wildlife Crossing Opportunities Along Open Trenches:</b> During new construction, operation and maintenance, upgrade, or modification of underground transmission facilities, maintain regularly spaced gaps in open trenches to provide crossing opportunities for wildlife.	Providing wildlife crossing opportunities across open trenches aims to reduce potential barriers to movement and the risk of wildlife entrapment in trenches.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify wildlife movement corridors</b> and species likely to be affected during initial site characterization.</li><li>▪ <b>Design trenching plans</b> to include <b>crossing gaps</b> at regular intervals (e.g., every 50–100 feet), depending on terrain and wildlife presence.</li><li>▪ <b>Use ramps or bridging materials</b> (e.g., boards, soil ramps, or culverts) to facilitate safe passage across trenches.</li><li>▪ <b>Monitor trench areas daily</b> for signs of wildlife activity and adjust crossing opportunities as needed.</li><li>▪ <b>Document trench crossing strategies</b> in the project-specific application, including spacing, materials used, and monitoring protocols.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and wildlife experts</b> to ensure alignment with species-specific movement needs and habitat protection goals.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Wild-12 – Collision Monitoring	<b>Wild-12 – Collision Monitoring:</b> A post-construction operational collision monitoring plan would be developed in collaboration with the Washington Department of Fish and Wildlife and approved by the State Environmental Policy Act Lead Agency for portions of the transmission facility identified as high collision risk.	This Mitigation Measure aims to reduce avian mortality by providing a collision monitoring plan that would include methods to survey bird mortalities, to confirm mitigation strategies are effective, and adaptive management strategies to be implemented if high mortality is recorded.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify high-risk areas</b> for bird collisions during initial site characterization, considering factors such as proximity to wetlands, migratory corridors, and known nesting or roosting sites.</li><li>▪ <b>Develop a collision monitoring plan that includes:</b><ul style="list-style-type: none"><li>○ Survey protocols for detecting and documenting bird mortalities.</li><li>○ Frequency and timing of monitoring activities.</li><li>○ Species identification and data recording procedures.</li><li>○ Criteria for evaluating the effectiveness of mitigation measures.</li><li>○ Adaptive management strategies if high mortality rates are observed.</li></ul></li><li>▪ <b>Coordinate with WDFW and the SEPA Lead Agency</b> to ensure the plan reflects current best practices and regional conservation priorities.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

<sup>15</sup> The line of sight of a predator when hunting. Logging and other industrial practices can affect this.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Incorporate mitigation measures</b> such as bird diverters, line marking devices, or structure design modifications where appropriate.</li><li>▪ <b>Report findings regularly</b> and adjust mitigation strategies based on monitoring results to reduce future impacts.</li></ul>		
Wild-13 – Perching Deterrents	<b>Wild-13 – Perching Deterrents:</b> Design transmission facility towers or structures to include raptor perching deterrents where electrocution risk exists.	Perching deterrents are expected to reduce raptor mortalities from electrocution.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify high-risk structures</b> during initial design and site characterization, particularly in areas with known raptor activity or nesting sites.</li><li>▪ <b>Incorporate perching deterrents</b> such as:<ul style="list-style-type: none"><li>○ Anti-perch spikes or angled surfaces.</li><li>○ Insulated components and covered conductors.</li><li>○ Line spacing and configuration adjustments to reduce electrocution risk.</li></ul></li><li>▪ <b>Consult with the WDFW</b> and avian protection experts to ensure deterrents are effective and species-appropriate.</li><li>▪ <b>Document deterrent strategies</b> in the project-specific application, including locations, design specifications, and rationale for use.</li><li>▪ <b>Monitor effectiveness post-construction</b> and implement adaptive management if deterrents are not performing as intended.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Wild-14 – Wildlife-Specific Noise Mitigation	<b>Wild-14 – Wildlife-Specific Noise Mitigation:</b> Implement noise control measures (e.g., temporary noise barriers, mufflers) or practices (e.g., restrictions to low-level helicopter flights) where project activities are expected near sensitive wildlife habitat.  Minimize the use of blasting, impact or vibratory driving, or other construction methods near water or implement noise reduction strategies to reduce underwater noise.	This Mitigation Measure aims to reduce indirect habitat loss for wildlife from sensory disturbance as well as reduce injury or mortality to fish.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify sensitive wildlife habitats and species</b> during site characterization, including nesting areas, migration corridors, and aquatic environments.</li><li>▪ <b>Implement terrestrial noise mitigation</b>, such as:<ul style="list-style-type: none"><li>○ Temporary noise barriers or acoustic screens.</li><li>○ Use of mufflers and quieter equipment.</li><li>○ Scheduling activities during daylight hours (see Wild-2).</li><li>○ Restrictions on low-level helicopter flights near sensitive areas.</li></ul></li><li>▪ <b>Implement underwater noise mitigation</b>, including:<ul style="list-style-type: none"><li>○ Avoiding or minimizing blasting, impact driving, and vibratory driving near waterbodies.</li><li>○ Using bubble curtains, cushion blocks, or other sound attenuation technologies.</li><li>○ Timing in-water work to avoid sensitive periods for fish spawning or migration.</li></ul></li><li>▪ <b>Document noise mitigation measures</b> in the project-specific application, including site-specific strategies, timing, and coordination with wildlife agencies.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and WDFW</b> to ensure alignment with species protection goals and regulatory requirements.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Monitor noise levels</b> during construction and adjust mitigation strategies through adaptive management if wildlife disturbance is observed.</li></ul>		
<b>Fish-1 – Least Risk Periods for Fish</b>	<b>Fish-1 – Least Risk Periods for Fish:</b> Schedule construction activities during the most up-to-date least risk periods and outside timing restrictions for salmonids or other sensitive fish species (e.g., pacific lamprey [ <i>Entosphenus tridentatus</i> ]) that inhabit the watercourse.	This Mitigation Measure aims to reduce adverse environmental impacts on salmon or other sensitive fish species during sensitive life history phases, such as when there are reeds. Applying least risk windows would time construction during periods when spawning or incubating salmonids or fish are least likely to be in Washington State freshwaters.	<ul style="list-style-type: none"><li>▪ The most up-to-date, least risk periods and outside timing restrictions for salmonids used in this Programmatic EIS are based on WDFW 2018. "Other sensitive fish" is based on USFWS 2010. Applicants and the SEPA Lead Agency should confirm with WDFW and USFWS to determine whether updates have subsequently been made to these documents.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li></ul>	Select descriptor.
<b>Fish-2 – Design Perpendicular Approaches</b>	<b>Fish-2 – Design Perpendicular Approaches:</b> Construct transmission facility access road approaches and crossings perpendicular to streams or rivers and maintain the existing channel form and dimensions.	This Mitigation Measure aims to reduce loss or disturbance to riparian vegetation, reduce instream habitat adverse environmental impacts, and maintain fish passage.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify stream and river crossings</b> during initial site characterization and assess the feasibility of perpendicular approaches based on terrain, hydrology, and engineering constraints.</li><li>▪ <b>Design crossings to minimize footprint</b> in riparian zones and avoid altering natural channel morphology.</li><li>▪ <b>Use appropriate crossing structures</b>, such as bridges or open-bottom culverts, that maintain natural substrate and allow for unimpeded fish movement.</li><li>▪ <b>Document crossing design and alignment</b> in the project-specific application, including justification for any deviations from perpendicular alignment.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and WDFW</b> to ensure consistency with fish habitat protection standards and stream crossing guidelines.</li><li>▪ <b>Monitor post-construction conditions</b> to verify that channel form and fish passage are maintained and adaptively manage if issues arise.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Preparation</li><li>▪ During Site Construction</li></ul>	Select descriptor.
<b>Fish-3 – Isolate Instream Works</b>	<b>Fish-3 – Isolate Instream Works:</b> Conduct in-water works in isolation from flowing water, if practicable.	This Mitigation Measure aims to reduce the risk of potential injury to fish during in-water construction and isolation.	<ul style="list-style-type: none"><li>▪ Fish exclusion would be implemented following BMPs and protocols and standards such as those outlined in the Washington State Department of Transportation Fish Exclusion – Protocol and Standards (WSDOT 2023) or in species-specific BMPs (USFWS 2010).</li><li>▪ Fish would be excluded from construction areas using appropriate methods, such as the use of nets and dewatering at a controlled rate.</li><li>▪ Fish would be salvaged from excluded areas and moved to safety according to the Hydraulic Project Approval permit conditions.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
<b>Fish-4 – Fords</b>	<b>Fish-4 – Fords:</b> Minimize low-water crossings (fords) by selecting the use of	This Mitigation Measure aims to minimize habitat loss and alteration, changes in water quality, or direct mortality to fish.	<ul style="list-style-type: none"><li>▪ If fording is required, ensure that it is done at the driest time of the year and at locations with rocky banks, as opposed to soft</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li></ul>	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
	temporary bridges if temporary access is needed to cross waterways.		substrates, and return the crossing to pre-existing stream channel conditions once the crossing is no longer needed.	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	
<b>Fish-5 – Delineate Riparian Management Zones</b>	<b>Fish-5 – Delineate Riparian Management Zones:</b> Delineate riparian management zones or buffers where certain activities (vegetation clearing or herbicide treatment) may be restricted.	This Mitigation Measure aims to maintain water quality and riparian function next to watercourses.	<ul style="list-style-type: none"><li>▪ Setback buffers should be based on Rentz et al. 2020 and Ecology 2009.</li><li>▪ Encroachment into these zones required during new construction and operations would be reviewed by the applicant’s biologist in consultation with the WDFW to determine the adverse environmental impacts on the zone and recommend additional measures to manage impacts on the resources.</li><li>▪ The applicant would conduct ongoing environmental monitoring during construction to ensure that adverse environmental impacts are avoided.</li><li>▪ The identified adverse environmental impacts, mitigation measures, and monitoring strategy would be provided to the WDFW for review and approval by the SEPA Lead Agency.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
<b>Fish-6 – Use Low-Impact Design for Roads</b>	<b>Fish-6 – Use Low-Impact Design for Roads:</b> Use low-impact development techniques (e.g., pervious paving materials and narrow road widths) during the site planning and layout period of project-specific applications, particularly in areas of high aquatic species diversity or salmonid-bearing streams.	This Mitigation Measure aims to protect salmonid habitat from adverse environmental impacts from roads.	<ul style="list-style-type: none"><li>▪ Areas of high aquatic species diversity or salmonid-bearing streams are based on Knight 2009.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
<b>Fish-7 – Work in Dry Conditions</b>	<b>Fish-7 – Work in Dry Conditions:</b> Plan and schedule work in streams during dry conditions or when flows are anticipated to be at their lowest, when possible.	This Mitigation Measure aims to reduce adverse environmental impacts on water quality (contaminants, sediment), water quantity, fish, and aquatic habitat.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify seasonal low-flow periods</b> for each stream or river segment during initial site characterization, using hydrologic data and consultation with local water resource agencies.</li><li>▪ <b>Schedule in-water construction activities</b> (e.g., culvert installation, bank stabilization, trenching) during these periods to reduce environmental impacts.</li><li>▪ <b>Coordinate with the WDFW</b> to confirm timing windows that protect fish spawning, migration, and rearing habitats.</li><li>▪ <b>Implement additional mitigation measures</b> if dry-season work is not feasible, such as:<ul style="list-style-type: none"><li>○ Temporary stream diversions or bypass systems.</li><li>○ Sediment control barriers and containment systems.</li><li>○ Real-time water quality monitoring.</li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Post-Construction Maintenance Activities</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Document timing and mitigation strategies</b> in the project-specific application, including justification for any deviations and coordination with regulatory agencies.</li></ul>		
<b>Fish-8 – Reduce EMF on Magnet-Sensitive Species</b>	<b>Fish-8 – Reduce EMF on Magnet-Sensitive Species:</b> Minimize the adverse environmental impact of electromagnetic fields (EMFs) on magnet-sensitive species.	This Mitigation Measure aims to reduce adverse environmental impacts associated with EMF.	Strategies that can be used to reduce EMFs are described below: <ul style="list-style-type: none"><li>▪ <b>Siting:</b> Cables should be routed to avoid habitat areas with electrosensitive<sup>16</sup> and magnet-sensitive<sup>17</sup> species of concern to separate EMF sources from sensitive species.</li><li>▪ <b>Installation:</b> Burying the cable provides physical separation between the highest levels of EMFs, which occur adjacent to the cable, and organisms that live near the bottom of the water column.</li><li>▪ <b>Cable Characteristics:</b> The intensity of a magnetic field increases with the amount of electrical current passing through a cable. Cables operating at higher voltages will produce lower-intensity EMF because higher-voltage cables can transmit the same amount of power using lower electrical current.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li></ul>	Select descriptor.
<b>Fish-9 – Decontaminate All Gear</b>	<b>Fish-9 – Decontaminate All Gear:</b> Control the spread of invasive species and diseases by minimizing work in areas known to support invasive plant species, and use decontamination procedures on all equipment and gear as specified for the species or disease.	This Mitigation Measure aims to reduce the spread of invasive species into areas that are not infected.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify areas with known invasive species or aquatic diseases</b> during site characterization using state databases and consultation with the Washington Department of Fish and Wildlife.</li><li>▪ <b>Develop a site-specific decontamination plan</b> that includes:<ul style="list-style-type: none"><li>○ Approved cleaning and disinfection methods (e.g., hot water, chemical treatments, drying protocols).</li><li>○ Procedures for gear, vehicles, and equipment entering or exiting waterbodies.</li><li>○ Designated decontamination stations and signage.</li></ul></li><li>▪ <b>Train personnel</b> on proper decontamination techniques and the importance of preventing biological contamination.</li><li>▪ <b>Document decontamination protocols</b> in the project-specific application, including species-specific procedures and coordination with regulatory agencies.</li><li>▪ <b>Monitor compliance</b> throughout construction and maintenance activities, and adapt protocols as needed based on site conditions or agency guidance.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.
<b>Fish-10 – Maintain Fish Passage</b>	<b>Fish-10 – Maintain Fish Passage:</b> Design necessary stream crossings to provide in-stream conditions that allow for and maintain uninterrupted movement and safe passage of fish and other aquatic species throughout new construction,	This Mitigation Measure aims to maintain fish passage and biodiversity.	<ul style="list-style-type: none"><li>▪ This process also includes assessing existing infrastructure for fish passage impacts during project planning and coordinating with relevant resource agencies (e.g., WDFW, NOAA Fisheries) to identify priority remediation opportunities and incorporating fish passage improvements as part of the project-specific mitigation where feasible and appropriate.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

<sup>16</sup> Sensitive to electrical current.

<sup>17</sup> Sensitive to magnetic fields.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
	operation and maintenance, upgrade, and modification.				
Fish-11 – Regular Maintenance of Infrastructure	<b>Fish-11 – Regular Maintenance of Infrastructure:</b> Regularly inspect and maintain infrastructure during operation to prevent leaks and spills into aquatic habitats.	This Mitigation Measure aims to maintain water quality to prevent injury or death.	<ul style="list-style-type: none"><li>▪ The applicant would provide the SEPA Lead Agency with an operational management plan that includes a schedule of planned inspections and maintenance at transmission features within 200 feet of a waterbody.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Post-Construction Monitoring and Reporting</li><li>▪ During Post-Construction Maintenance Activities</li></ul>	Select descriptor.
Fish-12 – Reduce Number of Stream Crossings	<b>Fish-12 – Reduce Number of Stream Crossings:</b> Design transmission facilities to reduce the number of stream crossings. Access roads and utilities would share common rights-of-way.	This Mitigation Measure aims to reduce adverse environmental impacts on fish and fish habitat and maintain water quality.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify all potential stream crossings</b> during initial site characterization using hydrologic mapping, field surveys, and geographic information system analysis.</li><li>▪ <b>Consolidate infrastructure corridors</b> by co-locating access roads, utility lines, and other linear features to reduce the number of crossings.</li><li>▪ <b>Prioritize routing alternatives</b> that avoid or minimize interaction with streams, wetlands, and riparian buffers.</li><li>▪ <b>Document stream crossing reduction strategies</b> in the project-specific application, including maps, design alternatives considered, and justification for any unavoidable crossings.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and WDFW</b> to ensure consistency with aquatic habitat protection goals and permitting requirements.</li><li>▪ <b>Implement BMPs</b> at all unavoidable crossings to maintain water quality and fish passage (e.g., Fish-2 – Design Perpendicular Approaches).</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Fish-13 – Use Bioengineering	<b>Fish-13 – Use Bioengineering:</b> Design stabilization structures to incorporate bioengineering <sup>18</sup> principles; for example, use living and nonliving plant materials in combination with natural and synthetic support material for slope stabilization, erosion reduction, and vegetation establishment.	This Mitigation Measure aims to reduce changes to water quality and restore riparian functions.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify areas prone to erosion or bank instability</b> during site characterization, especially near streams, rivers, and wetlands.</li><li>▪ <b>Incorporate bioengineering techniques</b> such as:<ul style="list-style-type: none"><li>○ Live staking and brush layering.</li><li>○ Coir logs, fascines, and erosion control blankets.</li><li>○ Willow wattles and vegetated geogrids.</li><li>○ Native plantings for long-term stabilization.</li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

<sup>18</sup> The incorporation of biological materials and structures in engineering design.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Avoid hard armoring</b> (e.g., riprap, concrete) unless necessary for safety or infrastructure protection, and justify its use in the project-specific application.</li><li>▪ <b>Document bioengineering designs</b> in the application, including materials, species selection, installation methods, and maintenance plans.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and WDFW</b> to ensure alignment with habitat restoration goals and regulatory requirements.</li><li>▪ <b>Monitor vegetation establishment and structural performance</b> post-construction and adaptively manage as needed to ensure long-term success.</li></ul>		
<b>Fish-14 – Removal of Riparian Vegetation</b>	<b>Fish-14 – Removal of Riparian Vegetation:</b> Minimize disturbance to low-growing shrubs and grass species in riparian areas, or tree removal in steep gulches.	This Mitigation Measure aims to maintain riparian functions without full removal of riparian vegetation.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify riparian zones and vegetation types</b> during initial site characterization using ecological surveys and mapping tools.</li><li>▪ <b>Design project activities</b> to avoid or minimize vegetation removal, especially in areas with steep slopes or high erosion potential.</li><li>▪ <b>Use selective clearing techniques</b> to retain native ground cover and shrubs while allowing necessary access or infrastructure placement.</li><li>▪ <b>Avoid tree removal in steep gulches</b> unless absolutely necessary for safety or engineering reasons, and document justification in the project-specific application.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and WDFW</b> to ensure consistency with riparian protection goals and applicable regulations.</li><li>▪ <b>Implement restoration measures</b> where vegetation must be removed, including replanting with native species and erosion control practices.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
<b>Fish-15 – In-stream Sediment Disruption</b>	<b>Fish-15 – In-stream Sediment Disruption:</b> If new transmission facility construction requires open-cut trenching or would generate in-stream sedimentation, then establish a dilution zone suitable to the location and flow.	This Mitigation Measure aims to reduce adverse environmental impacts on fish and fish habitat from excessive sedimentation.	If an applicant does not anticipate being able to meet state water quality standards, they may request from Ecology an extended area of mixing for a specific activity and duration, but this is not automatically granted.	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

**APP** = Avian Protection Plan; **APLIC** = Avian Power Line Interaction Committee; **BMPs** = best management practices; **EMF** = electromagnetic field; **ROW** = right-of-way; **SEPA** = State Environmental Policy Act; **USFWS** = United States Fish and Wildlife Service; **WDFW** = Washington Department of Fish and Wildlife; **WSDOT** = Washington State Department of Transportation



# A3.1-1.9 Mitigation Measures Identified in Section 3.7 Energy and Natural Resources

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
ENR-1 – Recycle Components	<b>ENR-1 – Recycle Components:</b> Recycle components that have the potential to be used as raw materials in commercial or industrial applications to the extent practicable.	Recycling components can reduce the environmental footprint of projects, reducing the demand on natural resources.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify recyclable components</b> during project planning and decommissioning phases, including metals, concrete, wood, plastics, and electronic equipment.</li><li>▪ <b>Develop a recycling and materials recovery plan</b> that outlines:<ul style="list-style-type: none"><li>○ Types of materials to be recycled.</li><li>○ Approved recycling facilities or vendors.</li><li>○ Procedures for sorting, handling, and transporting recyclable materials.</li></ul></li><li>▪ <b>Coordinate with local recycling programs and industrial partners</b> to ensure materials are processed appropriately and in compliance with environmental regulations.</li><li>▪ <b>Document recycling efforts</b> in the project-specific application, including estimated quantities of recycled materials and diversion rates from landfills.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
ENR-2 – Source Recycled Materials	<b>ENR-2 – Source Recycled Materials:</b> Source recycled or alternative materials to the extent practicable.	Using recycled materials and alternative, lower-impact materials can reduce the environmental footprint of projects, reducing the demand on natural resources.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify opportunities</b> to use recycled materials in project components such as:<ul style="list-style-type: none"><li>○ Aggregates for concrete and road base.</li><li>○ Recycled steel, aluminum, or composite materials for structures.</li><li>○ Reclaimed wood or plastic for temporary construction needs.</li></ul></li><li>▪ <b>Specify recycled content requirements</b> in procurement documents and contractor agreements.</li><li>▪ <b>Evaluate alternative materials</b> that offer lower environmental impacts, such as low-carbon concrete or sustainably sourced composites.</li><li>▪ <b>Document sourcing strategies</b> in the project-specific application, including material types, suppliers, and recycled content percentages.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with sustainability goals and applicable green procurement standards.</li><li>▪ <b>Track and report material sourcing</b> during construction to demonstrate compliance and support continuous improvement.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
ENR-3 – High-Efficiency Lighting	<b>ENR-3 – High-Efficiency Lighting:</b> Install high-efficiency lighting to reduce energy needs for the project’s operation and maintenance.	High-efficiency lighting, such as LED lights, consumes significantly less energy than traditional lighting options. High-efficiency lights typically have a longer operational life, reducing the frequency of replacements and maintenance. By reducing energy consumption, high-efficiency lighting helps decrease greenhouse gas emissions associated with electricity generation. Longer-lasting lights mean fewer replacements, leading to less waste and lower adverse environmental impacts from manufacturing and disposal.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Specify high-efficiency lighting</b> in design and procurement documents, prioritizing fixtures that meet ENERGY STAR® or DesignLights Consortium standards.</li><li>▪ <b>Use lighting controls</b> such as motion sensors, timers, and dimmers to reduce energy use and light pollution.</li><li>▪ <b>Design lighting layouts</b> to minimize over-illumination and avoid unnecessary lighting in sensitive environmental areas.</li><li>▪ <b>Document lighting specifications</b> in the project-specific application, including fixture types, energy ratings, and expected operational life.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with energy efficiency goals and applicable sustainability standards.</li><li>▪ <b>Track energy savings and maintenance reductions</b> post-installation to support continuous improvement and reporting.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
ENR-4 – Energy Supply	<b>ENR-4 – Energy Supply:</b> Power monitoring systems and maintenance equipment with renewable energy sources and use electric or hybrid vehicles for operation and maintenance, when feasible.	Integrating renewable resources into the lifecycle of transmission facilities enhances environmental sustainability and reduces reliance on non-renewable resources. The use of electric or hybrid vehicles for the operation and maintenance of transmission facilities, when feasible, can also serve several advantages, including reduced emissions, energy efficiency, noise reduction, and sustainability.	For project-specific applications: <ul style="list-style-type: none"><li>▪ Identify opportunities to integrate renewable energy during project design, such as:<ul style="list-style-type: none"><li>○ Solar-powered monitoring stations.</li><li>○ Battery-backed maintenance equipment.</li><li>○ Portable renewable energy systems for remote sites.</li></ul></li><li>▪ <b>Transition fleet vehicles</b> used for operation and maintenance to electric or hybrid models where terrain and access allow.</li><li>▪ <b>Document energy supply strategies</b> in the project-specific application, including types of renewable technologies used, estimated energy savings, and emissions reductions.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with state energy and climate goals.</li><li>▪ <b>Track performance and energy use</b> post-installation to support adaptive management and continuous improvement.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
ENR-5 – Source Locally	<b>ENR-5 – Source Locally:</b> Locally source raw materials, components, and fuel to the extent practicable.	Local sourcing minimizes the distance materials need to travel, which reduces fuel consumption and lowers greenhouse gas emissions associated with transportation. Shorter transportation distances mean less energy is required to move materials from the source to the site, promoting overall energy efficiency.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify local suppliers and manufacturers</b> during project planning, focusing on materials such as aggregates, steel, concrete, timber, and fuel.</li><li>▪ <b>Incorporate local sourcing goals</b> into procurement policies and contractor agreements.</li><li>▪ <b>Evaluate trade-offs</b> between cost, availability, and environmental benefits when selecting materials and suppliers.</li><li>▪ <b>Document sourcing strategies</b> in the project-specific application, including supplier locations, estimated transportation distances, and emissions reductions.</li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with sustainability and climate action goals.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

Programmatic Environmental Impact Statement

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Track sourcing metrics</b> during construction to support reporting and continuous improvement.</li></ul>		
ENR-6 – Cost-Benefit Analysis	<b>ENR-6 – Cost-Benefit Analysis:</b> Project-specific applications are encouraged to include a cost-benefit analysis.	Providing a cost-benefit analysis enhances long-term transmission planning efforts and decision-making by providing transparent selection criteria. It also helps decision-makers compare alternatives by assessing the net welfare change (i.e., the difference in societal well-being between a "build" and "no build" scenario).	<ul style="list-style-type: none"><li>▪ Although a cost-benefit analysis is not required under SEPA, it may be beneficial for long-range transmission planning.</li><li>▪ Applicants should refer to the cost-benefit analysis framework outlined in FERC Order Numbers 1920, 1920-A, and 1920-B.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

GHG = greenhouse gas; LED = light-emitting diode; FERC = Federal Energy Regulatory Commission; SEPA = State Environmental Policy Act

# A3.1-1.10 Mitigation Measures Identified in Section 3.8 Public Health and Safety

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
H&S-1 - Early Fault Detection	<b>H&amp;S-1 – Early Fault Detection:</b> Install early fault detection sensors that detect the radio frequency signal generated by partial discharge arcing on alternating current circuits and use precise time measurements of events to locate the source along the conductors.	This Mitigation Measure aims to reduce the risk of fire and power outages through early detection of failing equipment and encroaching vegetation.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Integrate fault detection systems</b> into transmission facility design, particularly in areas with elevated fire risk or aging infrastructure.</li><li>▪ <b>Use time-synchronized monitoring technologies</b> (e.g., traveling wave fault location systems) to pinpoint fault locations quickly and accurately.</li><li>▪ <b>Coordinate with utility operators and emergency response teams</b> to ensure fault data is actionable and integrated into maintenance and safety protocols.</li><li>▪ <b>Document fault detection strategies</b> in the project-specific application, including sensor types, placement, data collection methods, and response procedures.</li><li>▪ <b>Implement predictive maintenance programs</b> based on fault detection data to proactively address equipment degradation and vegetation encroachment.</li><li>▪ <b>Ensure compatibility</b> with broader grid monitoring systems and cybersecurity standards.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Construction</li></ul>	Select descriptor.
H&S-2 - Risk Management Strategy	<b>H&amp;S-2 – Risk Management Strategy:</b> Develop and apply an electromagnetic field (EMF) and electromagnetic interference (EMI) risk management strategy that regularly considers the consequence, likelihood, and significance of EMF and EMI on public health and existing infrastructure, such as transportation systems, based on emerging research studies and guidelines.	This Mitigation Measure aims to reduce the adverse environmental impacts of EMF exposure on the public and EMI on existing infrastructure through informed decision making and adaptive risk management. Techniques to decrease the risk of EMF and EMI would be implemented to ensure safety of the public and reliability of infrastructure systems.	<ul style="list-style-type: none"><li>▪ Project applicants should consider proximity to sensitive receptors (e.g., schools, childcare centers, and residential areas) when siting and designing, and consult with public health agencies as appropriate to address concerns regarding EMF exposure. Public engagement and transparency are critical for project-level siting decisions, especially in areas of community concern.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Preparation</li></ul>	Select descriptor.
H&S-3 – Anonymous Tip Hotline	<b>H&amp;S-3 – Anonymous Tip Hotline:</b> Establish an anonymous tip hotline for workers during the new construction, operation and maintenance, upgrades, and modifications of transmission facilities.	This Mitigation Measure aims to enhance worker safety by fostering a strong workplace safety culture.	The operation of the hotline would typically fall to the applicant or construction contractor. The hotline would be expected to remain active throughout construction activities, unless otherwise determined by the SEPA Lead Agency.  For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Ensure the hotline is accessible</b> via multiple formats (e.g., phone, web portal, mobile app) and available 24/7.</li><li>▪ <b>Clearly communicate the purpose and availability</b> of the hotline to all personnel during onboarding and safety briefings.</li><li>▪ <b>Maintain strict confidentiality</b> and protect the identity of individuals who submit tips.</li></ul>	<ul style="list-style-type: none"><li>▪ During site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Establish a protocol for reviewing and responding</b> to tips, including documentation, investigation, and corrective actions.</li><li>▪ <b>Track and analyze reported issues</b> to identify trends and improve safety practices through adaptive management.</li><li>▪ <b>Document the hotline program</b> in the project-specific application, including implementation details, oversight responsibilities, and coordination with the SEPA Lead Agency if applicable.</li></ul>		

**EMF** = electromagnetic field; **EMI** = electromagnetic interference; **SEPA** = State Environmental Policy Act

## A3.1-1.11 Mitigation Measures Identified in Section 3.9 Land and Shoreline Use

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
LSU-1 – Property, ROW, and Easement Verification	<b>LSU-1 – Property, ROW, and Easement Verification:</b> All potentially impacted rights-of-way, property boundaries, or easements that haven't been surveyed within five (5) years of project planning, design, or implementation would be reviewed and re-surveyed by a licensed land surveyor.	This Mitigation Measure aims to accurately reflect current land tenure and minimize potential conflicts with property owners.	<ul style="list-style-type: none"><li>▪ Implementing this measure early in the project planning period can save time and resources for the project team and other parties. Verifying that all recorded boundaries are accurate can reduce the potential for conflict, disputes, or legal challenges. The verification process would include, but not be limited to, the following:<ul style="list-style-type: none"><li>○ Review the most current recorded deeds, plats, title reports, and easement agreements.</li><li>○ Determine whether they have been surveyed or assessed within the past five years.</li><li>○ Coordinate with the property owner or owning entity.</li><li>○ Conduct a field verification and re-survey the boundaries as needed to confirm the location of potentially impacted property lines or easements.</li></ul></li><li>▪ Update project mapping to reflect any changes or discrepancies identified.</li><li>▪ Provide the SEPA Lead Agency with additional information should the use of a restricted or reduced ROW be required for the project.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
LSU-2 – Coordinate with DNR	<b>LSU-2 – Coordinate with DNR:</b> Conduct early and ongoing consultation with the Washington Department of Natural Resources (DNR) to address any potential conflicts with DNR-administered lands, including state trust lands.	This Mitigation Measure aims to minimize adverse environmental impacts on DNR-administered lands, as some forms of development could have an adverse environmental impact on natural resource areas and socioeconomics.	<ul style="list-style-type: none"><li>▪ Prioritize routing transmission facilities such that it has the least possible adverse environmental impact on DNR-administered lands. Transmission facilities could be routed along the edge of or adjacent to DNR-administered lands. Additionally, this may result in a scenario where the preferred alternative may not be the shortest in length. By prioritizing these siting practices, it would be less likely for state trust land to become severed, remnant, or unproductive.</li><li>▪ Consider the ongoing the loss of DNR-administered lands, particularly state trust lands, has on the underlying landowners and consider some means of capturing, accounting for, and/or mitigating the financial loss. Examples could include ongoing financial payments or increased conservation, which can be used to reinvest for future revenue production.</li><li>▪ All expenses required for DNR to exercise a nondefault or early termination provision would be the responsibility of the project proponent.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
LSU-3 – Construction Schedule	<b>LSU-3 – Construction Schedule:</b> Develop and distribute a schedule of construction activities to potentially affected farm operators at least three months in advance of ground disturbance.	This Mitigation Measure aims to allow sufficient time for agricultural landowners to plan planting, harvesting, or maintenance activities in advance of construction activities.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify agricultural stakeholders early</b> in the planning process through landowner outreach and coordination with local agricultural agencies.</li><li>▪ <b>Include key construction milestones</b> in the schedule, such as:<ul style="list-style-type: none"><li>○ Site preparation.</li><li>○ Equipment staging.</li><li>○ Trenching or foundation work.</li><li>○ Line installation.</li><li>○ Restoration activities.</li></ul></li><li>▪ <b>Provide the schedule in accessible formats</b>, such as printed mailers, email, or online portals, and ensure it includes contact information for project representatives.</li><li>▪ <b>Update the schedule as needed</b> and communicate changes promptly to affected landowners.</li><li>▪ <b>Document outreach efforts</b> in the project-specific application, including distribution methods, stakeholder feedback, and any accommodations made to reduce agricultural impacts.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
LSU-4 – Livestock	<b>LSU-4 – Livestock:</b> Coordinate with property owners to keep livestock out of construction areas.	This Mitigation Measure aims to reduce mortality to livestock. During new project construction and maintenance activities, it may be necessary to remove cattle or livestock from areas where blasting or heavy equipment operations are taking place.	<ul style="list-style-type: none"><li>▪ Applicants should make arrangements with property owners and livestock owners regarding the presence of livestock in or near transmission facility ROWs during construction and maintenance activities.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Preparation</li><li>▪ During Site Construction</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
LSU-5 – Reseed Disturbed Rangelands	<b>LSU-5 – Reseed Disturbed Rangelands:</b> Coordinate with rangeland property owners to determine the appropriate seed mix used in revegetation actions.	This Mitigation Measure aims to restore rangelands to the pre-construction conditions or better.	<ul style="list-style-type: none"><li>▪ Once construction is complete, reseed rangelands that have been disturbed from project construction activities with the agreed-upon seed mix.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Post-Construction Restoration</li></ul>	Select descriptor.
LSU-6 – Consult with the Northwest DOD Regional Coordination Team	<b>LSU-6 – Consult with the Northwest DOD Regional Coordination Team:</b> Conduct early and ongoing consultation with the Northwest Department of Defense (DOD) Regional Coordination Team to address any potential conflicts with military utilized airspaces or land uses.	This Mitigation Measure aims to mitigate adverse environmental impacts on military operations and testing facilities while fostering the viability of a project-specific application. Coordination with military representatives from the Northwest DOD Regional Coordination Team is a crucial step in the planning and	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Contact the Northwest DOD Regional Coordination Team</b> early in the planning process to identify potential compatibility issues.</li><li>▪ <b>Provide project details</b>, including maps, structure heights, lighting plans, construction schedules, and any planned use of technologies that may interfere with military operations.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
		development of transmission facilities and may identify land use conflicts, rules that govern development, and land use concepts specific to the area.	<ul style="list-style-type: none"><li>▪ <b>Develop measures</b> by working with the Northwest DOD Regional Coordination Team, as appropriate, to mitigate potential conflicts. These measures could include design modifications, technology solutions, or operational measures.</li><li>▪ <b>Document coordination efforts</b>, agreements, and any recommended modifications or measures for inclusion in the project-specific application materials.</li></ul>		

DNR: Washington Department of Natural Resources; DOD = Department of Defense; EIS = Environmental Impact Statement; ROW = right-of-way; SEPA = State Environmental Policy Act

# A3.1-1.12 Mitigation Measures Identified in Section 3.10 Transportation

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
TR-1 – Coordination with Aviation Groups	<b>TR-1 – Coordination with Aviation Groups:</b> Work closely with aviation groups and authorities to ensure that transmission facilities are marked on aviation maps and that pilots, both commercial and recreational, are aware of their locations.	This Mitigation Measure aims to reduce the risk of accidents and alert low-flying aircraft and helicopters or other aerial recreationists in the area, including private aircraft, paragliders, hang-gliders, and skydivers to overhead transmission facilities.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify nearby aviation activity zones</b> during site characterization, including airports, heliports, flight training areas, and recreational airspace.</li><li>▪ <b>Coordinate with relevant aviation authorities</b>, such as:<ul style="list-style-type: none"><li>○ FAA.</li><li>○ Washington State Department of Transportation – Aviation Division.</li><li>○ Local airport operators and aviation clubs.</li></ul></li><li>▪ <b>Ensure transmission facilities are registered</b> and marked on official aviation charts and databases.</li><li>▪ <b>Install appropriate aerial markers and lighting</b> on transmission structures in accordance with FAA regulations and local guidance.</li><li>▪ <b>Document coordination efforts</b> in the project-specific application, including communication records, mapping updates, and mitigation measures.</li><li>▪ <b>Engage with local aviation communities</b> to raise awareness and gather input on potential flight safety concerns.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
TR-2 – Planning Coordination	<b>TR-2 – Planning Coordination:</b> Consult local authorities regarding planned construction activity near or crossing roads, waterways, railways, and airports.	This Mitigation Measure aims to streamline transportation processes and reduce adverse environmental impacts by optimizing routes, schedules, and operations for all types of transportation to meet the needs of affected stakeholders, minimize disruptions, and address potential concerns.	<ul style="list-style-type: none"><li>▪ Provide estimates of increased traffic during new construction, including an assessment of the number, size, and type of vehicles/vessels per day.</li><li>▪ Discuss the transportation management plan and revise as necessary.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ During Site Preparation</li><li>▪ During Site Construction</li></ul>	Select descriptor.
TR-3 – Carpool Program	<b>TR-3 – Carpool Program:</b> Create a carpool program that connects workers commuting from similar areas.	This Mitigation Measure aims to limit traffic volume increases associated with commuting workers by decreasing the number of potential cars on the road. It also aims to reduce a project’s adverse environmental impacts by minimizing emissions from vehicles.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Survey workers’ commuting patterns during project mobilization</b> to identify potential carpool matches.</li><li>▪ <b>Create a centralized carpool coordination system</b>, such as:<ul style="list-style-type: none"><li>○ A mobile app or online platform.</li><li>○ Bulletin boards at staging areas.</li><li>○ Coordination through site supervisors or Human Resources.</li></ul></li><li>▪ <b>Incentivize participation</b> through preferred parking, fuel stipends, or recognition programs.</li><li>▪ <b>Document carpool program details</b> in the project-specific application, including estimated reductions in vehicle trips and emissions.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li><li>▪ During Site Construction</li></ul>	Select descriptor.

Programmatic Environmental Impact Statement

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to align with transportation and air quality mitigation goals.</li><li>▪ <b>Monitor participation and effectiveness</b> throughout the project and adjust strategies as needed.</li></ul>		

**FAA** = Federal Aviation Administration; **TIA** = Traffic Impact Assessment; **SEPA** = State Environmental Policy Act

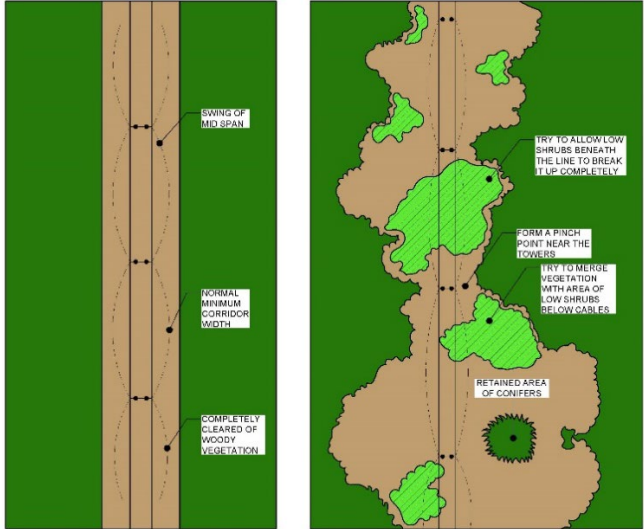
# A3.1-1.13 Mitigation Measures Identified in Section 3.11 Public Services and Utilities

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
PSU-1 – Utility Coordination	<b>PSU-1 – Utility Coordination:</b> Contact impacted or potentially impacted utility service providers as early as possible in the planning process to identify conflicts or issues.	<p>This is a required component of project-specific applications necessary for SEPA Lead Agencies to evaluate baseline conditions.</p> <p>This Mitigation Measure aims to identify and address utility conflicts early in the planning and design process and throughout operation and maintenance.</p>	<ul style="list-style-type: none"><li>▪ Applicants should conduct a preliminary investigation based on existing records or by requesting information from utility owners.</li><li>▪ Additional measures could be required, including pre-construction surveys using ground-penetrating radar technologies and conducting a risk assessment.</li><li>▪ Should utility relocation(s) be required, the applicant and utility service providers should prepare and execute utility agreements outlining relocation plans and schedules.</li><li>▪ Applicants and utility service providers should establish and implement agreed-upon avoidance, minimization, and/or mitigation measures in a written agreement.</li><li>▪ Ongoing coordination between utility providers would support a consistent and reliable utility system during operation and maintenance.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
PSU-2 – Corrosion Analysis	<b>PSU-2 – Corrosion Analysis:</b> Identify and delineate existing metallic pipes or pumping wells near the project-specific application. Coordinate with adjacent utility providers to determine the need for a corrosion analysis, design modifications, and/or additional mitigation strategies.	<p>This Mitigation Measure aims to mitigate the adverse environmental impacts of electric currents or accelerated corrosion of metallic pipes and/or pumping wells from high-voltage transmission facilities.</p>	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Conduct a subsurface utility investigation</b> during initial site characterization to locate and map metallic infrastructure within the project area.</li><li>▪ <b>Engage utility providers early</b> to share project details and assess potential risks of electrical interference or corrosion.</li><li>▪ <b>Perform a corrosion risk assessment</b> if metallic infrastructure is located within proximity to transmission lines, considering:<ul style="list-style-type: none"><li>○ Soil conductivity and moisture content.</li><li>○ Distance from transmission conductors.</li><li>○ Historical corrosion data or maintenance records.</li></ul></li><li>▪ <b>Document findings and mitigation strategies</b> in the project-specific application, including:<ul style="list-style-type: none"><li>○ Results of corrosion modeling or field testing.</li><li>○ Design adjustments (e.g., grounding, shielding, separation distances).</li><li>○ Monitoring plans or protective coatings.</li></ul></li><li>▪ <b>Coordinate with the SEPA Lead Agency</b> to ensure alignment with environmental protection and infrastructure safety standards.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

SEPA = State Environmental Policy Act



A3.1-1.14 Mitigation Measures Identified in Section 3.12 Visual Quality

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Vis-1 – Selection of Finishes	<b>Vis-1 – Selection of Finishes:</b> Use dull and/or dark painted surfaces, textured surfaces, and low-reflectivity finishes on transmission facilities.	This Mitigation Measure is intended to mitigate adverse environmental impacts from surface glare.	<ul style="list-style-type: none"><li>Monopole towers should have a low-reflectivity treatment; lattice towers should receive a non-specular treatment.</li><li>Electricity transmission facilities should utilize non-specular conductors<sup>19</sup> and non-reflective coatings on insulators.</li><li>Finishes and colors should be appropriate to their location and context.</li></ul>	<ul style="list-style-type: none"><li>During Site Construction</li></ul>	Select descriptor.
Vis-2 – Visual Appeal of ROWs	<b>Vis-2 – Visual Appeal of ROWs:</b> Create varied, feathered vegetation edges for cleared areas and linear rights-of-way (ROWs) that are sinuous horizontally and layered vertically. Strategically retain or plant native vegetation within the ROW where practicable in visually sensitive areas.	This Mitigation Measure aims to reduce the visual contrast resulting from straight ROW corridors by emulating natural vegetation character using curvilinear edges.	<ul style="list-style-type: none"><li>The implementation of this Mitigation Measure should be adapted to site-specific conditions and coordinated with industry best practices and landowner agreements.</li><li>Consider cutting tree stumps as low to the ground as practicable to lessen visual impacts.</li><li>The figure shown below provides an example of straight ROW corridors versus feathered vegetation edges.</li></ul> <div><p>1. THE USUAL MINIMUM REQUIREMENT FOR RIGHT OF WAY CLEARANCE.</p><p>2. A RIGHT OF WAY DESIGNED TO BLEND INTO THE LANDSCAPE WITHIN THE LIMITATIONS IMPOSED BY SAFETY.</p></div>	<ul style="list-style-type: none"><li>During Site Construction</li><li>During Post-Construction Restoration</li></ul>	Select descriptor.
Vis-3 – Underground Construction	<b>Vis-3 – Underground Construction:</b> Use underground construction methods in areas with high scenic quality and/or open rural areas, depending on geologic conditions.	This Mitigation Measure aims to mitigate surface visual, adverse environmental impacts on visually sensitive areas by using underground construction methods.	<ul style="list-style-type: none"><li>The Programmatic EIS includes undergrounding as one of several potential visual mitigation strategies, but it is not intended to be a default or universally applicable measure.</li><li>Undergrounding is context-dependent and should only be considered where adverse environmental impacts are determined to be significant and where other Mitigation Measures are insufficient. The impact of overhead transmission facilities may be minimal, even in areas with high scenic value or rural character, particularly when sited</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.

<sup>19</sup> A conductor that has been treated with an outer layer that reduces light reflection.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			within existing corridors or where topography and vegetation provide natural screening. <ul style="list-style-type: none"><li>▪ The decision to underground should be made during project-specific environmental review.</li></ul>		
Vis-4 – Visual Screening	<b>Vis-4 – Visual Screening:</b> Use techniques such as berms, fencing, or vegetative screening to conceal or improve the appearance of distribution substations, above-ground vaults, and other facilities.	Depending on site conditions and the scale of facilities, visual screening can be an effective method to reduce visual contrast resulting from transmission facilities.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Assess visual sensitivity</b> of the project area during site characterization, including proximity to homes, parks, scenic byways, and culturally significant sites.</li><li>▪ <b>Select screening methods</b> appropriate to the site conditions and facility scale:<ul style="list-style-type: none"><li>○ Vegetative screening using native trees, shrubs, or grasses.</li><li>○ Earthen berms shaped to blend with natural topography.</li><li>○ Architectural fencing designed to complement local aesthetics.</li></ul></li><li>▪ <b>Incorporate screening into facility design</b> and layout to maximize effectiveness and minimize land disturbance.</li><li>▪ <b>Document visual screening strategies</b> in the project-specific application, including design details, plant species, and maintenance plans.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and local jurisdictions</b> to ensure consistency with visual resource management goals and community expectations.</li><li>▪ <b>Monitor screening effectiveness</b> post-construction and adaptively manage vegetation or structures as needed.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li></ul>	Select descriptor.
Vis-5 – Span Length	<b>Vis-5 – Span Length:</b> Maximize the span length when using overhead lines crossing highways and other linear viewing locations.	This Mitigation Measure aims to decrease visual contrast at highway crossings by moving the tower structures as far from the road as possible.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify visually sensitive corridors</b> during site characterization, including highways, scenic byways, trails, and recreational areas.</li><li>▪ <b>Design span lengths</b> to place transmission structures as far from the corridor as technically and safely feasible, considering terrain, conductor tension limits, and structural integrity.</li><li>▪ <b>Evaluate alternative alignments</b> that reduce the number of crossings or shift them to less visually prominent locations.</li><li>▪ <b>Document span length strategies</b> in the project-specific application, including engineering constraints, visual impact assessments, and coordination with transportation agencies.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and local transportation authorities</b> to ensure consistency with visual resource management and safety standards.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li></ul>	Select descriptor.

Select descriptor .ROW = right-of-way; SEPA = State Environmental Policy Act

# A3.1-1.15 Mitigation Measures Identified in Section 3.13 Noise and Vibration

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Noise-1 – Limit Construction Hours	<b>Noise-1 – Limit Construction Hours:</b> With the exception of trenchless crossings that require continuous day/night operations, limit noise-generating equipment used in new construction, maintenance, upgrades, and modifications that would impact sensitive receptors to weekdays and daytime hours.	This Mitigation Measure aims to limit construction noise to daytime hours.	<ul style="list-style-type: none"><li>▪ Daytime hours generally have higher baseline conditions, have higher noise limitations and standards, and are less likely to cause noise nuisance complaints.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li><li>▪ During Post-Construction Restoration</li><li>▪ During Operation and Maintenance</li></ul>	Select descriptor.
Noise-2 – Use Noise Barriers for Construction	<b>Noise-2 – Use Noise Barriers for Construction:</b> Use noise barriers or other mitigation measures for new construction activities, like trenchless crossings, that require continuous day/night operations or during upgrades and maintenance where the potential exists to exceed state and/or local noise standards to mitigate the adverse environmental impact on noise-sensitive receptors.	This Mitigation Measure aims to reduce noise impacts on sensitive receptors.	<ul style="list-style-type: none"><li>▪ Nighttime hours generally have lower baseline conditions, have lower noise limitations, and are more likely to cause noise nuisance complaints.</li><li>▪ Additionally, certain components of transmission facilities (e.g., substation transformers) have the potential to exceed state and/or local noise standards or otherwise cause a nuisance when sources cannot be moved away from sensitive receptors.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Construction</li></ul>	Select descriptor.
Noise-3 – Use of Operational Noise Mitigation	<b>Noise-3 – Use of Operational Noise Mitigation:</b> Provide vendor-supplied noise mitigation or acoustic barriers for substation transformers and equipment located near noise sensitive areas.	This Mitigation Measure aims to reduce noise impacts on sensitive receptors when there is a potential for a project to exceed state and/or local noise standards or otherwise cause a nuisance when sources cannot be moved away from sensitive receptors.	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ <b>Identify noise-sensitive areas</b> during site characterization using land use maps, field surveys, and community input.</li><li>▪ <b>Conduct predictive noise modeling</b> to assess potential operational noise levels and determine the need for mitigation.</li><li>▪ <b>Select appropriate noise control technologies</b>, such as:<ul style="list-style-type: none"><li>○ Sound-absorbing panels or walls.</li><li>○ Transformer enclosures with acoustic insulation.</li><li>○ Vibration isolation mounts.</li><li>○ Low-noise cooling systems.</li></ul></li><li>▪ <b>Document noise mitigation strategies</b> in the project-specific application, including equipment specifications, installation locations, and expected noise reduction levels.</li><li>▪ <b>Coordinate with the SEPA Lead Agency and local jurisdictions</b> to ensure compliance with applicable noise ordinances and environmental review requirements.</li><li>▪ <b>Monitor operational noise post-installation</b> and implement adaptive management if noise levels exceed expectations or generate complaints.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Noise-4 – Prevent Hearing Loss	<b>Noise-4 – Prevent Hearing Loss:</b> Identify when construction activities may produce on-site and off-site noise levels that exceed 85 A-weighted decibels (dBA) as an equivalent noise level over 8 hours ( $L_{eq(8Hr)}$ )	Prolonged exposure to noise levels above 85 dBA $L_{eq(8Hr)}$ can cause irreversible hearing loss. Identifying high noise levels early allows for timely	<ul style="list-style-type: none"><li>▪ Document in application measures when there is the potential for exposure to noise levels exceeding 85 dBA <math>L_{eq(8Hr)}</math> and identify the engineering and administrative controls implemented to mitigate to acceptable levels.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
	and the associated engineering or administrative controls in place to reduce the potential for hearing loss.	implementation of protective measures to prevent hearing loss.		▪ Prior to Application and Permit Approvals	
Noise-5 – Noise Assessment	<b>Noise-5 – Noise Assessment:</b> Prepare a noise assessment that includes measuring existing baseline noise environments, predicting future noise levels from either new construction and/or operation and maintenance, and evaluating the potential adverse environmental impacts on surrounding sensitive noise receptors.	This assessment would help identify sensitive noise receptors, evaluate the potential noise impacts, and determine the effectiveness of potential noise mitigation measures.	<ul style="list-style-type: none"><li>▪ Project-specific noise assessments are particularly recommended where sensitive receptors are present, construction is proposed outside of normal work hours, or where required by local ordinances.</li><li>▪ Project construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses.</li><li>▪ Compare calculated or modeled noise levels with existing baseline noise environments, state or local standards and limits, and federal guidelines.</li><li>▪ Use the comparisons to identify potential health concerns from noise exposure, risks of a noise-related nuisance, and whether mitigation of noise sources is needed.</li><li>▪ The noise analysis should assess nighttime operations, because nighttime is the most sensitive time period for noise receptors, has the most limiting sound level criteria, and is the time when nuisance complaints are most likely.</li></ul> <p>Depending on site-specific conditions and proximity to other resources, a vibration assessment may be requested either as part of the noise assessment or as a separate evaluation. If project-specific activities have the potential to create vibration leading to building damage or prolonged annoyance to sensitive receptor sites, a vibration assessment may be warranted. Construction activities can result in varying degrees of ground-borne vibration, depending on the equipment and construction method. While ground-borne vibrations from construction activities do not often reach levels that can damage structures, fragile buildings would receive special consideration. This assessment would help to identify sensitive resources and structures, evaluate the potential adverse environmental impacts, and determine construction vibration mitigation measures. The applicant should refer to the Federal Transit Administration Noise and Vibration Impact Assessment Manual for additional guidance for preparing the vibration assessment. The applicant should coordinate with the SEPA Lead Agency before preparing the assessment to verify the appropriate level of detail required.</p>	▪ Prior to Application and Permit Approvals	Select descriptor.

**dBA** = A-weighted decibels; **EIS** = Environmental Impact Statement; **Leq(8Hr)** = equivalent noise level over 8 hours; **ROW** = right-of-way; **SEPA** = State Environmental Policy Act



A3.1-1.16 Mitigation Measures Identified in Section 3.14 Recreation

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Rec-1 – Stakeholder and Agency Coordination	<b>Rec-1 – Stakeholder and Agency Coordination:</b> Coordinate with potentially affected federal, state, and local agencies, communities, and recreation-based organizations to mitigate adverse environmental impacts on recreational facilities and during seasonal activities.	This Mitigation Measure aims to reduce the adverse environmental impact of transmission facilities on recreation facilities and seasonal activities. Effectively engaging stakeholders is crucial in the planning and development of transmission facilities and for building community support.	<ul style="list-style-type: none"><li>▪ Examples of effective stakeholder coordination include public meetings, workshops, surveys, questionnaires, and advisory committees.</li><li>▪ Project applicants should also consider keeping stakeholders engaged and informed throughout the project by providing newsletters, social media updates, and/or updated project websites.</li><li>▪ Coordinate with the local jurisdiction and community regarding provision of recreational access when and where practicable. In some cases, access can be provided in a certain season or off-construction hours, or continuous access can be provided to some areas of the overall project site until construction begins at that location.</li><li>▪ Document coordination efforts in the project-specific application, including communication records, mapping updates, and mitigation measures.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Rec-2 – Public Notification of Temporary Closure	<b>Rec-2 – Public Notification of Temporary Closure:</b> Notify appropriate stakeholders of temporary closures at least six months prior to the start of the closure.	This Mitigation Measure aims to reduce the adverse environmental impact of transmission facilities on recreation users. Notifying the public of temporary closures of trails or sites through public outreach and media outlets provides transparency between the applicant and the local community. Public notifications are also necessary to ensure public awareness and safety within construction areas.	<ul style="list-style-type: none"><li>▪ Add temporary closure information on recreation site websites (e.g., for national parks/campgrounds) to inform the public.</li><li>▪ Ongoing public outreach should utilize public platforms and media outlets, including signs, radio, websites, and social media, throughout the planning process to communicate and update the public on projected closures.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Rec-3 – Trail Detours	<b>Rec-3 – Trail Detours:</b> Consider phased closures or explore alternative solutions such as rerouting trails, creating temporary access points, or scheduling work during off-peak times to minimize disruption.	This Mitigation Measure aims to alleviate the inconvenience of construction on recreationists.	<ul style="list-style-type: none"><li>▪ Coordination between the applicant and the affected party should determine alternative access points and trail detours during construction to limit closure and restrictions, specifically during peak seasons.</li><li>▪ Under this measure, recreational facilities could still be accessed during construction.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Rec-4 – Informational Signage and Precautionary Safety Measures	<b>Rec-4 – Informational Signage and Precautionary Safety Measures:</b> Place informational signage, placards, safety fencing, and other precautionary indicators in areas where transmission facilities are within or adjacent to existing recreational facilities.	This Mitigation Measure aims to alert recreational users to construction hazards or, in cases where transmission facilities are operating within or near recreation sites, protect recreationists from accidental injury.	<ul style="list-style-type: none"><li>▪ Temporary fencing should be installed around all staging areas, storage yards, and excavation areas during construction.</li><li>▪ Permanent fencing should be installed around substations and tower footings to deter public access during operation.</li></ul>	<ul style="list-style-type: none"><li>▪ During Site Preparation</li></ul>	Select descriptor.



Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Rec-5 – Notice to Air Missions	<b>Rec-5 – Notice to Air Missions:</b> Coordinate with the appropriate aviation authorities, such as the Federal Aviation Administration, to determine the necessity and content of a Notice to Air Missions (NOTAM).	A NOTAM is a critical communication tool used in aviation to inform pilots and other flight personnel about potential hazards or changes in the National Airspace System that could affect flight operations. NOTAMs provide timely information about the abnormal status of a component of the National Airspace System, such as runway closures, airspace restrictions, or changes in navigation aids.	For project-specific applications: <ul style="list-style-type: none"><li>▪ <b>Identify transmission facility components</b> that may pose a hazard to air navigation, including:<ul style="list-style-type: none"><li>○ Tall structures (e.g., towers, poles).</li><li>○ Temporary construction equipment (e.g., cranes).</li><li>○ Aerial activities (e.g., helicopter work).</li></ul></li><li>▪ <b>Consult with the FAA and local aviation authorities</b> to determine if a NOTAM is required based on structure height, location, and proximity to flight paths or recreational airspace.</li><li>▪ <b>Prepare and submit NOTAMs</b> with accurate details, including:<ul style="list-style-type: none"><li>○ Geographic coordinates.</li><li>○ Structure height and type.</li><li>○ Duration of the hazard or activity.</li><li>○ Contact information for follow-up.</li></ul></li><li>▪ <b>Document coordination efforts</b> in the project-specific application, including communication records, NOTAM content, and approval status.</li><li>▪ <b>Engage with local aviation communities</b>, including recreational pilots, paragliders, and skydiving groups, to raise awareness of transmission facility locations and construction activities.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Preparation</li></ul>	Select descriptor.

**dBA** = A-weighted decibels; **FAA** = Federal Aviation Administration; **L<sub>eq(8Hr)</sub>** = equivalent noise level over 8 hours; **NOTAM** = Notice to Air Missions

# A3.1-1.17 Mitigation Measures Identified in Section 3.15 Cultural and Historic Resources

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Hist/Cultural-1 – WISAARD Database	<b>Hist/Cultural-1 – WISAARD Database:</b> While planning transmission facilities, gather information on previously surveyed historic and cultural resources.	This Mitigation Measure aims to gather information on previously surveyed historic and cultural resources on the Washington State Department of Archaeology and Historic Preservation online Washington Information System for Architectural and Archaeological Records Data database for National Register of Historic Places-listed and eligible historic properties ( <a href="https://wisaard.dahp.wa.gov/">https://wisaard.dahp.wa.gov/</a> ) to help applicants plan project area corridors.	<ul style="list-style-type: none"><li>▪ This Mitigation Measure would allow the applicant to make informed choices regarding the presence or absence of known historic and cultural resources and may indicate if a historic or cultural resource survey is recommended.</li><li>▪ Applicants would need to work with a Secretary of the Interior-qualified archaeologist with access to the secure side of WISAARD to identify previously conducted surveys and known archaeological sites or isolates that may intersect with a project area.</li><li>▪ Applicants would also need to work with a Secretary of the Interior-qualified architectural historian to identify previously known historic resources in the project area and vicinity.</li><li>▪ Request that any desktop survey conducted include information regarding the presence of cultural and historic resources within 1.0 mile of the project area.</li><li>▪ For cultural resources, request that the desktop review include identification of where the project area falls within the DAHP WISAARD predictive model.</li><li>▪ In areas flagged by the WISAARD predictive model as high-risk, archaeological surveys should be performed prior to any ground-disturbing activities.</li><li>▪ For cultural resources, request that the archaeologist make a risk assessment and recommendation on the need to conduct a cultural resource survey.</li><li>▪ For historic resources, request that the architectural historian make a recommendation on the need to conduct a historic resources survey of aboveground resources.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Hist/Cultural-2 – Early Tribal Engagement	<b>Hist/Cultural-2 – Early Tribal Engagement:</b> Conduct early engagement with affected Tribes.	This Mitigation Measure aims to meaningfully engage affected Tribes in advance of application to get information and input on historic and cultural properties and Tribal resources that may not be identified through publicly available background research and surveys.	<ul style="list-style-type: none"><li>▪ The SEPA Lead Agency should uphold its government-to-government consultation responsibility by providing early notice, sufficient time for review, and culturally appropriate engagement methods to affected Tribes. This consultation would be consistent with protocols specific to each Tribe and would be conducted in accordance with applicable laws. Tribal consultation would be conducted independently of the public comment process to ensure that Tribal rights, interests, and knowledge are fully considered. The SEPA Lead Agency should also explore opportunities to facilitate resources or technical assistance to support Tribal capacity for meaningful participation in project-specific reviews.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li><li>▪ </li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			<ul style="list-style-type: none"><li>▪ Early engagement with affected Tribes during Initial Site Characterization is particularly important to (1) determine the likelihood of encountering burial sites, (2) guide appropriate survey and avoidance strategies, and (3) understand significant Tribal resources and TCPs that are only known to Tribes.</li><li>▪ In areas flagged by the WISAARD predictive model as high-risk, early and proactive consultation with the relevant Tribe is warranted. Check the WISAARD Tribal Area of Interest map for the appropriate Tribe (<a href="https://dahp.wa.gov/archaeology/tribal-consultation-information">https://dahp.wa.gov/archaeology/tribal-consultation-information</a>).</li><li>▪ The presence of traditional place names and oral histories is a strong indicator of cultural continuity and should be considered in both impact assessment and avoidance strategies.</li><li>▪ Culturally significant areas identified by tribes should be treated with respect and confidentiality.</li><li>▪ Early and meaningful engagement looks different for each Tribe that may be interested in consulting on a project. At a minimum, assume a 60-day review period of any materials sent. Offer meetings to discuss the project area with each affected Tribe individually, never together.</li><li>▪ Understand that, as Tribes are sovereign governments, they may elect to only interact, formally or informally, with other sovereign governments at the federal, state, or local level. Outreach and communication efforts with affected Tribes should, at a minimum, incorporate the SEPA Lead Agency and, depending on Tribal preference, may take place entirely through the SEPA Lead Agency as an intermediary.</li></ul>		
Hist/Cultural-3 – Early Engagement	<b>Hist/Cultural-3 – Early Engagement:</b> Conduct early engagement with other interested parties.	This Mitigation Measure aims to engage interested parties, including the Washington State Department of Archaeology and Historic Preservation and local organizations, in advance of application to get information and input from these groups on historic and cultural properties that may not be identified through publicly available background research and surveys.	<ul style="list-style-type: none"><li>▪ This engagement should be initiated early to be able to make changes to proposed routes to avoid historic or cultural properties identified by these groups.</li><li>▪ Engagement with these parties is an important part of the SEPA, the National Environmental Policy Act, and Section 106, and can be coordinated among these three processes.</li><li>▪ Early engagement with local historical societies, county governments, and CLGs is also important to identify properties of local importance, often listed in established local registers, which need to be taken into account for adverse environmental impacts according to SEPA Questionnaire (Question 13: Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site?).</li><li>▪ Prior to conducting early engagement, prepare project area maps and have clear exhibits showing ground-disturbing impacts, dimensions of the physical facility, identified access</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
			routes and any areas where access routes may be developed, and any information that affected Tribes may need to adequately determine the potential of adverse effects. <ul style="list-style-type: none"><li>Consider sending alternative locations with appropriate information for review.</li></ul>		
Hist/Cultural-4 – Survey Methodology Approval	<b>Hist/Cultural-4 – Survey Methodology Approval:</b> Obtain concurrence from the Washington State Department of Archaeology and Historic Preservation (DAHP) and affected Tribes on historic and cultural resource survey methodologies prior to conducting the surveys.	This Mitigation Measure aims to consult and obtain concurrence from DAHP and affected Tribes on historic and cultural resource survey methodology, which would include the project area and anticipated viewshed of the project.	<ul style="list-style-type: none"><li>Interested parties, particularly DAHP and affected Tribes, should be included in the development of the area to be surveyed (the APE) and survey methodology.</li><li>Following an approved survey methodology will ensure that all cultural and historic resources that could potentially be significantly impacted by the project are identified appropriately. Identification of all resources will allow applicants to identify other appropriate mitigation measures.</li><li>Survey methodologies for cultural resources should be developed by a Secretary of the Interior-qualified archaeologist with access to the secure side of WISAARD. Survey methodologies for historic resources would be developed by a Secretary of the Interior-qualified architectural historian.</li><li>Methodologies should incorporate feedback from affected Tribes and DAHP.</li><li>Engagement with affected Tribes to comment on methodologies may take up to 60 days per review period.</li></ul>	<ul style="list-style-type: none"><li>During Initial Site Characterization</li><li>Prior to Application and Permit Approvals</li></ul>	Select descriptor.
Hist/Cultural-5 – Cultural Resources Awareness Training	<b>Hist/Cultural-5 – Cultural Resources Awareness Training:</b> Provide cultural resources awareness training to new construction, operation and maintenance, upgrade, and modification personnel.	This Mitigation Measure ensures that project personnel are aware of regulations, protections, consequences, and procedures for an inadvertent discovery of cultural materials during new construction, operation and maintenance, upgrade, and modification.	<ul style="list-style-type: none"><li>Training would consist of an overview of the applicable regulations for the project, the types of resources that may be encountered, the procedures from any applicable monitoring and discovery plan, and procedures for inadvertent discovery of resources or human remains.</li><li>Interested parties, particularly DAHP and affected Tribes, should be included in the development of this training.</li><li>Affected Tribes may want to conduct training of the crew themselves or may request that an archaeologist familiar with the archaeology of the region conduct the training.</li><li>Training by a Secretary of the Interior-qualified archaeologist or a Tribal member of an affected Tribe will be more comprehensive and educational than the Washington State Inadvertent Discovery Protocol.</li><li>The protocol for inadvertent discoveries may change depending on the presence or absence of an archaeological or Tribal Monitor.</li><li>Training should be taken by all crew, regardless of their role, including laborers, inspectors, and project managers.</li><li>A copy of the Inadvertent Discovery Plan should be physically present on site each day that work is being conducted.</li></ul>	<ul style="list-style-type: none"><li>Prior to Site Preparation</li><li>During Operation and Maintenance</li></ul>	Select descriptor.

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
Hist/Cultural-6 – Trenchless Construction for Known Archaeological Resources	<b>Hist/Cultural-6 – Trenchless Construction for Known Archaeological Resources:</b> Use trenchless construction methods where feasible to mitigate physical and visual, adverse environmental impacts to known archaeological resources.	Trenchless construction methods can be used to install subsurface cable where entry and exit pits are located outside of boundaries of cultural resources, Tribal Resources, or Tribal Cultural Properties. Trenchless construction reduces surface disruption as well as the visual presence of hanging cables, therefore minimizing potential adverse environmental impacts on resources.	<ul style="list-style-type: none"><li>▪ Additional work plans would be needed, and archaeological testing may be required to establish site depth for appropriate trenchless construction usage as a mitigation option.</li><li>▪ Cables should be deeply buried to avoid deeper archaeological deposits.</li><li>▪ A cultural resource survey should be conducted in any location where trenchless construction is recommended.</li><li>▪ The survey should include subsurface testing to determine the horizontal and vertical extent of cultural resources that may be physically impacted.</li><li>▪ Entry and exit pits should be located outside of archaeological sites.</li><li>▪ Entry and exit pits should be clearly marked on project maps and provided to DAHP and affected Tribes.</li><li>▪ The monitoring of trenchless construction should be used to avoid cultural resources.</li><li>▪ Archaeological and/or Tribal monitoring is recommended.</li><li>▪ Entry and exit pits should be visually inspected, and soil samples should be screened to identify if cultural resources were impacted.</li></ul>	<ul style="list-style-type: none"><li>▪ Prior to Application and Permit Approvals</li><li>▪ During Site Construction</li></ul>	Select descriptor.

**APE** = area of potential effect; **CLGs** = certified local governments; **DAHP** = Washington State Department of Archaeology and Historic Preservation; **EFSEC** = Washington State Energy Facility Site Evaluation Council; **HDD** = horizontal directional drilling; **NRHP** = National Register of Historic Places; **ROW** = right-of-way; **SEPA** = State Environmental Policy Act; **TCP** = Traditional Cultural Place; **WISAARD** = Washington Information System for Architectural and Archaeological Records Data



# A3.1-1.18 Mitigation Measures Identified in Section 3.16 Socioeconomics and Environmental Justice

Mitigation Measure ID	Mitigation Measure	Rationale	Additional Guidance	Implementation Schedule	Implementation Status
SE-1 — Analysis of Housing Market	<b>SE-1 – Analysis of Housing Market:</b> Complete an analysis of the temporary housing market.	This Mitigation Measure aims to address potential adverse environmental impacts on temporary housing and property values. It assesses the potential impacts on temporary housing, identifying when and what type of mitigation would be necessary.	<ul style="list-style-type: none"><li>▪ Applicants would provide a current analysis of the availability of temporary housing for workers.</li><li>▪ Indicators of insufficient temporary housing can include, but are not limited to, high demand and low supply, poor quality and unsuitability, unaffordability, or negative social impact.</li><li>▪ If there is insufficient temporary housing, applicants would present alternative housing options for workers coming from outside the community.</li><li>▪ Although many factors influence property values, the analysis should consider the conditions in which the project could impact property values (i.e., proximity, easement access requirements, restrictions). The analysis may cite studies that link changes in property values to transmission facility construction.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.
SE-2 – Engage Vulnerable Populations and Overburdened Communities	<b>SE-2 – Engage Vulnerable Populations and Overburdened Communities:</b> Identify and engage community leaders and organizations from within vulnerable populations and overburdened communities. These community organizers would be listed within a community engagement plan. This plan would also include a community worker training initiative in which education and job training programs are made accessible to vulnerable populations and overburdened communities.	This Mitigation Measure aims to ensure vulnerable populations and overburdened communities can participate in the energy transition through active engagement and equal access to employment opportunities. This measure promotes stimulation and diversification of the local economy, prepares workers for a variety of industries, and offers local employment opportunities, thereby minimizing the need for worker relocation. Community engagement and worker training programs can greatly contribute to the revitalization of overburdened communities by addressing socioeconomic disparities and promoting environmental justice.	<p>For project-specific applications:</p> <ul style="list-style-type: none"><li>▪ Define vulnerable and overburdened communities using demographic data, environmental justice mapping tools (e.g., EPA EJScreen), and consultation with local agencies.</li><li>▪ Develop a community engagement plan that includes:<ul style="list-style-type: none"><li>○ A list of identified community leaders and organizations.</li><li>○ Culturally appropriate outreach methods (e.g., multilingual materials, community meetings).</li><li>○ Feedback mechanisms to incorporate community input into project decisions.</li></ul></li><li>▪ Establish a community worker training initiative that provides:<ul style="list-style-type: none"><li>○ Job readiness programs tailored to local workforce needs.</li><li>○ Access to apprenticeships, certifications, and on-the-job training.</li><li>○ Partnerships with local educational institutions and workforce development agencies.</li></ul></li><li>▪ Document engagement and training efforts in the project-specific application, including participation metrics, program outcomes, and adaptive strategies.</li><li>▪ Coordinate with the SEPA Lead Agency and relevant state agencies to ensure alignment with environmental justice policies and workforce development goals.</li></ul>	<ul style="list-style-type: none"><li>▪ During Initial Site Characterization</li><li>▪ Prior to Application and Permit Approvals</li></ul>	Select descriptor.

EPA = U.S. Environmental Protection Agency; SEPA = State Environmental Policy Act

This Page Intentionally Left Blank

# References

- APLIC (Avian Power Line Interaction Committee). 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Washington, D.C.: Edison Electric Institute and APLIC. Accessed January 23, 2025. <https://www.resolutionmineeis.us/sites/default/files/references/avian-power-line-2012.pdf>
- APLIC (Avian Power Line Interaction Committee). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Washington, D.C.: Edison Electric Institute and APLIC. Accessed January 22, 2025. <https://www.nrc.gov/docs/ML1224/ML12243A391.pdf>
- APLIC (Avian Power Line Interaction Committee). 2015. Best Management Practices for Electric Utilities in Sage-Grouse Habitat. Washington, D.C.: Edison Electric Institute and APLIC. Accessed January 23, 2025. [https://aplic.org/uploads/files/15646/SAGR%20BMP%20FINAL\\_June%202015.pdf](https://aplic.org/uploads/files/15646/SAGR%20BMP%20FINAL_June%202015.pdf)
- Ecology (Washington State Department of Ecology). 2009. Shoreline Master Programs Handbook, Chapter 11: Vegetation Conservation, Buffers and Setbacks. Publication No. 11-06-010. Olympia, Washington. Accessed January 23, 2025. <https://apps.ecology.wa.gov/publications/parts/1106010part11.pdf>
- Knight, K. 2009. Land Use Planning for Salmon, Steelhead and Trout. Olympia, Washington: Washington Department of Fish and Wildlife. Accessed January 24, 2025. <https://wdfw.wa.gov/publications/00033>
- Martin, C. J., E. W. Bork, and S. E. Nielsen. 2022. Mortality of Grassland Birds Increases with Transmission Lines. Avian Conservation and Ecology, 17(1):17. Accessed January 24, 2025. [https://ace-lab.ca/assets/b/Martin%20et%20al.%20\(2022\)%20ACE-ECO.pdf](https://ace-lab.ca/assets/b/Martin%20et%20al.%20(2022)%20ACE-ECO.pdf)
- Rentz, T., A. Windrope, K. Folkerts, and J. Azerrad. 2020. Riparian Ecosystems, Volume 2: Management Recommendations. Olympia, Washington: Habitat Program, Washington Department of Fish and Wildlife. Accessed January 24, 2025. <https://wdfw.wa.gov/sites/default/files/publications/01988/wdfw01988.pdf>
- USFWS (U.S. Fish & Wildlife Service). 2010. Best Management Practices to Minimize Adverse Effects to Pacific Lamprey (*Entosphenus tridentatus*). Accessed January 24, 2025. <https://semspub.epa.gov/work/10/100016741.pdf>
- WDFW (Washington Department of Fish and Wildlife). 2018. Washington Department of Fish and Wildlife: Times when spawning or incubating salmonids are least likely to be within Washington State Freshwaters. Olympia, Washington. Accessed January 24, 2025. [https://wdfw.wa.gov/sites/default/files/2019-02/freshwater\\_incubation\\_avoidance\\_times.pdf](https://wdfw.wa.gov/sites/default/files/2019-02/freshwater_incubation_avoidance_times.pdf)
- WHCWG (Washington Wildlife Habitat Connectivity Working Group). 2012. Washington Connected Landscapes Project: Analysis of the Columbia Plateau Ecoregion. Olympia, Washington: Washington's Department of Fish and Wildlife and Department of Transportation. Accessed January 24, 2025. [https://waconnected.org/wp-content/themes/whcwg/docs/WHCWG\\_ColumbiaPlateauEcoregion\\_ExecSummary\\_2012.pdf](https://waconnected.org/wp-content/themes/whcwg/docs/WHCWG_ColumbiaPlateauEcoregion_ExecSummary_2012.pdf)
- WSDOT (Washington State Department of Transportation). 2023. Fish Exclusion - Protocol and Standards. Olympia, Washington. Accessed January 24, 2025. <https://wsdot.wa.gov/sites/default/files/2021-12/FishMoving-Policy-StandardsProtocols.pdf>

This Page Intentionally Left Blank