Chapter 28 Consistency with State Substantive Standards

BPA is a federal agency subject to state regulation only if there has been a waiver of federal sovereign immunity through federal law, consistent with the supremacy clause of the U.S. Constitution. Certain federal laws, such as the Clean Water Act (CWA) and Clean Air Act (CAA), have provided this waiver of federal sovereign immunity, and BPA's activities thus can be regulated by state entities under these laws. The Federal Land Policy Management Act (FLPMA), 43 USC §1701 et seq., provides a limited waiver of federal sovereign

Words in **bold** and acronyms are defined in Chapter 32, Glossary and Acronyms.

immunity, such that federal agencies including BPA are required to comply with specific substantive provisions for environmental protection that may be identified by states for portions of the federal agency's activities that would be located on federal lands.

Notwithstanding these aspects of federal supremacy, BPA is committed to planning its transmission line projects to be consistent or compatible, to the extent practicable, with state plans and programs, as well as any substantive standards that these plans and programs may contain, even when not required by federal law. To work towards this goal, BPA typically provides project information relevant to state permitting processes to state entities with a potential interest in the project. In designing and carrying out its proposed projects, BPA also strives to meet or exceed the substantive standards and policies of state regulations.

To further memorialize this approach, BPA entered into a series of Memoranda of Understanding (MOUs) and Memoranda of Agreement (MOAs) in the 1980s with individual Pacific Northwest states concerning BPA's activities in each state, including Washington and Oregon (State of Washington and BPA 1983a, 1983b; State of Oregon and BPA 1981). Each MOU called for general cooperation between BPA and each state regarding BPA's activities in that state, and each MOA called for cooperation specifically on the siting of proposed federal transmission facility projects to be located in that state. Each MOA also called for the development of project-specific work plan agreements between BPA and the state for individual BPA transmission line projects to be located in that state.

In the MOU and MOA with the states of Washington and Oregon, the agencies that are designated with the responsibility for entering into and carrying out work plan agreements for each individual BPA transmission line project are Washington EFSEC and the Oregon DOE. Because the project would be located in both Washington and Oregon, BPA has entered into work plan agreements with EFSEC and ODOE for this project. Under these agreements, the state agencies have provided BPA with potentially applicable state substantive standards that they believe should be addressed in this EIS to aid state agency review of the project. It is the objective of BPA, EFSEC, and ODOE that by identifying and considering these standards as early as possible, the project can be designed to be consistent or compatible with these standards to the maximum extent practicable.

The remainder of this chapter identifies those state substantive standards that are potentially applicable to the project, and evaluates the extent to which the project would be consistent with these standards. This discussion is organized by the state agency that has established each standard, with the standards of each agency further organized by resource topic where appropriate. In most cases, BPA believes that implementation of its own design, construction,

and operation standards would serve to meet or exceed the state substantive standards that have been identified. However, in some cases, additional measures may be required to be consistent with a particular state standard. For any state standards where it is likely that consistency cannot be achieved, an explanation is provided.

28.1 Washington EFSEC Standards

Washington EFSEC is the state agency responsible for siting new energy facilities in the state of Washington, including certain thermal power plants, alternative energy facilities, natural gas pipelines, and electrical transmission lines. EFSEC's authority in this area is provided by RCW Chapter 80.50, and is implemented through WAC Title 463.

BPA's transmission lines are not subject to EFSEC's siting jurisdiction except for portions proposed to be located on federal lands administered by the BLM or are part of the National Forest System administered by the U.S. Forest Service. The proposed project would not be located on any such federal land. Nonetheless, BPA will seek to be consistent with EFSEC's substantive standards to the extent practicable.

The following EFSEC substantive standards from WAC Title 463 (WAC 463-26, 463-60, 463-72, and 463-74) are potentially applicable to the project:

28.1.1 Natural Environment—Energy and Natural Resources

- The application shall describe the rate of use and efficiency of consumption of energy and natural resources during both construction and operation of the proposed facility.
- The application shall describe the sources of supply, locations of use, types, amounts, and availability of energy or resources to be used or consumed during construction and operation of the facility.
- The application shall describe all nonrenewable resources that will be used, made inaccessible or unusable by construction and operation of the facility.
- The application shall describe conservation measures and/or renewable resources that will or could be used during construction and operation of the facility.

Consistency: General information on likely use and consumption of energy and natural resources is provided throughout the EIS. However, detailed information regarding the source, locations of use, and rate of use and efficiency of consumption of energy and other resources is beyond the scope of this EIS. Impacts on natural resources are addressed by resource in Chapters 5 through 22. Irreversible or irretrievable commitments of resources (both renewable and nonrenewable resources) are discussed in Chapter 25, Irreversible or Irretrievable Commitment of Resources.

• The application shall describe any scenic resources which may be affected by the facility or discharges from the facility.

Consistency: Chapters 5, 6, and 7 (Land, Recreation, and Visual Resources) describe the project's impact on visual resources including impacts on recreational areas. There would be no discharges from the transmission line but there would be stormwater discharge from the

substations. Through its compliance with the CWA, BPA seeks appropriate certifications and authorizations from state water quality regulatory agencies for its proposed projects. BPA would meet all applicable standards identified through this process to protect water quality. Substation designs would include stormwater detention ponds to control outflow (not required at Sundial Substation). Information concerning the project's potential impacts on water quality is provided in Chapter 15, Water. BPA's CWA compliance activities are described in Chapter 27, Consultation, Permits, and Review Requirements.

28.1.2 Transportation

- **Transportation systems**. The application shall identify all permanent transportation facilities impacted by the construction and operation of the energy facilities, the nature of the impacts, and the methods to mitigate impacts. Such impact identification, description, and mitigation shall, at least, take into account
 - Expected traffic volumes during construction, based on where the work force is expected to reside
 - o Access routes for moving heavy loads, construction materials, or equipment
 - Expected traffic volumes during normal operation of the facility
 - For transmission facilities, anticipated maintenance access
 - Consistency with local comprehensive transportation plans
- Vehicular traffic. The application shall describe existing roads, estimate volume, types, and routes of vehicular traffic which will arise from construction and operation of the facility. The applicant shall indicate the applicable standards to be utilized in improving existing roads and in constructing new permanent or temporary roads or access, and shall indicate the final disposition of new roads or access and identify who will maintain them.
- Waterborne, rail, and air traffic. The application shall describe existing railroads and other transportation facilities and indicate what additional access, if any, will be needed during planned construction and operation. The applicant shall indicate the applicable standards to be utilized in improving existing transportation facilities and in constructing new permanent or temporary access facilities, and shall indicate the final disposition of new access facilities and identify who will maintain them.
- **Parking**. The application shall identify existing and any additional parking areas or facilities which will be needed during construction and operation of the energy facility, and plans for maintenance and runoff control from the parking areas or facilities.
- Movement/circulation of people and goods. The application shall describe any change to the current movement or circulation of people or goods caused by construction or operation of the facility. The application shall indicate consideration of multipurpose utilization of rights of way and describe the measures to be employed to utilize, restore, or rehabilitate disturbed areas. The application shall describe the means proposed to ensure safe utilization of those areas under applicant's control where public access will be granted during project construction, operation, abandonment, termination, or when operations cease.
- **Traffic hazards**. The application shall identify all hazards to traffic caused by construction or operation of the facility. Except where security restrictions are imposed by the federal government the applicant shall indicate the manner in which fuels and

waste products are to be transported to and from the facility, including a designation of the specific routes to be utilized.

Consistency: Construction and improvement of the access road system for the project is discussed in Chapter 3, Project Components. Chapter 12, Transportation describes the project's general impacts on transportation resources. The movement or circulation of people or goods in certain areas may be temporarily affected during construction of the project. Potential impacts on water, rail, and air traffic are also addressed in Chapter 12. Road use during construction and operation and maintenance of the line would comply with regional transportation plans. Access roads constructed as part of the project would also be used during maintenance of the transmission line. Fuel would be transported to work sites using the same access roads discussed in Chapters 3 and 12. Staging areas that would be used to store construction materials and vehicles are discussed in Chapter 3.

28.1.3 Socioeconomic

- The application shall include a detailed socioeconomic impact analysis which identifies primary, secondary, and positive as well as negative impacts on the socioeconomic environment in the area potentially affected by the project, with particular attention to the impact of the proposed facility on population, work force, property values, housing, health facilities and services, education facilities, governmental services, and local economy. The study area shall include the area that may be affected by employment within a 1-hour commute distance of the project site. The analysis shall use the most recent data as published by the U.S. Census or state of Washington sources.
- The analysis shall include the following:
 - Population and growth rate data for the most current 10-year period for the county or counties and incorporated cities in the study area
 - Published forecast population figures for the study area for both the construction and operations periods
 - Numbers and percentages describing the race/ethnic composition of the cities and counties in the study area
 - A description of whether or not any minority or low-income populations would be displaced by this project or disproportionately impacted
 - The average annual work force size, total number of employed workers, and the number and percentage of unemployed workers including the year that data are most recently available. Employment numbers and percentage of the total work force should be provided for the primary employment sectors
 - An estimate by month of the average size of the project construction, operational work force by trade, and work force peak periods
 - An analysis of whether or not the locally available work force would be sufficient to meet the anticipated demand for direct workers and an estimate of the number of construction and operation workers that would be hired from outside of the study area if the locally available work force would not meet the demand
 - \circ $\;$ A list of the required trades for the proposed project construction
 - An estimate of how many direct or indirect operation and maintenance workers (including family members and/or dependents) would temporarily relocate
 - An estimate of how many workers would potentially commute on a daily basis and where they would originate

- The application shall describe the potential impact on housing needs, costs, or availability due to the influx of workers for construction and operation of the facility and include the following:
 - Housing data from the most recent 10-year period that data are available, including the total number of housing units in the study area, number of units occupied, number and percentage of vacant units, median home value, and median gross rent. A description of the available hotels, motels, bed and breakfasts, campgrounds, or other recreational facilities
 - How and where the direct construction and indirect work force would likely be housed. A description of the potential impacts on area hotels, motels, bed and breakfasts, campgrounds, and recreational facilities
 - Whether or not meeting the direct construction and indirect work force's housing needs might constrain the housing market for existing residents and whether or not increased demand could lead to increased median housing values or median gross rents and/or new housing construction. Describe mitigation plans, if needed, to meet shortfalls in housing needs for these direct and indirect work forces
- The application shall have an analysis of the economic factors including the following:
 - The approximate average hourly wage that would likely be paid to construction and operational workers, how these wage levels vary from existing wage levels in the study area, and estimate the expendable income that direct workers would likely spend within the study area
 - How much, and what types, of direct and indirect taxes would be paid during construction and operation of the project, and which jurisdictions would receive those tax revenues
 - The other overall economic benefits (including mitigation measures) and costs of the project on the economies of the county, the study area, and the state, as appropriate, during both the construction and operational periods
- The application shall describe the impacts, relationships, and plans for utilizing or mitigating impacts caused by construction or operation of the facility to the following public facilities and services:
 - o Fire
 - o Police
 - o Schools
 - Parks or other recreational facilities
 - Utilities
 - o Maintenance
 - Communications
 - Water/storm water
 - Sewer/solid waste
 - Other governmental services
- The application shall compare local government revenues generated by the project (e.g., property tax, sales tax, business and occupation tax, payroll taxes) with their additional service expenditures resulting from the project; and identify any potential gaps in expenditures and revenues during both construction and operation of the project. This discussion should also address potential temporal gaps in revenues and expenditures.

• To the degree that a project will have a primary or secondary negative impact on any element of the socioeconomic environment, the applicant is encouraged to work with local governments to avoid, minimize, or compensate for the negative impact. The term "local government" is defined to include cities, counties, school districts, fire districts, sewer districts, water districts, irrigation districts, or other special purpose districts.

Consistency: Chapter 11, Socioeconomics provides a detailed discussion of the socioeconomic impacts from the project including impacts on population, work force, property values, housing, health facilities and services, education facilities, governmental services, and the local economy in Cowlitz, Clark, and Multnomah counties.

28.1.4 Land Use and Zoning

• The council shall make a determination as to whether the proposed site is consistent and in compliance with land use plans and zoning ordinances pursuant to RCW 80.50.090 (2).

Consistency: Area-wide and local plan and program consistency is addressed in Chapter 27, Consultation, Permits, and Review Requirements. Potential impacts on land use are addressed in Chapter 5, Land.

28.1.5 Site Restoration and Preservation

When a site is subject to preservation or restoration pursuant to a plan as defined in WAC 463-72-040 through 463-72-060, the certificate holder shall conduct operations within terms of the plan; shall advise the council of unforeseen problems and other emergent circumstances at the site; and shall provide site monitoring pursuant to an authorized schedule. After approval of an initial site restoration plan pursuant to WAC 463-72-040, a certificate holder shall review its site restoration plan in light of relevant new conditions, technologies, and knowledge, and report to the council the results of its review, at least every 5 years or upon any change in project status. The council may direct the submission of a site preservation or restoration plan at any time during the development, construction, or operating life of a project based upon council's review of the project's status. The council may require such information and take or require such action as is appropriate to protect the environment and all segments of the public against risks or dangers resulting from conditions or activities at the site.

Consistency: Implementation of mitigation measures described in Chapter 3, Project Components, and those suggested at the end of some of the resource chapters, would reduce possible impacts during construction and maintenance and provide site restoration following construction.

28.1.6 Geology and Soils

• The seismicity standard for construction of energy facilities shall be the standards contained in the state building code.

Consistency: BPA would apply seismic standards applicable to transmission line and substation construction in its design specifications for the proposed transmission line and substations (see Chapter 14, Geology and Soils).

28.1.7 Water Quality

• Waste water discharges from projects under [EFSEC's] jurisdiction shall meet the requirements of applicable state water quality standards, Chapter 173-201A WAC, state groundwater quality standards, Chapter 173-200 WAC, state sediment management standards, Chapter 173-204A WAC, requirements of the Federal Water Pollution Control Act as amended (86 Stat 816,33 USC 1251, et seq.) and regulations promulgated thereunder.

Consistency: Through its compliance with the CWA, BPA seeks appropriate certifications and authorizations from state water quality regulatory agencies for its proposed projects. The project's consistency with state water quality standards is confirmed in part through a review of any wetlands fill permit proposed by the Corps. Section 401 of the CWA authorizes Ecology to review and certify proposed dredge and fill permits or other pollutant discharges to waters of the United States on non-federal lands or on federal land, if there has been a waiver of sovereign immunity. Ecology and the ODEQ are authorized to issue a Water Quality Certification under Section 401. BPA would meet all applicable standards identified through this process to protect water quality. Chapter 15, Water provides information on the project's potential effects on water quality, and Chapter 27, Consultation, Review, and Permit Requirements provides more information concerning BPA's CWA compliance activities.

28.1.8 Wetlands

- Wetland impacts shall be avoided wherever possible.
- Where impacts cannot be avoided, the applicant shall be required to take one or more of the following actions (in the following order of preference): Restore wetlands on upland sites that were formerly wetlands; create wetlands on disturbed upland sites; enhance significantly degraded wetlands; and preserve high-quality wetlands that are under imminent threat. Wetland mitigation actions proposed to compensate for project impacts shall not result in a net loss of wetland area except when the lost wetland area provides minimal functions and the mitigation action(s) will clearly result in a significant net gain in wetland functions as determined by a site-specific function assessment.

Consistency: In designing its projects, BPA attempts to avoid identified wetland areas where feasible. If wetlands cannot be avoided, BPA works to minimize potential impacts and compensate appropriately for unavoidable impacts. BPA would act consistently with EFSEC's standards related to wetlands during construction and maintenance of the proposed transmission line. Chapter 16, Wetlands provides information concerning the project's potential impacts on wetlands, and Chapter 27, Consultation, Review, and Permit Requirements provides more information concerning BPA's activities to comply with wetland regulations such as Sections 401 and 404 of the CWA.

28.1.9 Fish and Wildlife

- EFSEC encourages applicants to select sites that avoid impacts to any species on federal or state lists of endangered or threatened species or to priority species and habitats.
- An applicant must demonstrate no net loss of fish and wildlife habitat function and value.

- Restoration and enhancement are preferred over creation of habitats due to the difficulty in successfully creating habitat.
- Mitigation credits and debits shall be based on a scientifically valid measure of habitat function, value, and area.
- The ratios of replacement habitat to impacted habitat shall be greater than 1:1 to compensate for temporal losses, uncertainty of performance, and differences in functions and values.
- Fish and wildlife surveys shall be conducted during all seasons of the year to determine breeding, summer, winter, migratory usage, and habitat condition of the site.

Consistency: In designing its projects, BPA attempts to avoid impacts on fish and wildlife species where possible. Field surveys were conducted as needed in 2014, 2015, and will continue in 2016 to confirm the presence and/or absence of listed species in the project area. Potential impacts on ESA-listed species are discussed in Chapters 18, Wildlife and 19, Fish. These chapters also discuss potential effects to state-listed species and priority habitat and species, and recommend measures to mitigate impacts to species and habitat.

28.1.10 Air Quality

• Air emissions from energy facilities shall meet the requirements of applicable state air quality laws and regulations promulgated pursuant to the CAA, Chapter 70.94 RCW, and the Federal Clean Air Act (42 USC 7401 et seq.), and Chapter 463-78 WAC.

Consistency: To the extent that air emissions resulting from construction and maintenance of the transmission line and substation are regulated under state law, the project would comply with these regulations. Because operation of the proposed line would not result in any air emissions, other than maintenance and inspection vehicles and helicopters, there are no applicable standards for project operation (see Chapter 21, Air Quality).

28.1.11 Public Health and Safety

- The provisions of Chapter 173-303 WAC shall apply to the on-site activities, at energy facilities subject to this chapter, which involve the generation, storage, transportation, treatment or disposal of dangerous wastes.
- No person shall cause or permit noise to intrude into the property of another person which noise exceeds the maximum permissible noise levels set forth below in this section.
- The noise limitations established are as set forth in Table 28-1 after any applicable adjustments provided for herein are applied.
- Between the hours of 10 p.m. and 7 a.m. the applicable noise limitations shall be reduced by 10 dBA for receiving property within Class A environmental designations for noise abatement (EDNAs).
- At any hour of the day or night the applicable noise limitations may be exceeded for any receiving property by no more than: (i) 5 dBA for a total of 15 minutes in any 1-hour period; or (ii) 10 dBA for a total of 5 minutes in any 1-hour period; or (iii) 15 dBA for a total of 1.5 minutes in any 1-hour period.

• Sounds originating from temporary construction sites as a result of construction activity are exempt from these standards, except where such provisions relate to the reception of noise within Class A EDNAs between the hours of 10 p.m. and 7 a.m.

EDNA ¹ of Noise Source	EDNA of Receiving Property (dBA)		
	Class A	Class B	Class C
Class A	55	57	60
Class B	57	60	65
Class C	60	65	70
Notes: 1. EDNA: environmental des	ignations for noise ab	atement.	

Table 28-1 Noise Limitations

Consistency: BPA would comply with all applicable state regulations concerning the generation, storage, transportation, treatment, or disposal of dangerous wastes during construction and maintenance of the transmission line. BPA also would conduct its construction and maintenance activities for the project in conformance with EFSEC's standards concerning maximum permissible noise levels through using appropriate muffling devices on construction and maintenance equipment and limiting construction and maintenance to daytime and evening hours (see Chapter 9, Noise). Noise impacts during operation of the transmission line and substations would meet federal and state noise guidelines and standards.

28.2 Washington State Department of Natural Resources Standards

The project area includes state lands managed by WDNR and state and private lands regulated by WDNR. This agency manages uplands for many purposes, including protection of state and federal threatened and endangered species, revenue for school construction, and environmental protection. Lands held in trust to support public beneficiaries generate earnings that help build or remodel public schools and universities. These revenues come from timber harvest on state trust lands, as well as from leases to farmers and ranchers and leases for mineral exploration and wind power generation (WDNR 2009b). WDNR holds a forest riparian easement, and owns lands set aside for genetic reserves, a Natural Resource Conservation Area, and a Natural Preserves Area. BPA would obtain easements and permits as appropriate for any WDNR lands crossed by the project.

The project area includes state trust lands, State-Owned Aquatic Lands managed by WDNR, and private lands regulated by WDNR. Within its scope, the department has multiple responsibilities ranging from the management, disposition and acquisition of certain public trust lands including aquatic lands and natural areas, to regulation of timber harvest activities and fire protection on non-federal lands. The department collects, analyzes, and distributes scientific data about state plants. The Washington State Geologist is also part of the WDNR and maintains and provides information on geologic hazards throughout the state.

The following WDNR policies are potentially applicable to the project.

28.2.1 Compliance and Cooperation with other State and Federal Laws

- Policy 08-028: The department will comply with SEPA by managing activities on trust agricultural and grazing lands through a phased review process.
- Policy 08-035: The department will actively promote and maintain long-term relationships with public and private organizations that affect the agricultural and grazing program.
- Policy 14-018: The department will utilize the requirements of SEPA to communicate department objectives and outcomes; to consider local, regional and statewide interests and concerns; and to develop and analyze forest management strategies.
- Policy 14-022: In carrying out its management activities, the department will actively communicate and promote collaboration with trust beneficiaries; Tribes; local, state, and federal governments; stakeholders; and the public.
- The department will comply with Chapter 43.21C RCW SEPA and Chapter 197-11 WAC SEPA Rules for all non-exempt proposed actions as defined by the SEPA laws including Chapter 332-41 WAC WDNR SEPA Procedures.

Consistency: BPA is committed to planning its transmission line projects to be consistent or compatible with existing land uses to the extent practicable. Information concerning the project's potential impacts on agriculture and forested lands, and mitigation measures identified to reduce or eliminate impacts on those resources are provided in Chapters 5, Land; 6, Recreation; 11, Socioeconomics; and 17, Vegetation. Information regarding the Farmland Protection Policy Act, which directs federal agencies to identify and quantify adverse impacts on farmlands, can be found in Chapter 27, Consultation, Review, and Permit Requirements.

As described in the introduction to this chapter, BPA is working with Washington EFSEC to help ensure that this EIS is adoptable under SEPA for all state and local agencies. BPA also is working with WDNR directly to ensure WDNR has the information it needs for any required SEPA compliance. This EIS will help with this compliance through its analysis of the impacts of the project to the natural and built environments in Chapters 5 through 22, and the information provided in Appendix A, WDNR Lands Analysis.

28.2.2 Geology and Soils

- Policy 08-029: The department will actively maintain or enhance soil productivity and quality on agricultural and grazing lands.
- The provisions in Chapter 43.92 RCW shall apply to geologic hazards, which include assessment and mapping of seismic, landslide, and tsunami hazards, estimation of potential consequences, and likelihood of occurrence.

Consistency: In designing its projects, BPA attempts to reduce impacts on soil productivity by implementing mitigation measures as listed in Chapter 14, Geology and Soils. Geologic hazards are also taken into account during line and substation design; landslide-susceptible areas are avoided if possible, and towers and substations are designed to withstand seismic hazards. Where landslide-susceptible areas are unavoidable, BPA is conducting additional geotechnical

analyses to inform the location and design of access roads and towers. Chapter 14 and Appendix J discuss areas along the routes with landslide or seismic hazards.

28.2.3 Water Quality

- Policy 14-010: The department will assess the potential for significant cumulative impacts of department activities on watershed systems, and develop mitigation strategies as needed.
- Policy 14-011: Statewide, the department will allow for no net loss of acreage and function of wetlands, as defined by state forest practices rules.
- Policy 08-031: The department will maintain or enhance the quality and longevity of water resources originating from, flowing through, or applied on department-managed lands.

Consistency: BPA seeks appropriate certifications and authorizations from state water quality regulatory agencies and will meet all applicable standards identified through this process to protect water quality. Chapter 15, Water and Chapter 16, Wetlands, includes information concerning the project's potential impacts on water quality and wetlands and mitigation measures that would reduce those impacts.

28.2.4 Biological Resources

- Policy -008: The department will actively participate with public and private sectors in developing and implementing pest and weed management programs.
- Policy 08-030: The department will maintain and enhance desirable vegetative communities on trust lands used for crop production, grazing, and wildlife habitat when compatible with agricultural and grazing program goals.
- Policy 14-008: The department will defer from harvest old-growth stands (stands 5 acres and larger that originated naturally, before 1850), in order to help meet WDNR's Habitat Conservation Plan (HCP) and regulatory requirements, over forest targets, and social/cultural values.
- When in the best interest of the trust(s), the department will actively seek to transfer old-growth stands and areas containing very large diameter trees of high social or cultural significance out of the trust status, when full market value compensation to the trust(s) is secured. In seeking to transfer such stands out of trust status, the department will immediately prioritize old-growth stands that are not subject to protection under WDNR's HCP or other applicable regulations.
- The department will comply with Title 17 RCW Weeds, Rodents, and Pests.
- The department will comply with Chapter 15.58 RCW Washington Pesticide Control Act.

Consistency: BPA's vegetation management would be guided by its Transmission System Vegetation Management Program EIS (see Chapter 3, Project Components; BPA and USDOE 2002). BPA is working with WDFW and underlying landowners on appropriate seed mixes that could encourage wildlife foraging habitat. Additionally, BPA works with the county weed boards and landowners on area-wide or site-specific plans for noxious weed control as budgets permit Resource compensation, right-of-way easements, and land purchased in fee would be negotiated with WDNR

28.2.5 Cultural Resources

- Policy 14-016: The department will identify and protect significant historic and archaeological sites, consistent with state and federal law.
- Policy 08-034: The department will, within trust management obligations, protect significant archaeological and cultural resources on agricultural and grazing lands.
- The department will comply with PO06-001 Historical, Cultural, and Archeological sites.

Consistency: As discussed in Chapter 27, Consultation, Review, and Permit Requirements, BPA seeks to comply with all applicable laws and other directives for the management of cultural resources. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties on all lands affected by proposed projects. Through the evaluation of this project in this EIS (see Chapter 13, Cultural Resources) and compliance with the Section 106 process and other review requirements, BPA will act consistently with WDNR's potentially applicable cultural resource policies.

28.2.6 Land Use and Socioeconomics

- Policy 08-012: The department will sell valuable materials from and lease, permit or contract agricultural and grazing lands for other surface and subsurface uses when in the best interest of the trust beneficiaries. In such cases: Existing agricultural lessees will be compensated by subsequent users for loss when crops or authorized improvements are damaged, when the lease is terminated, or lease renewal negotiation is denied.
- Existing grazing lessees will be compensated by subsequent users for loss when crops or authorized improvements are damaged, when the lease is terminated, or lease renewal negotiation is denied.
- Policy 14-014: When managing public access and recreation use on forested state trust lands, the department will protect trust interests and seek to balance economic, ecological and social concerns. The department will work to control negative effects of designated or dispersed public access and use on forested state trust lands through collaboration with the public, user groups, other landowners, and other agencies and organizations.
- Chapter 332-52 WAC public access and recreation.
- RCW 79.10.120 Multiple uses compatible with financial obligations of trust management.
- RCW 79.10.125 Land open to public for fishing, hunting, and non-consumptive wildlife activities.
- RCW 79.36.440 Right-of-way for public roads.
- RCW 79.36.510 Utility pipe lines, transmission lines, etc.
- RCW 79.36.520 Utility pipe lines, transmission lines, etc. Procedure to acquire.
- RCW 79.36.530 Utility pipe lines Appraisal Certificate Reversion.
- RCW 79.38.040 Permits for use of roads.

Consistency: As described above, BPA is committed to planning its transmission line projects to be consistent or compatible with existing land uses to the extent practicable. Mitigation measures identified to reduce potential impacts on landowners and their lessees are provided in Chapter 5, Land, and Chapter 11, Socioeconomics.

28.2.7 Fish and Wildlife

- Policy 08-032: The department will recognize the natural resource values of riparian zones and implement management plans to maintain or enhance these zones.
- Policy 08-033: The department will avoid effects on plant and animal species considered endangered. Within trust management obligations, the department will avoid adverse effects on species considered threatened, and consider avoiding or lessening effects on species considered sensitive.
- Policy 14-009: The department will meet the requirements of federal and state laws and contractual requirements that protect endangered, threatened and sensitive species and their habitats.
- Policy 14-011 In Western Washington, the department will maintain or restore salmonid freshwater habitat on department-managed lands and contribute to the conservation of other aquatic and riparian obligate species through implementation of WDNR's HCP.

Consistency: As described above under consistency with EFSEC standards, BPA attempts to avoid impacts on fish and wildlife species where possible. Chapter 18, Wildlife, and Chapter 19, Fish display the listed and proposed species that are either known to occur or have the potential to occur in the project area, and also discuss the project's potential impacts on wildlife and fish, and mitigation measures to minimize those impacts. Due to the required safe operation of the transmission line, BPA must remove tall-growing vegetation in riparian zones. BPA is developing prescriptions in important riparian zones that are consistent with the Vegetation Management Program and transmission line safety, but that may allow more vegetation to be kept that provides important riparian function.

28.2.8 Transportation and Access

Policy 14-020 pertaining to forest roads in WDNR's Policy Manual (WDNR 2005) states the following:

- The department will develop and maintain forest roads to meet trust objectives and Board of Natural Resources policy, including protecting and enhancing the asset value.
- To minimize adverse environmental impacts, the department will rely on the requirements of WDNR's HCP, state forest practices rules and the State Environmental Policy Act, and will minimize the extent of the road network, consistent with other Board of Natural Resources policy.

In response to WDNR's policy and in order to achieve the regulatory requirements under Washington Forest Practices Act, a comprehensive discussion of WDNR standards for roads designed, constructed, maintained, and abandoned on state-managed lands was developed in WDNR's Forest Roads Guidebook (WDNR 2011a). Three general management practices characterize a small portion of the objectives and standards outlined in the Forest Roads Guidebook, but are representative of the considerations WDNR must make when adding a new road to the overall transportation system:

- Build no more new road than is necessary to accomplish and economically conduct harvest and/or management objectives for the basic plan of operations, regardless of whether a road is in sensitive areas or not.
- The protection of sensitive species and areas including, but not limited to, streams and watersheds is vital. Proper logging methods, road locations and construction techniques must be considered to mitigate a potential increase in erosion from forest areas and sediment delivery to surface water.
- Consider the overall transportation plan for a geographic area. Plan new roads that take into account transportation plans and needs for future sales and access. This will avoid construction of parallel roads or extra lengths of roads to access far corners that will be harvested in the future.

Consistency: The action alternatives cross WDNR-managed state lands where trees could be removed for new or improved roads. BPA has worked closely with WDNR to identify existing roads that could be used by BPA for construction and operation and maintenance of the project since many already exist on WDNR land and are used by WDNR mostly for logging. BPA and WDNR have determined trade-offs between identifying new roads that may minimize impacts on environmental resources and improving existing roads. BPA continues to work closely with WDNR to ensure that roads are sited in consideration of all existing and planned uses and environmental resources, existing access roads are improved appropriately, and crossing structures are identified and sized appropriately.

28.2.9 Washington's Forest Practices Act and Rules

WDNR's Forest Practices Program is responsible for the implementation of the state's Forest Practices Act and rules (Chapter 76.09 RCW and Chapter 222 WAC). The rules provide the framework for the protection of public resources on all state and private forest land and are a responsibility of forest landowners, timber owners and operators when conducting forest practices activities.

Consistency: Portions of all alternatives cross state or private lands managed for forest or timber and which are governed under the Forest Practices Act and Rules. Proposed amounts of timber removed on WDNR land is included in Appendix A. Trees would be removed within and outside of existing and planned right-of-way (danger trees). BPA continues to work closely with WDNR to identify the types and amounts of trees that need to be removed and where and how placement of right-of-way, towers, and roads might minimize interference with existing and planned timber harvests and practices. BPA also continues to work with WDNR to type streams, understand and identify riparian buffers and impacts, and identify mitigation.

28.2.10 State-Owned Aquatic Lands

WDNR is currently in negotiations with USFWS and NOAA Fisheries to develop an Aquatic Lands HCP which will cover aquatic lands under water bodies, including those proposed to be crossed by the project. Final conservation measures may change from those listed below once the Aquatic HCP is negotiated and approved and the Incidental Take Permit is developed for covered species and vegetation. Under the draft HCP, the following draft conservation measures are proposed to be implemented on a case-by-case basis as site-specific conditions warrant.

- Protection of Submerged Native Aquatic Vegetation. WDNR has identified freshwater and marine vegetation species to be protected. New activities must avoid existing freshwater native aquatic vegetation identified in the project area (see list of freshwater and marine vegetation species to be protected provided by WDNR Aquatic Lands HCP, November 2012). BPA has identified aquatic plants at SOAL crossings along the Preferred Alternative and has included this list in Appendix A.
- Species Work Windows. For the crossings listed in the Columbia, Coweeman, Kalama, Lewis, and Washougal rivers, WDFW species in-water work windows must be used for the timing of any construction, operation or maintenance activities, to protect listed and sensitive species and forage fish species in sensitive live history phases (see Listed and Sensitive Species provided by WDNR Aquatic Lands HCP, November 2012).
- Maintenance and Decommissioning. Lessees and grantees must remove unused, abandoned structures, and equipment from the lease or easement site. A timeframe for removal will be specified in the authorizing document.

Consistency: The action alternatives cross State Owned Aquatic Lands along the Columbia, Camas Slough, Cowlitz, Coweeman, Kalama, Lewis, East Fork Lewis, and Washougal rivers. Within the ordinary high water mark (OHWM), two existing towers would be removed and two new towers would be constructed in the existing right-of-way in the Columbia River on Ione Reef (see Chapter 3, Project Components). On Lady Island along the Camas Slough and within the OHWM, one existing tower would be removed and replaced with a new tower. On the east bank of the Washougal River and within the OHWM, two existing towers would be removed and replaced with two new towers. A few additional towers would be removed and replaced close to rivers but outside of the OHWM. Most structures would be at least 200 feet from the edge of river banks. No towers, other than the ones already described, or new or improved access roads would be placed in rivers. Depending on type and height, riparian vegetation would be removed along the rivers for safe operation of the line and development of access roads to towers. BPA continues to work closely with WDNR to identify the types and amounts of trees that need to be removed and how placement of the right-of-way, towers, and roads might minimize riparian clearing and potential impacts to aquatic species and other aquatic resources and activities.

28.2.11 Public Health and Safety

• The provisions of Chapter 332-24 WAC and Chapter 76.04 RCW shall apply to forest protection measures and operator responsibilities related to fire prevention and fire hazard abatement.

Consistency: BPA is committed to reducing the potential for fire during construction. Chapter 10, Public Health and Safety identifies mitigation measures to minimize potential health and safety risks from fire.

28.3 Washington Department of Fish and Wildlife Standards

WDFW serves as the state's principal agency on species protection and conservation. Legislative mandate RCW 77.04.012 established that wildlife, fish, and shellfish are property of the state and that WDFW is entrusted by and through the Fish and Wildlife Commission to "preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish" and "attempt to maximize the public recreational game fishing and hunting opportunities of all citizens."

In 2003, WDFW and a broad range of wind power stakeholders developed the WDFW Wind Power Guidelines (WDFW 2009a) to provide consistent statewide direction for development of land-based wind energy projects still protecting the state's wildlife and habitat. The guidelines were revised in 2009. Although the project is not a wind energy project, guidelines for impact avoidance and minimization that are potentially applicable to the project are included in the sections below.

28.3.1 Wildlife

• Where appropriate, develop in agricultural and other disturbed lands, including using existing transmission corridors and roads where possible.

Consistency: Where feasible, BPA typically considers transmission line alternatives that use existing rights-of-way or are routed across already disturbed areas such as agricultural lands, and attempts to use existing roads where possible. Chapters 2 through 4 discuss alternative development and placement of roads, and Chapter 5 provides information on potential impacts on land uses.

- Avoid high bird and bat aggregation areas, and areas used by sensitive status species.
- Encourage the protection of priority habitats and species.

Consistency: BPA attempts to route transmission lines away from high bird and bat aggregation areas and sensitive species' habitat where possible; however, because new lines most often extend from one specific area to another, route locations can be limited. Chapter 18, Wildlife describes the project's potential impacts on wildlife and mitigation measures identified to minimize those impacts.

• Minimize use of overhead collector lines, unless underground collector lines are not appropriate or feasible due to environmental conditions (e.g., topography, soil conductivity, environmental impacts, etc.).

Consistency: BPA would not construct collector lines for the project. Undergrounding of high-voltage (230- and 500-kV) transmission lines is usually not an option because of the greater environmental impacts and costs of undergrounding. Section 4.7, Alternatives Considered but Eliminated from Detailed Study, of this EIS provides information on alternatives eliminated from detailed consideration and Appendices D and D1 include the more detailed underground route studies.

• When overhead lines are used, use designs that avoid and minimize impacts to raptors and other birds (refer to APLIC guidelines regarding adequate conductor spacing and use of perch guards).

Consistency: BPA always designs conductor spacing to comply with Avian Power Line Interaction Committee guidelines (see Section 3.3, Conductors, of this EIS). BPA has also worked with WDFW to identify river crossing and spans where bird flight diverters may be installed.

• Use tubular towers to reduce the likelihood that birds will perch on towers and to possibly reduce the risk of collision. Avoid use of lattice towers, particularly those with horizontal cross-members.

Consistency: The industry standard design for towers for high-voltage transmission lines is steel lattice towers. This design also minimizes cost. Chapter 3, Project Components, provides information on the design of the proposed transmission line.

• Avoid using permanent tower types that employ guy wires. If guy wired towers are approved, encourage the requirement of bird flight diverters on the guy wires.

Consistency: BPA typically does not use guy wires on towers for its high-voltage transmission lines. In the event that guy wires are necessary, BPA would consider placing bird flight diverters on the guy wires if it is compatible with the tower design. Chapter 18 describes the proposed mitigation measures identified to minimize impacts on birds.

• Discourage the use of rodenticides to control rodents burrowing around towers.

Consistency: BPA does not use rodenticides.

• Minimize the use of lights on towers and facilities structures, in accordance with federal, state, and local requirements.

Consistency: BPA typically only uses lights on very tall towers (such as at river crossings) and towers near airports/heliports, in compliance with FAA requirements. Chapter 3 provides a discussion of tower lighting design and potential locations.

- Control noxious weeds in accordance with federal, state, and local laws.
- Encourage the control of noxious weeds that may occur from project disturbance.

Consistency: BPA controls weeds in accordance with federal laws, and also follows applicable state and local weed control laws to the extent practicable. Chapter 17, Vegetation, discusses proposed mitigation measures to reduce or eliminate the potential for the spread of noxious weeds under the action alternatives.

• Encourage the permitting authority to require a fire protection plan and a complete road siting and management plan that includes vehicle-driving speeds that minimize wildlife mortality.

Consistency: Because BPA is not subject to state or county permitting authorities, this guideline does not apply to the project. However, Chapter 10, Public Health and Safety does include

proposed mitigation for the safe operation of vehicles and construction equipment, and the development of safety plans that incorporate the underlying landowners existing safety plans.

• Minimize roads and stream crossings.

Consistency: BPA typically proposes to build or improve the minimum amount of roads needed to access the transmission line and avoid stream crossings where possible. Section 28.2.8, Transportation and Access, of this chapter, provides information on BPA's commitment to work with WDNR on access roads.

28.4 Washington State Department of Ecology Standards

The Washington State Department of Ecology (Ecology) is the state agency responsible for protecting air and water quality in the state of Washington, including management of shorelines and wetland areas and implementation of federal and state water pollution control laws and regulations.

28.4.1 Shorelines and Wetlands

The Coastal Zone Management Program is authorized by the Coastal Zone Management Act of 1972 and administered at the federal level by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management, Coastal Programs Division. Management of the program is delegated to the states participating in the program. In Washington, Ecology administers the program. The Coastal Zone Management Act requires federal development projects and activities directly affecting the coastal zone "shall be conducted in a manner which is, to the maximum extent practicable, consistent with approved state management programs" (Section 307(c)(1), (2)).

A federal agency or applicant for a federal license, permit, or financial assistance is responsible for determining whether the proposed activity may affect any natural resource, land use, or water use in Washington's coastal zone. Ecology will concur with a determination if the federal activity is consistent to the maximum extent practicable with the Washington Coastal Zone Management Program. Consistency with the state program is described below.

The Washington State Shoreline Management Act (the Act) establishes a planning program and regulatory permit system initiated at the local level under state guidance. Ecology is designated as the lead state agency, and local governments exercise primary authority for implementing the Act. Each local government's master program consists of a shoreline inventory and a "shoreline master program" (SMP) to regulate shoreline uses. The SMP for Clark County, adopted in September 2012 as Chapter 13 of the Clark County Comprehensive Plan, and Cowlitz County, adopted in 1977 regulates land uses affecting shorelines of the state. The proposed transmission facilities would impact state shorelines if the towers or access roads would be located within 200 feet of them or their associated wetlands.

Regulations pertaining to utilities are listed in Section 16 of the Act. Utility services in shoreline areas designated Conservancy, Rural, and Urban Environments, shall be permitted subject to the following regulations:

- All utility systems shall be underground when such undergrounding is economically feasible.
- All clearing for installation of maintenance shall be kept to the minimum width necessary.
- Upon completion of the installation of utility systems or of any maintenance, disturbed areas shall be restored as nearly as practical to the pre-existing condition.
- Utilities shall be located above flood levels wherever practical.

Consistency: The action alternatives would cross the Columbia River, Camas Slough, Lewis River, East Fork Lewis River, Coweeman River, Cowlitz River, Washougal River, Kalama River, and many other creeks and streams, and wetlands identified in Chapter 15, Water and Chapter 16, Wetlands. Towers and access roads would be placed as far from the water's edge as feasible to avoid floodplains; however, some towers and access roads would be placed within floodplains and within 200 feet of the shoreline. Clearing would be kept to a minimum; however, all tall-growing vegetation in the right-of-way would need to be removed for safe operation of the line. Exceptions to this would be in deep canyons or draws. Disturbed areas would be reseeded. Chapters 15 and 16 discuss mitigation measures identified to reduce potential impacts on water and wetlands. Appendix O discusses substantive compliance with the Act in more detail for the Preferred Alternative.

Section 401 consistency with the Clean Water Act for fill or pollutant discharge into waters of the United States including wetlands is a requirement and is discussed in Section 28.1.7, Water Quality, of this chapter.

Isolated wetlands are considered by the Corps to be those wetlands that are not adjacent to or do not have a surface water connection to navigable waters of the United States, such as streams, rivers, lakes or marine waters. The Corps determines whether a wetland meets federal definition for being isolated. In 2001, a U.S. Supreme Court ruling (Solid Waste Agency of North Cook County v. United States Army Corps of Engineers et al., also known as the SWANCC decision) determined that isolated wetlands are no longer subject to the regulation of Section 404 of the CWA. Although not protected under federal law, isolated wetlands are still protected at the state level by Ecology through the State Water Pollution Control Act (Chapter 90.48 RCW).

Because isolated wetlands can perform many of the same ecological functions as other wetlands, the state Water Pollution Control Act makes no distinction between isolated versus other wetlands meeting the federal definition. Instead, all "waters of the state" are covered by the Act. According to Ecology, "waters of the state" include all marine waters, streams, rivers, lakes, ponds, springs, and wetlands. Any activity that may cause pollution, including discharge of fill or other alteration of the physical, chemical or biological properties of isolated wetlands is subject to regulation under the Water Pollution Control Act. The standards of review are the "state water quality standards for surface waters of the state of Washington" (WAC 173-201A) equivalent to the standards required for 401 water-quality certification. If the Corps determines that a wetland is isolated and not within its jurisdiction, impacts to the isolated wetland in Washington would need to be authorized by Ecology through an Administrative Order.

Consistency: BPA is working with Ecology to determine if isolated wetlands would be impacted by project alternatives in Washington. If impacts are proposed, BPA would obtain authorization from Ecology and implement compensatory mitigation.

In 2005, Ecology published a synthesis of the science related to freshwater wetlands in Washington. This publication included two volumes which outline Ecology recommendations for wetland buffers and protection measures: 1) Wetlands in Washington, Volume 1 - A Synthesis of the Science (Publication #05-06-006); and 2) Volume 2 - Guidance for Protecting and Managing Wetlands (Publication #05-06-008). These documents provide guidance for protection of wetlands in Washington based upon the scores derived from the 2004 wetland rating system (Hruby, 2004). Wetlands identified within the Preferred Alternative have been rated using the 2004 wetland rating system.

Ecology has developed wetland buffer width recommendations and alternatives taking into account several environmental factors including: 1) wetland category, 2) habitat score, 3) land use intensity, and 4) special characteristics (e.g., bog, forested, natural heritage site, etc.). Using Buffer Alternative 3, the buffer recommendations are summarized in Tables 8C-7 of Appendix 8-C in Volume 2. According to the guidance document, "utility corridor or right-of-way shared by several utilities and including access/maintenance roads" is considered to be of "moderate land use." Standard wetland buffers recommended for "moderate land use" using Alternative 3 are summarized below.

Wetland Category	Wetland Characteristics	Buffer Width (feet) for Moderate Land Use
	High habitat score (29-36 points)	225
	Moderate habitat score (20-28 points)	110
Category I	High water quality score (24-32 points); low habitat score (less than 20)	75
	Not meeting above characteristics	75
	High habitat score (29-36 points)	225
	Moderate habitat score (20-28 points)	110
Category II	High water quality score (24-32 points); low habitat score (less than 20)	75
	Not meeting above characteristics	75
Moderate habitat score (20-28 points)		110
Category III	Low habitat score (less than 20 points)	60
Category IV	Category IV Score for all 3 basic functions is less than 30 points	

Table 28-2Standard Buffer Width Recommended for Wetlands with Moderate
Land Use Intensity, Buffer Alternative 3, Appendix 8-C in Volume 2 –
Guidance for Protecting and Managing Wetlands (2005)

In October 2013, Ecology published an *Update on Wetland Buffers: the State of the Science* (Publication #13-06-11). This document generally reaffirmed the science behind the buffer recommendations by wetland category and habitat features outlined above.

Consistency: BPA is working with Ecology to determine wetland buffer widths for wetlands potentially impacted by action alternatives in Washington.

28.4.2 Water Quality

The following Ecology substantive standards from Chapter 90.48 RCW, Chapter 173-216 WAC, Chapter 173-220 WAC, Chapter 173-200 WAC, and Chapter 173-201A WAC are potentially applicable to the proposed project:

- Proper erosion and sediment control practices must be used on the construction site and adjacent areas to prevent upland sediments from entering surface water. All ground disturbances by construction activities must be stabilized. When appropriate, use native vegetation typical of the site.
- Any operation which would generate a waste discharge or have the potential to impact the quality of state waters, must receive specific prior authorization from Ecology.
- Routine inspections and maintenance of all erosion and sediment control BMPs are recommended both during and after development of the sites.
- A SWPPP for the project site may be required and should be developed by a qualified person(s). Erosion and sediment control measures in the plan must be implemented prior to any clearing, grading, or construction. These control measures must be effective to prevent soil from being carried into surface water by stormwater runoff. Sand, silt, and soil can damage aquatic habitat and are considered pollutants. The plan must be upgraded as necessary during the construction period.
- Proper disposal of construction debris must be in such a manner that debris cannot enter the natural stormwater drainage system or cause water quality degradation of surface waters. Dumpsters and refuse collection containers shall be durable, corrosion resistant, nonabsorbent, water tight, and have close fitting covers. If spillage or leakage does occur, the waste shall be picked up immediately and returned to the container and the area properly cleaned.
- The operator of a construction site that disturbs one acre or more of total land area, and which has or will have a discharge of stormwater to a surface water or to a storm sewer, must apply for coverage under Ecology's NPDES Construction Stormwater General Permit.

Consistency: Water quality standards are discussed in Chapter 27, Consultation, Review, and Permit Requirements. BPA seeks appropriate certifications and authorizations from state water quality regulatory agencies and will meet all applicable standards identified through this process to protect water quality. Chapters 14, Geology and Soils, and 15, Water, provide information on the project's potential impacts on soils and water quality, and identify mitigation measures that would reduce potential impacts. Section 401 certification of consistency with the Clean Water Act for fill or pollutant discharge of waters of the United States is a requirement and is discussed in Section 28.1.7, Water Quality, and in Chapter 27, Consultation, Review, and Permit Requirements.

28.4.3 Air Quality

Ecology substantive standards from Chapter 42.21A RCW and Chapter 173-400 WAC related to general regulations of air pollution sources establish attainable standards and rules applicable to control or prevention of emissions of air contaminants. Ecology suggests the development of a Fugitive Dust Control Plan (FCDP) to identify project-related fugitive dust sources,

implementation procedures for dust abatement, and how dust control measures will comply with applicable provisions outlined in WAC 173-400-040.

Consistency: See Chapter 14, Geology and Soils and Chapter 21, Air Quality for a discussion of dust and air quality impacts and for mitigation measures to control emissions and fugitive dust. The Federal Construction General Permit that applies to federal projects directs the NPDES permit holder to address dust control within the Stormwater Pollution Prevention Plan that will be prepared for this project. BPA directs its contractors to use the regionally appropriate BMPs from the Western or Eastern Washington Stormwater Manual, in particular BMP C140 which outlines design and installation specifications for dust control.

28.5 Washington State Department of Archaeology and Historic Preservation Standards

The Department of Archaeology and Historic Preservation works with agencies, Tribes, private citizens, and developers to identify and develop protection strategies to ensure that Washington's cultural heritage is not lost. In Washington, archaeological sites and Native American graves are protected from known disturbance by a variety of state laws. Federal law applies to all federal and Native American lands, and Washington state law applies to all other lands. The following state laws on archaeology and historic preservation for the management of cultural resources are potentially applicable to the I-5 Project:

- Indian Graves and Records (RCW 27.44)
- Archaeological Sites and Resources (RCW 27.53)
- Archaeological Excavation and Removal Permit (WAC 25-48)
- Abandoned and Historic Cemeteries and Historic Graves (RCW 68.60)
- Advisory Council on Historic Preservation (WAC 25-12)

Consistency: As discussed in Chapter 13, Cultural Resources, Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. If a federal agency plans to undertake a type of activity that could affect historic properties, it must consult with the appropriate State Historic Preservation Officer to make an assessment of adverse effects on identified historic properties. BPA would comply with NHPA and all applicable state laws.

28.6 Oregon Department of Energy

The Oregon Department of Energy (ODOE) is the state agency responsible for overseeing the development of large energy facilities in Oregon. A proposed facility must undergo a review process before the Oregon Energy Facility Siting Council (EFSC) that meets the siting standards before being issued a site certificate, which authorizes a developer to construct and operate an energy facility. BPA's transmission lines are not subject to EFSC's siting jurisdiction. Nonetheless, BPA will seek to be consistent with EFSC's substantive standards to the extent practicable.

The following substantive standards from Oregon Administrative Rules (OAR) Chapter 345, Division 22 and Division 24 are potentially applicable to the project:

28.6.1 Soil and Geologic Resources

- The provisions in OAR 345-022-0022 require that applicants consider potential impacts to soil resources.
- The provisions in OAR 345-022-0020 require that applicants design, engineer, and construct proposed facilities to avoid dangers to human safety presented by seismic hazards expected to result from maximum probably ground motion events.

Consistency: BPA would apply seismic standards applicable to transmission line and substation construction in its design specifications for the proposed transmission line (see Chapter 14, Geology and Soils).

28.6.2 Land Use

- The provisions in OAR 345-022-0030 ensure that proposed energy facilities will comply with Oregon's land use planning goals adopted by the Land Conservation and Development Commission (LCDC).
- EFSC must decide whether the proposed energy facility complies with LCDC rules and goals directly applicable to the facility under ORS 197.646(3).

Consistency: BPA is committed to planning its transmission line projects to be consistent or compatible with existing land uses to the extent practicable. Chapter 5, Land provides a discussion of mitigation measures identified to reduce potential impacts on land use and ownership.

28.6.3 Fish and Wildlife Habitat

- The provisions in OAR 345-022-0060 require that proposed facilities comply with habitat mitigation goals and standards of ODFW.
- The provisions in OAR 345-022-0070 require that applicants provide appropriate studies that identify state-listed threatened or endangered species that could be affected by the proposed energy facility. Applicants should consult with the Oregon Department of Agriculture (ODA) and ODFW.

Consistency: In designing its projects, BPA attempts to avoid impacts on fish and wildlife species where possible. Field surveys were conducted as needed in spring 2014, 2015, and will continue in 2016 to confirm the presence and/or absence of listed species in the project area. Potential impacts on ESA-listed species and state-listed species and priority habitat are discussed in Chapter 18, Wildlife and Chapter 19, Fish. These chapters also discuss potential effects to state-listed species and priority habitat and species, and recommend measures to mitigate impacts to species and habitat.

28.6.4 Visual Resources

The provisions in OAR 345-022-0080 (Scenic Resources) protect scenic values that local land use or federal management plans identify as significant or important. Proposed facilities affecting scenic values identified as significant must propose appropriate measures to reduce impacts.

Consistency: Chapter 7, Visual Resources, provides a discussion of impacts on visual resources and mitigation measures to lessen those impacts.

28.6.5 Historic, Cultural, and Archaeological Resources

• The provisions in OAR 345-022-0090 protect public interest in preserving historic, cultural, or archaeologically significant places. Applicants must conduct appropriate surveys to identify and avoid places of potential significance. If the project involves construction on an archaeological site, the applicant may need a permit from the SHPO.

Consistency: As discussed in Chapter 27, Consultation, Review, and Permit Requirements, BPA seeks to comply with all applicable laws and other directives for the management of cultural resources. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties on all lands affected by proposed projects. Through the evaluation of this project in this EIS (see Chapter 13, Cultural Resources) and compliance with the Section 106 process and other review requirements, BPA will act consistently with ODOE's potentially applicable cultural resource policies.

28.6.6 Recreation

- The provisions in OAR 345-022-0100 require evaluation of potential impact to recreational opportunities at the construction site or in the surrounding area. If significant impact is likely, the Council may require avoidance or mitigation measures to reduce impact to recreational opportunities.
- Impacts to protected state and national areas specified in OAR 345-022-0040 will be sufficiently mitigated to less than significant impact.

Consistency: Chapter 6, Recreation describes impacts on recreation areas in the project area and mitigation measures to lessen those impacts.

28.6.7 Socioeconomics

• The provisions in OAR 345-022-0110 require applicants to assess proposed facility needs for water, wastewater disposal, storm water, and solid waste. Expected population increases, impacts to housing, traffic safety, police, and fire protection, heath care and schools must also be analyzed for expected temporary and permanent impacts.

Consistency: Chapter 11, Socioeconomics describes potential impacts on socioeconomics for the project and mitigation measures to lessen those impacts.

28.6.8 Public Health and Safety

- ORS Chapter 467.020 and 467.030 relate to Oregon Department of Environmental Quality (ODEQ) noise regulation for energy facilities. OAR 340-035-0035 establishes noise control regulations for industry and commerce, including energy facilities.
- No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 28-1.
- Provisions in OAR 345-022-0120 require applicants to plan to minimize solid waste and wastewater generated during construction and operation of the proposed facility. Applicants must propose methods to handle waste through collection, storage and disposal.
- The applicant should consult with DEQ to list all hazardous materials potentially stored or used at the facility site during construction and operation as well as ensure compliance with Oregon Revised Statutes) (ORS) Chapters 465 and 466 related to use, clean up, and disposal of hazardous materials.

Consistency: BPA would comply with all applicable state regulations concerning the generation, storage, transportation, treatment or disposal of dangerous wastes during construction and maintenance of the proposed transmission line (see Chapter 10, Public Health and Safety). BPA also would conduct project construction activities in conformance with DEQ standards for maximum permissible noise levels using appropriate muffling devices on construction equipment and limiting construction to daytime and evening hours (see Chapter 9, Noise).

28.6.9 Air Quality

• Provisions in OAR 345-024-05000 provide specific standards for base load gas plants, non-base load power plants, and non-generating energy facilities that emit carbon dioxide. The following limitations are in place:

0	Base load gas plants	0.675 lb. CO ₂ / kWh
0	Non-base load gas plants	0.675 lb. CO ₂ / kWh
0	Non-generating facilities	0.504 lb. CO ₂ / horsepower-hour

Consistency: To the extent that air emissions resulting from construction and maintenance of the project are regulated under state law, the project would comply with these regulations (see Chapter 21, Air Quality). Vehicle use during operation and maintenance of the transmission line and substations would result in annual emissions below EPA's mandatory reporting threshold, as described in Chapter 21. There are no applicable air emissions standards for actual project operation.

28.6.10 Water Resources

• The Oregon Department of State Lands and the U.S. Army Corps of Engineers have a joint application process for issuing permits for work conducted within waters of the State. ODSL will require a removal-fill permit if 50 cubic yards or more of material is removed, filled or altered within a jurisdictional water of the State. The removal-fill

permit will be issued separately from the 404 permit issued by the U.S. Army Corps of Engineers.

• A Limited Water Rights permit is required if new water rights are necessary for the project.

Consistency: Through its compliance with the CWA, BPA seeks appropriate certifications and authorizations from state water quality regulatory agencies for its proposed projects. BPA will meet all applicable standards identified through this process to protect water quality from construction and operation of the proposed transmission line, substations, and access roads. In designing its projects, BPA attempts to avoid identified wetland areas where feasible. If wetlands cannot be avoided, BPA works to minimize potential impacts and compensate appropriately for unavoidable impacts. BPA would act consistently with standards related to wetlands during construction and operation and maintenance of the project. Chapter 15, Water and Chapter 16, Wetlands provide additional information concerning the project's potential impacts on water quality, and Chapter 27, Consultation, Review, and Permit Requirements provides information concerning BPA's CWA compliance activities.