SCOPING SUMMARY

Prepared for:
U.S. Forest Service, Mt. Hood National Forest
16400 Champion Way
Sandy, OR 97055

Prepared by:
EnviroIssues
1515 SW Fifth Ave., Suite 1022
Portland, OR 97201

October 20, 2010

TABLE OF CONTENTS

APPENDICES

HOW TO USE THIS REPORT

The U.S. Forest Service (USFS) is the lead federal agency responsible for the National Environmental Policy Act (NEPA) process as it relates to the proposed Cascade Crossing Transmission Project (Cascade Crossing). The purpose of this summary report is to summarize issue areas raised by individuals, organizations and agencies during the scoping comment period for this project.

This report summarizes all comments received during the scoping period, including those that may not specifically relate to the project and/or the project's effects to federal lands. The USFS, along with other federal agencies described below, will fully analyze these scoping comments to determine key issues of concern and help shape the environmental analysis and alternatives to be considered in the draft environmental impact statement (EIS).

This report also describes comment collection and processing methods, as well as methodology used for categorizing comments received. Comments are categorized and summarized into key themes; however the text of each individual comment received is not contained in the body of this report.

PROJECT DESCRIPTION

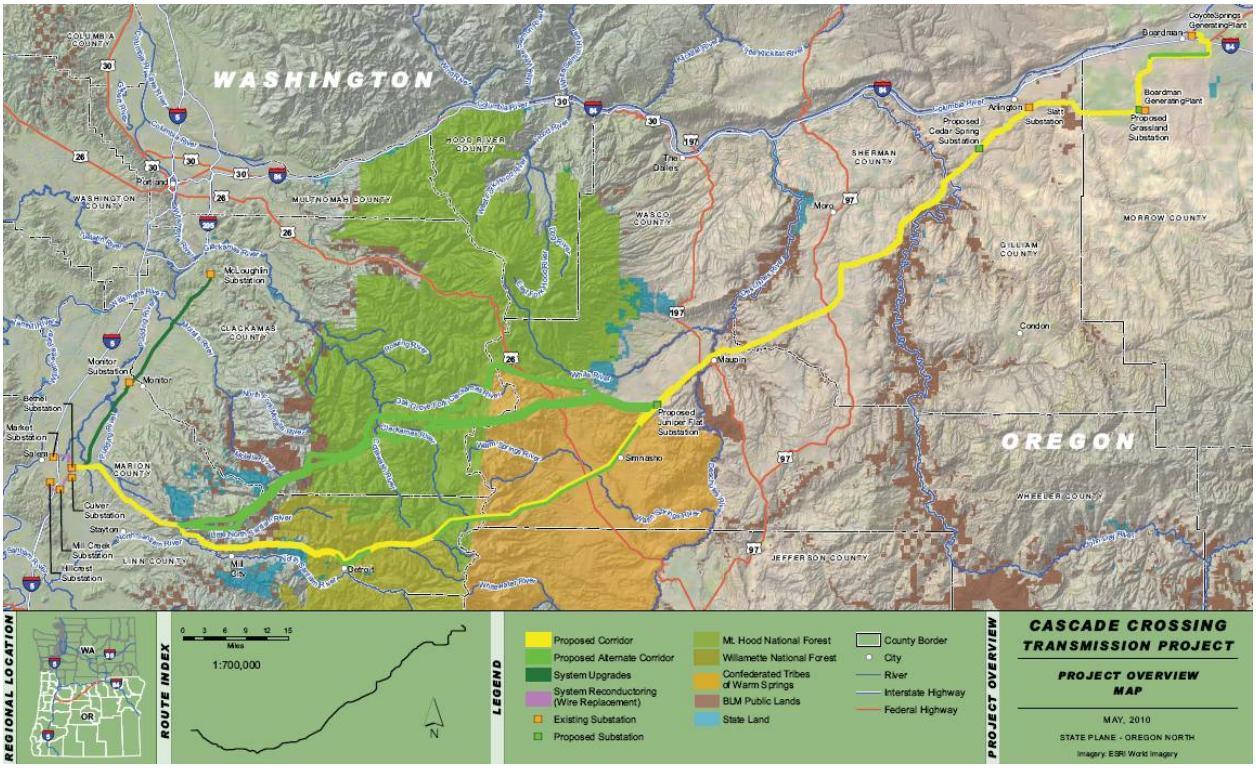
Portland General Electric (PGE) proposes to build, operate and maintain the Cascade Crossing Transmission Project, which includes approximately 22 miles of single circuit and 187 miles of double circuit, 500 kilovolt (kV) transmission line between Boardman and Salem, Oregon. In addition, PGE proposes to construct three new substations, expand two existing substations, and upgrade the existing transmission system near Salem and possibly the Willamette Valley. PGE has identified multiple potential route segments for the proposed transmission line. A project area overview map displaying these routes is shown in the following section.

The project proposes to cross private, tribal and public lands, including the Mt. Hood and Willamette national forests, as well as lands managed by the Bureau of Land Management (BLM), Department of Defense, U.S. Army Corps of Engineers and Bureau of Reclamation. As such, this project is subject to the NEPA process which requires federal agencies to evaluate the environmental effects of a proposed project prior to deciding whether to allow the proposed project to be built on federally-managed land.

The USFS is the lead federal agency responsible for NEPA compliance and is working cooperatively with the BLM (referred to in this document as "federal agencies"). NEPA is an open process designed to encourage citizen involvement and to help agencies make better-informed decisions.

In addition to the federal NEPA process, this project is also subject to the Oregon Department of Energy's Energy Facility Siting Council (ODOE-EFSC) process, which governs the approval and construction of large energy facilities within the state of Oregon. While this process is separate and distinct from the NEPA process, the federal agencies and the state are working closely together to align key milestones in each process and combine public involvement efforts whenever possible. For more on the state's EFSC process, please visit the EFSC section of the project website: www.cascadecrossingproject.com/statereview.aspx.

PROJECT OVERVIEW MAP



SCOPING PROCESS AND SOLICITATION OF COMMENTS

During the scoping period, the federal agencies and ODOE informed the public, landowners, government agencies, tribes and interested stakeholders about the proposed Cascade Crossing project and solicited their comments. All comments received were shared by the state and federal agencies and will be used to identify key issue areas and concerns to consider during their respective review processes. The federal agencies will analyze comments to develop issues that may drive alternatives, project design or mitigations.

The federal agencies, jointly with the ODOE, announced the scoping period through various means, held public scoping meetings, and invited the public to comment and ask questions. The scoping period and public meetings were announced in the *Federal Register*, letters were mailed to property owners near the proposed project and other interested stakeholders, press releases were sent to local media outlets, posters were distributed to local establishments, and display ads were placed in local newspapers. These activities are described in more detail in the following subsections.

FEDERAL REGISTER

The public scoping period officially began with the publication of a federal Notice of Intent (NOI) to prepare an EIS, which announced the public scoping meetings for Cascade Crossing. The NOI published in the *Federal Register* on June 1, 2010. The NOI can be found in Appendix A.

SCOPING NOTIFICATION LETTER

Scoping notification letters, produced jointly by the state and federal agencies, were sent to government agencies, elected officials, property owners near the proposed project, various non-governmental organizations and other interested stakeholders. The scoping letter briefly explained the project, the federal and state review processes, and announced the scoping period and the public meetings. Included with the scoping notification letter was a project overview map and flowcharts describing the NEPA and EFSC processes. This letter and attachments can be found in Appendix B. Over 5,700 scoping notifications were sent in late May 2010.

PRESS RELEASES

Three press releases were sent notifying the public and media about the scoping period and public meetings. The first press release was sent on May 28, 2010 announcing the filing of the NOI and the beginning of the scoping period and public meetings. The second press release was sent on June 10, 2010 to notify the public of the public meetings. The third press release was sent approximately two weeks prior to the close of the scoping period, on July 15, 2010, to remind the public to submit their comments. Copies of these press releases can be viewed in Appendix B.

POSTERS

Posters were distributed to local businesses and city halls to help announce the scoping meetings and comment period. Posters were distributed to the following locations in Oregon:

BOARDMAN	• Boardman City Hall • Boardman Family Foods • Boardman Hardware

	• Boardman Library • Boardman Pharmacy • Boardman Post Office • Boardman Select Market • Poppy's Take and Bake Pizza
MAUPIN	• Deschutes Pizza Company • Graves Market • Maupin City Hall • Maupin City Library • Maupin Hardware Services and Supply • Maupin Post Office • Southern Wasco County Library
MILL CITY	• Mill City City Hall • Mill City Library • Mill City Marketplace • Mill City Pharmacy • Mill City Post Office
OREGON CITY	• Clackamas County Library • Oregon City Hall • Oregon City Post Office • Oregon City Public Library • Pioneer Community Center
SALEM	• Salem City Hall • Salem Post Offices • Salem Public Library
MT. ANGEL	• City of Mt. Angel • Mt. Angel Community and Senior Center • Mt. Angel Public Library • Mt. Angel Drug
STAYTON	• Stayton City Hall • Stayton Library • Wilco (hardware store)
DETROIT	• Detroit City Hall • Mt. High Grocery and Gifts • Detroit Ranger Station
MORO	• Moro City Hall • Sherman County Public/School Library • Huskey's 97 Market and Ellee's Deli
GRASS VALLEY	• Grass Valley City Hall • Grass Valley Country Market

DISPLAY ADS

Display ads were placed in the following newspapers to announce the public scoping and information meetings, as well as the comment period:

Newspaper	Community	Date Published
North Morrow Times	Boardman, OR	June 1, 2010
The Oregonian	Portland, OR	June 14, 2010
Dalles Chronicle	The Dalles, OR	June 15, 2010
Salem Statesman Journal	Salem, OR	June 15, 2010
Canby Herald	Canby, OR	June 16, 2010
Madras Pioneer	Madras, OR	June 16, 2010
Molalla Pioneer	Molalla, OR	June 16, 2010
Clackamas Review	Clackamas County, OR	June 16, 2010
Oregon City News	Oregon City, OR	June 16, 2010
Hermiston Herald	Hermiston, OR	June 23, 2010
Mill City Independent Press	Mill City, OR	June 23, 2010
East Oregonian	Pendleton, OR	June 24, 2010

WEBSITE

Meeting notification information and comment period details were also posted on the project website at www.cascadecrossingproject.com, which is shared by the federal agencies, ODOE and PGE. The Cascade Crossing project website went live on May 25, 2010. From May through August, 2010, the project website averaged 629 total visitors and 406 unique visitors per month. Site visitors spent an average of four minutes and forty-four seconds on the website and viewed an average of 4.6 pages per visit.

METHODS FOR SUBMITTING COMMENTS

The federal agencies and ODOE encouraged comments through a variety of methods, including:

- Public meetings – see below for list of meetings
- Postal mail – 1515 SW Fifth Ave., Suite 1022, Portland, OR 97201
- E-mail – comments@cascadecrossingproject.com
- Website – www.cascadecrossingproject.com/comment
- Fax – (888) 291-6460 (toll-free)

The state and federal agencies shared all of the communications received to minimize duplication of comments and the need for commenters to send multiple communications.

PUBLIC SCOPING MEETINGS

The federal agencies, along with ODOE, co-hosted public information and scoping meetings throughout the project area to gather public comment and explain their respective review processes.

Five public scoping meetings were held at the locations listed below.

Meeting Date	Meeting Location	Meeting Attendance
June 21, 2010	Maupin, OR	14
June 23, 2010	Oregon City, OR	19
June 24, 2010	Salem, OR	27
June 29, 2010	Mill City, OR	37
July 1, 2010	Boardman, OR	21
TOTAL ATTENDANCE		**118**

The public scoping meetings were designed as open houses, each with two presentation and question and answer sessions. The meetings were held from 4:00 p.m. to 7:00 p.m., with the presentation and question and answer sessions at 4:30 p.m. and 6:00 p.m. The open house portion featured information stations throughout the room staffed by the appropriate subject matter experts from the federal and state agencies. PGE also had a station with staff on hand to answer questions about the proposed project. In addition, an interactive Geographic Information System (GIS) computer station with a projection system was available for landowners to view images of their individual properties.

Handouts were available for the public to take and large-scale maps were available for viewing. All meeting materials are available on the project website: www.cascadecrossingproject.com/documents.aspx.

PRESENTATION AND QUESTION AND ANSWER SESSIONS

The USFS, as the lead federal agency, and the ODOE gave a joint presentation twice per open house, explaining their respective review processes. The federal agencies explained the overall NEPA process and the next steps leading toward the draft EIS. ODOE presented information about the state review process. PGE gave a brief introductory presentation providing background on the project and describing the need for the project. A public questions and answers session followed each presentation. The federal agencies and state joint presentation is available in Appendix C.

INFORMATION STATIONS

The public meetings included the following open house stations:

- Sign-in and welcome

- Project overview
- NEPA process overview
- EFSC process overview
- Maps (including GIS map station)
- Portland General Electric
- Comments

Display boards presented at these stations are included in Appendix C.

HAND-OUTS

The following handouts were available at the public meetings:

- Project map
- Comment form
- NEPA process flow chart
- ODOE-EFSC process flow chart
- ODOE-EFSC siting standards
- ODOE-EFSC public participation process
- PGE project brochure

The comment form available at meetings can be found in Appendix C.

MAPS

The following maps were available to view at the public meetings:

- Project overview map
- Landownership maps (showing parcels)
- Resource maps
- Land use allocation maps
- Electronic map search, with staff to look up parcel information

The maps shown at the meetings are available for viewing at the project website: www.cascadecrossingproject.com/maps_meeting.aspx.

COMMENT PROCESSING METHODOLOGY

COMMUNICATIONS RECEIVED

The scoping period began on May 28, 2010, as was announced in the scoping notification letter, although the NOI did not publish in the *Federal Register* until June 1, 2010. The comment period closed on August 2, 2010. There were 149 communications received during the comment period through a variety of means (see "Methods for Submitting Comments" for more details). All communications received were reviewed and categorized by EnviroIssues. Categorized comments can be found in Appendix F.

Of the 149 communications received, 21 were submitted by government agencies, 15 were submitted by non-governmental organizations, 8 were submitted by businesses or business groups, and 105 were submitted by individuals. The communications highlighted a variety of issues, including land use types. Of the 149 communications submitted approximately 40 percent were comments specific to private land (including property owned by the commenter), approximately 11 percent were specific to federal land, and approximately 12 percent were specific to state, county and/or local land.

PROCESSING COMMUNICATIONS

Commenter contact information and the full text of each communication were recorded in a computer database. After the communications were entered in the database, EnviroIssues' staff read each communication to identify key themes and code unique comments. In many cases, communications contained multiple comments. Using a coding system that corresponded to comment categories, analysts coded each communication. Coded communications were then reviewed and checked for accuracy and consistency. Appendix D contains the coding categories used.

SUMMARIZATION

This report summarizes key themes and issue areas identified from the communications received. For the purposes of this summary, all comments were given equal weight, regardless of whether they were mentioned once or mentioned several times. This report does not seek to prioritize issue areas or track the number of comments each key theme category received. This report is meant to summarize the themes and areas of concern that will help guide the environmental analysis for the draft EIS.

COMMENT RESULTS PER TOPIC

ORGANIZATION OF THIS SECTION

The following sections are organized by categories based on the issues and concerns expressed during the scoping period. These issues and concerns are summarized by category. Each individual comment relating to the specific category is not shown nor is the number of times each comment was heard.

PGE'S PURPOSE AND NEED FOR THE PROJECT

Commenters discussed a variety of issues regarding PGE's stated purpose and need for the project. Commenters stated that the project is based on potential future needs which are contingent on other possible energy generating projects such as wind farms.

Commenters questioned whether the project would be necessary to address future power needs because:

- Oregon Public Utility Commission (OPUC) statistics indicate energy consumption in Oregon is flat and has not grown in the last decade.
- PGE's peak load has never exceeded the record high set in 1998.
- Statements made by PGE's chief executive officer indicate that he expects energy consumption to remain flat.
- Large energy consumers like businesses are shutting down or leaving the state.

Commenters recommended the project demonstrate need as required by EFSC and OPUC.

Some commenters questioned PGE's ability to predict future energy needs once alternative energy sources and energy-saving measures are implemented. Commenters questioned whether there were other means of relieving energy congestion on the present electrical grid, such as reduced pricing for energy used during non-peak hours. Commenters recommended including information about ongoing and planned energy production programs in the project area and how they may influence the need for the proposed project.

Commenters expressed concern about the type of energy that would be supported by the project. Some commenters disliked the purpose of the proposed transmission lines being used to transmit energy created by coal and natural gas. Other commenters stated that the proposed project is a necessity in order to access present and future wind resources in central Oregon.

Some commenters in support of wind development stated they did not understand how wind power projects necessitated a new transmission project. Commenters stated that the transmission line should not be justified by the use of renewable energy because wind farms and dams can be as harmful to the environment as power plants fueled by coal.

Commenters said the project is not necessary because the Bonneville Power Administration (BPA) just completed their own upgrade, the OPUC has not endorsed the need for the project, and the project may only benefit PGE investors and wind farm developers.

The City of Salem expressed support for the project because it will support economic development and improve the reliability of electricity in the region, which is critical for recruiting new businesses and supporting expansion of existing businesses.

Commenters also recommended the following, related to PGE's purpose and need for the project, be addressed in the draft EIS:

- Assess the project need according to the public interest and based on independent data and findings.
- Document the purpose and need of the lines in their present proposed locations. If unable to do so, then commenters recommended PGE expand the scope to include additional alternatives.
- Discuss the proposed project in the context of the larger energy market, including identification of existing electric power providers and clients, transmission systems and beneficiaries, and clearly describe how the need for the project has been determined.

PROJECT DEVELOPMENT AND APPROVAL PROCESS

GENERAL PROCESS DESIGN

Commenters wanted to know when a decision will be made on the project and whether there was a process in place for objections. Commenters expressed concerns that their comments would not be read by PGE and that PGE has not shown interest in the issues raised by the public.

PUBLIC NOTIFICATION

Commenters expressed concern that PGE had been planning the project for a long time and only recently provided information about the project to the public. They specifically mentioned that PGE did not provide reasonable notice to those affiliated with the Taylor Park private campground, farm businesses, and landowners in east Marion County, causing many landowners to miss the opportunity to comment.

Commenters also said PGE had not directly contacted landowners that would be affected.

INFORMATION AND MAPS

Commenters stated there was not enough information provided about the project to submit a comment. Commenters said the scoping maps provided to the public are unacceptable because it was difficult to determine where the alternate corridors exit and return to the existing corridor, which made it difficult for interested parties to provide substantive comments.

Commenters requested more detailed maps, such as quadrant maps identifying township, section and range, be available before the release of the draft EIS so interested parties could go out to sections of the proposed route to get an understanding of what the project looks like from the ground level. They also encouraged the use of Google Earth or other free, interactive software.

STAKEHOLDER ENGAGEMENT

Commenters requested the Breitenbush Hot Springs Retreat and Conference Center be included as a stakeholder and continually engaged in the decision-making process, specifically as it relates to tower siting, tower height and distance between towers to minimize viewshed impact as much as possible. Commenters requested the Breitenbush Hot Springs Retreat and Conference Center be involved with the USFS representatives in the development of best practices for watershed stewardship and expressed concern about past implementation of USFS best practices.

REGULATORY OBLIGATIONS AND DOCUMENTATION

COMPLIANCE WITH OTHER LAWS, REGULATIONS AND POLICIES

Many local jurisdictions and state and federal agencies submitted comments about the project, including those agencies designated “reviewing agencies” by the ODOE for their energy facility siting process. These agencies provided specific information regarding laws, regulations and policies on a variety of subjects.

Comments were received by the following agencies:

- U.S. Environmental Protection Agency (EPA).
- U.S. Fish and Wildlife Service (USFWS).
- Oregon state agencies, including:
    - Department of Environmental Quality (ODEQ).

    - Department of Fish and Wildlife (ODFW).
    - Department of Forestry (ODF).
    - Department of Land Conservation and Development (OLCD).
    - Department of State Lands (ODSL).
    - Marine Safety Board (OMSB).
    - Parks and Recreation Department (OPRD).
    - State Historic Preservation Office (OSHPO).
- Counties including:
    - Gilliam.
    - Marion.
    - Morrow.

DRAFT EIS APPROACH AND CONTENT

Commenters recommended the draft EIS should include a range of reasonable alternatives meeting the stated purpose and need for the project and that are responsive to the issues identified during the scoping process. The EPA recommended adhering to the guidance provided by the Council on Environmental Quality, which recommends that all reasonable alternatives should be considered, even if some of them could be outside the capability of the applicant or the jurisdiction of the agency and that the environmental impacts of the proposal and alternatives should be presented in comparative form.

Commenters recommended several surveys, plans, studies, disclosures and evaluations be included in the draft EIS. These requests are included in the following sections, according to the general topic area they would address within the draft EIS.

PERMITS

Commenters provided information about applications, permits and easements that may be required for the project. Local and state jurisdictions provided comments related to their jurisdiction's permits and permitting processes, which the project may need to obtain, including:

- Oregon state agencies, including:
    - Department of Environmental Quality.
    - Department of Forestry.
    - Department of State Lands.
- Counties including:
    - Gilliam.
    - Marion.
    - Morrow.

Additionally, the Wasco Electric Cooperative said it requires a crossing permit where the project's access roads or the transmission line cross over or under their underground or overhead power lines.

PROJECT DESIGN

GENERAL ROUTE PLANNING

Commenters expressed concern regarding the overall proposed path of the project, and questioned why the line will run to Salem when most of PGE's customers are in the Portland metropolitan area. Commenters believed PGE is ultimately trying to transmit power to the Portland metropolitan area, and is not using a direct route. They requested PGE show that a more direct route is not feasible, particularly because it could present a significant cost savings. Commenters also expressed concern about what they said was the opportunistic timing of the proposal given the current reduction in land values.

PHYSICAL DESIGN

Commenters requested PGE consider placing the transmission lines underground in appropriate areas to allow more protection of native ecosystems, visual resources and productive farmland. Commenters also stated that underground transmission lines would protect farm workers from potential electrocution, which is more common with overhead transmission lines.

Commenters suggested the project be designed to blend in to the surrounding landscape as much as possible, noting as an example that some cell phone towers are camouflaged as trees in forested areas or near parks.

Commenters requested PGE use their resources to develop more technologically advanced methods of transmitting electricity that focus on conserving land. Commenters suggested that PGE work with the Oregon Department of Transportation to purchase and utilize their surplus land.

Commenters also encouraged PGE to work closely with BPA to utilize the existing corridor as much as possible. Some suggested PGE work with the BPA to upgrade and share their towers, rather than creating a new transmission line right of way. Others suggested PGE only update, retrofit and expand their existing transmission lines and corridors, rather than build a new one. Commenters also suggested developing routes with rights of way less than 250 feet.

Commenters had several specific questions regarding project design on their properties, including:

- How close to a residence can the towers or substations be located?

- Where would rights of way be placed?
- What are the vegetation height limitations (15 or 20 feet) in rights of way?
- What are the minimum widths of the rights of way (250, 300, 600 or 1,200 feet)?
- Will another transmission line be added in the future next to this new proposed transmission line? Commenters were particularly concerned about this possibility due to the width of the rights of way PGE is proposing.
- How will disputes be resolved if a landowner plants crops in the right of way deemed unacceptable to PGE?
- How will landowners be compensated?
- Can landowners reject PGE's compensation offers?
- Will new towers replace the existing towers or go beside the existing towers?
- Will current easements be changed?
- Can the new 500 kV transmission line be placed on the current 230 kV towers?
- Since the proposed towers are larger and can be placed farther apart, will this cause the new transmission line to be located closer to homes?
- Will PGE work around existing pipeline easements?

TYPE OF POWER

Commenters had questions about how the project will interconnect with proposed wind farms. They specifically mentioned PGE's Biglow Canyon Wind Farm, BPA's Klondike III and Orion, and asked PGE to identify which projects they will provide transmission for and which ones BPA will provide for.

Commenters questioned what will happen to the transmission line when the Boardman Power Plant closes and the types of power to be transmitted in the future. Commenters expressed concern that PGE would continue transmitting energy generated with fossil fuels. Commenters recommended PGE explore solar and geothermal power options.

Commenters requested PGE focus more on energy conservation by increasing investments in energy conservation campaigns and credits. They also stated that increased conservation should be included in the no-action alternative.

ACCESS ROADS AND CONSTRUCTION

Commenters had general concerns about impacts to wildlife, historic trails, erosion and runoff caused by road construction, siting of tower pads and other support infrastructure.

GENERAL CONSTRUCTION

The ODEQ stated that when selecting the locations of support structures, staging yards and maintenance roads the project should take into consideration the proximity to surface waters, among other factors, and locate the infrastructure and staging areas away from water bodies when feasible to minimize the potential for impacts.

The Oregon State Marine Board requested that any structure placed over water be constructed and maintained to allow adequate vertical clearance for safe passage of all forms of boats.

Commenters requested the construction of a bridge or a major culvert where access roads cross the headwaters of Squirrel Creek and Clackamas River because the existing crossings are fords in live streams.

Commenters stated they preferred construction to occur on their property between April and October, rather than other times of the year.

Commenters recommended several ways to prevent and limit the impacts of road construction and roadway improvements including:

- Prioritize the utilization of existing road networks.
- Locate the lines near existing infrastructure to minimize the need for new road construction.
- Upgrade existing roads to modern standards to limit ground disturbance and reduce sediment input into surface water.
- Include surface stabilization in access road design.
- Limit the use of access roads by trucks and other heavy equipment during wet weather.
- Decommission any road built solely for construction purposes and not needed for ongoing maintenance after project completion.
- Use helicopters for access and construction operations where possible.
- Utilize robust drainage design and sediment containment measures.
- Upgrade existing culverts if they do not meet current fish passage and stormwater runoff standards.

Some commenters had site-specific concerns related to access and road construction, which included:

- Wasco Electric Cooperative – Stated their preference for construction cranes to be disassembled to legal road height and moved instead of performing “crane walks” to eliminate affecting Wasco Electric Cooperative lines and customers.

- Taylor Park – Commenters stated that construction would leave campsites inaccessible for an undetermined amount of time.

Commenters also recommended the following issues be studied in the draft EIS:

- Disclose the effects of roads necessary for construction and maintenance, especially soil compaction, erosion, water pollution, weeds, slope instability and habitat degradation.
- Identify the exact location of all new roads and the soil and slope conditions in those locations.
- Include project-specific best management practices to reduce impacts from access roads.

Further discussion of vegetation is included in the Natural Resources, Vegetation and Weeds section.

HABITAT CONSIDERATIONS

The ODFW stated that placement of access roads should avoid high priority habitats and species listed in the Oregon Conservation Strategy and areas with evidence of high wildlife activity. The USFWS stated that any new or upgraded road crossings (culverts, open pipe arches or bridges) should comply with the Region 6 USFS standards for fish passage and reflect state-of-the-art fluvial geomorphological design, regardless of land ownership.

The ODFW stated that all in-water work should be planned according to specific timing recommendations to avoid or minimize impacts to fish and other aquatic resources.

The ODFW also requested PGE take actions to retain existing snags and downed wood habitat elements within the construction corridor including staging areas to prevent impacts to species success.

The USFWS requested that post-construction, PGE should close all unnecessary and temporary construction roads on all land ownership types and revegetate these areas to restore pre-construction habitat conditions in conjunction with the best management practices of the affected federal and state land management agencies. The agency also recommended that PGE should limit the size of construction to the smallest area needed to meet the project's needs.

Further discussion of wildlife habitat is discussed in the Natural Resources, Fish and Wildlife sections.

HISTORIC TRAILS

Commenters requested PGE not use historic trails as access roads during construction and position access roads such that they are not a detriment to the preservation of historic trails. Further discussion

of historic trails is included in the Natural Resources, Natural and Cultural Resources, Native American Interests section.

MITIGATION AND MONITORING

HABITAT AND WILDLIFE MITIGATION

Commenters recommended PGE mitigate for any adverse environmental effects that cannot be avoided and provide a proposed mitigation and revegetation plan with detailed mitigation steps that will be taken.

The USFWS requested PGE comply with its mitigation policies or those of the ODFW. The agency also recommended drafting conservation agreements to ensure compensatory measures are implemented.

The EPA recommended the project be designed to include an environmental inspection and mitigation monitoring program to ensure compliance with all mitigation measures and assess their effectiveness. It also advised implementing mitigation in advance of the impacts to avoid habitat loss due to the lag time between the occurrence of the impact and successful mitigation. Commenters also requested PGE develop and implement a post-construction management and restoration plan.

The ODFW noted that many of PGE's proposed alternative alignments would impact Category I habitats. The mitigation goal for Category I habitat is no loss of either habitat quantity or quality. Acceptable mitigation approaches are therefore limited to avoidance of impacts through alternatives to the proposed action or no authorization of the activity if impacts cannot be avoided.

Commenters recommended several mitigation activities, which included:

- Creating a mitigation fund to acquire private land that is set aside for conservation purposes to improve habitat and species survival and compensate for wildlife losses due to habitat fragmentation and connectivity impacts of the lines as a whole.
- Planting native replacement trees to offset any unavoidable tree loss close to where the loss occurred. Native saplings should be used, if practicable, at a minimum ratio of 1:1.
- Assisting county, state, tribal or federal agencies with ongoing or planned forest or tree reclamation projects in affected watersheds.
- Replanting private property with native plants, including setting up watering systems while the plants take root.
- Restoring disturbed riparian habitat by planting native riparian vegetation.

- Working with the USFWS and other stakeholders to develop compensatory and/or capitol mitigation plans for all migratory bird habitats that will be impacted by project activities and lost, either for a meaningful period of time or permanently.
- The ODFW recommends PGE stockpile habitat elements such as downed wood, brush piles and duff, and replace these features after construction to minimize impacts to amphibians and reptiles.

The ODSL stated that if PGE wishes to receive a removal-fill permit it will have to complete compensatory wetland, compensatory non-wetland and temporary impacts mitigation plans.

Commenters also recommend PGE develop and implement a post-construction monitoring and mortality reporting system for avian and bat species in cooperation with the USFWS and state wildlife agencies. The USFWS also recommended PGE increase monitoring requirements for project elements sited in high-quality or high-risk areas. It also recommended PGE monitor its operations and continually seek to improve wildlife-related performance, study protocols, mitigation approaches and study methodologies to reduce future wildlife risks.

Commenters also recommended describing the monitoring program and how it will be used as an effective feedback mechanism so any needed adjustments can be made to the project to meet environmental objectives throughout the project lifespan.

Other habitat and vegetation issues are discussed in the Natural Resources section.

OTHER RESOURCES

Commenters also suggested the project provide mitigation for lost farmland. The ODLCD has standards requiring mitigation measures to minimize impacts on surrounding farmland "to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices."

Commenters requested PGE establish a process for mitigation, if needed, for any intrusion or damage done to historic trail remains and suggested potential mitigation measures.

Commenters identified non-regulatory tools such as the Oregon Conservation Strategy and information put together in support of the Western Governors Association Renewable Energy Zoning effort to identify areas for mitigation opportunities and areas that may offer the potential to leverage other conservation work at those mitigation sites.

ALTERNATIVES AND SITING

There were several comments related to siting the proposed transmission line. Commenters expressed their preferences for the line to be sited north or south of the existing corridor in relation to private property. In addition, commenters recommended use of existing and well-maintained access roads.

Commenters requested the project follow existing transmission corridors where possible because it avoids taking new private property, utilizes existing road infrastructure, does not create new viewshed impacts and prevents disturbance to undeveloped ecosystems. Commenters also stated that the line could be placed along existing road and freeway corridors for similar reasons.

Commenters recommended lands which are already impaired, such as degraded agricultural lands, continue to be a considered siting priority. Commenters also encouraged the use of the alternate route to site the line on tree farms as opposed to residential land. Commenters stated that timber crops and some tree farms are incompatible with transmission rights of way due to height restrictions.

Commenters expressed concerns about the length and indirectness of the current proposed route under the assumption that the electricity will ultimately be transmitted to the Portland metro area.

Alternatives suggested to shorten the route include:

- A route traveling along the north side of the Confederated Tribes of the Warm Springs Reservation and following a federally-designated energy corridor west-northwest through Clackamas County toward the McLoughlin Substation.
- An existing, unused corridor in east Clackamas County provides PGE with a direct and accessible route to Oregon City and would save about 80 miles in construction cost and avoid acquiring significant amounts of new right of way across exclusive farm use lands.
- Upgrading the current 230 kV PGE transmission line running east-west through Marion County in an existing PGE-owned right of way.
- Along the Santiam Highway corridor.
- A shorter route over federal lands that avoids impacts to farmlands.

Commenters suggested PGE has not demonstrated that other reasonable alternatives have been considered, and identified additional routes that they believed should be included in the analysis, including:

- A route to the proposed Grasslands Substation that was considered and eliminated due to comments by the City of Boardman and its citizens.

- A route along one of the proposed priority West-wide Energy Corridors. Commenters questioned whether PGE had attempted to engage in this larger regional planning process.
- A route following the proposed Palomar Gas Pipeline.

Additionally, commenters recommended including a no-action alternative in the draft EIS. In particular, commenters were interested in balancing any analysis of future technological advances in renewable energy sourcing that might justify this development for the public interest with analysis of the advances in conservation and smart grid opportunities to justify a no-action alternative.

Commenters had general concerns that the transmission line siting should avoid the following:

Natural Resources

- Bat migration areas.
- Bird migration areas.
- Ecologically significant unroaded areas greater than 1,000 acres.
- Critical and high-quality habitat.
- Mature and old-growth forests.
- Historic and scenic viewsheds, including along waterways.
- Inventoried roadless areas.
- Late successional reserves.

Water Quality

- Watersheds.
- Riparian areas.
- Wetlands.

Land Uses

- Recreation areas.
- Residential areas.
- Lands zoned for exclusive farm use.
- Farms under permanent conservation easements.
- Properties that already have a transmission line on their property.

Commenters also suggested location-specific siting recommendations, such as:

- Site the proposed transmission line near USFS Road 46 north of the existing transmission lines. If the transmission line goes to the south, then it will negatively impact the viewshed of the Breitenbush Hot Springs Retreat and Conference Center.

- Use the northern alternate route to Breitenbush Hot Springs Retreat and Conference Center and other associated mountain developments.
- Route the line through U.S. Navy Bombing Range land, rather than private farmland.
- Use the alternate route to avoid the private campground Taylor Park.
- Use the existing corridor where the east end of the existing BPA line leaves the Confederated Tribes of Warm Springs Reservation and enters the Mt. Hood National Forest to reduce impacts to national forest lands.
- Route the proposed line to head west from Coyote Springs Plant to Tower Road and then turn south to PGE's Boardman Power Plant for a more direct route.
- Route the proposed line to avoid a permanent conservation easement held by the American Farmland Trust along Segment 4, east of the Bethel Substation. This is a farm area dominated by grass seed production that requires burning.
- Consider an alternative route on Segment 4, west of Mehama, where the proposed route deviates from an existing transmission line corridor, reaching into active farming areas. An alternative route along the existing southerly transmission line corridor should be considered.
- Use existing rights of way when siting the proposed line across the John Day and Deschutes Wild and Scenic Rivers.
- Reduce impacts to Cottonwood Canyon State Park by siting the line on the most western side of the half-mile corridor.

Commenters stated PGE must demonstrate the utility facility is necessary for public service in order to be sited within an exclusive farm use zone. To demonstrate a utility facility is necessary, a project proponent must meet Oregon exclusive farm use regulations. Further discussion of need can be found in the PGE's Proposed Purpose and Need for the Project section, while discussion of zoning requirements can be found in Land Use.

SOCIOECONOMICS

COST TO LANDOWNERS

Commenters identified potential impacts to landowners caused by the proposed project including decreased property values, loss of business, disruption to farming operations, restrictions on future developments and fragmentation of property.

Commenters expressed concern about increased business liability due to the risk the proposed transmission line would pose to employees working around them or the public trespassing upon easements.

Commenters indicated restrictions imposed by the placement of the transmission facility would prevent certain types of crops from being raised including hazelnuts, tall Christmas trees, timber and crops that require burning. These restrictions would result in the loss of current, future or potential income for farmers. Commenters recommended assessing the impacts of the project on agricultural businesses.

Commenters also stated that landowners with existing transmission lines on their property are being unduly burdened by having an additional line added to their property. Commenters had concerns about whether they would be properly compensated. Commenters were also concerned about future plans to build cabins near the right of way area.

Commenters mentioned a number of additional potential costs they could incur as landowners due to the project, including:

- Long-term loss of timber production ground.
- Economic disadvantage due to farm parcels being fragmented.
- The ability of farming businesses to survive within the project's constraints on their operations.
- The loss of irreplaceable farmland.
- The inability of future generations to continue farming operations and receive comparable income.
- Not having a choice about how private land is used.
- Uncertainty about how to conduct home sales or business operations due to potential impacts of the project.
- Potential displacement from their home.
- The inability to find a comparable location that is well suited for specific types of agriculture or a home or campsite.

Commenters also had concerns about specific locations and land uses, which included:

- The Breitenbush Hot Springs Retreat and Conference Center was granted a new conditional use permit from Marion County allowing for construction of greenhouses on the land which would be impacted.
- Concern that campsites at the private campground, Taylor Park, may become permanently un-rentable.

Other agricultural and compensation issues are discussed in the Agriculture and Irrigation and Socioeconomics, Eminent Domain and Compensation sections, respectively.

INCOME

Commenters stated concerns about income loss due to project impacts, specifically to a private campground, a retreat facility, timberlands and farming operations.

Commenters stated that if several campsites were removed at the private campground, Taylor Park, present and future income would be lost and might affect the business' ability to continue to operate. Commenters stated that the Breitenbush Hot Springs Retreat and Conference Center may lose income if the project impacts its ability to draw guests. Commenters stated that both of these facilities draw guests to the areas and local businesses would also be affected.

Commenters noted the project could affect the ability of agricultural landowners and leaseholders to stay in business, particularly given small agricultural profit margins. Transmission towers make harvesting, maintenance and spraying difficult which increases costs and also makes the property less valuable to be leased. Commenters also stated that these impacts could affect future incomes and future generations within family-owned businesses. Commenters requested PGE be required to pay rent, compensate for lost income or purchase new equipment that can adequately work around the towers and wires.

Commenters also indentified that the project could impact timberland owners because it may force an early harvest of timber when prices are low and it would no longer provide planned future income due to height restrictions of vegetation underneath transmission lines.

EMPLOYMENT

Commenters were concerned that the project could impact employment in the Santiam Canyon area if the operations of the Breitenbush Hot Springs Retreat and Conference Center are affected. Commenters were also concerned about agricultural employment.

ECONOMY

Commenters stated concerns about the potential impacts of the project on local economies. One commenter said the project could cause economic harm to the Santiam Canyon area because it may cause a loss of recreational and residential development opportunities that have recently replaced lost timber revenue.

Gilliam County stated that the transmission line is needed to continue to make wind development possible, and the county needs the economic diversification provided by wind projects to replace the area's losses in the agricultural sector.

Several commenters stated that the project will cost ratepayers more and increase monthly electric bills. Commenters recommended the draft EIS disclose cost increases and impacts to local communities and ratepayers as a result of the project.

Some commenters stated that the project is not worth it given its high cost of development.

EMINENT DOMAIN AND COMPENSATION

Commenters stated that they were concerned about the project taking away their homes, properties or portions of their properties through eminent domain. Commenters stated that they would likely challenge the project's use of eminent domain.

Commenters also discussed their general concerns about compensation and several specific issues related to compensation. Commenters stated that they may not receive fair market value estimate for what their land is worth. They expressed concern about how PGE will compensate landowners for their property.

Commenters requested PGE also provide compensation for additional costs borne by landowners such as property devaluation, loss of patrons, leaseholders or potential renters, inconvenience of farming around towers and increased operational and maintenance costs. Commenters suggested PGE should pay rent for tower placement, similar to wind turbine towers.

HEALTH AND SAFETY

Commenters expressed concerns about possible health effects to people living, working and recreating under and/or near transmission lines. Commenters were particularly concerned about potential health risks such as cancer.

Commenters questioned whether there have been unbiased studies of the potential health risks of high voltage transmission lines and whether future studies would "increase the liability of risk to PGE and regulatory agencies."

PUBLIC SERVICES AND COMMUNITY SAFETY

Commenters discussed a variety of public services and community safety topics, including physical safety, equipment operation and general safety issues.

Physical safety concerns included risk of electrical shock. Commenters discussed the possibility of being shocked by touching equipment or working near or under the proposed transmission lines. Commenters questioned whether this would increase as the new transmission line is added to existing rights of way and whether the frequency of these events may impact hiring. In addition, commenters expressed concern about public safety with regard to siting this proposed transmission line within a right of way with two other transmission lines and its proximity to homes.

Commenters also recommended the draft EIS address any potential toxic hazards related to the application of pesticides and herbicides used for vegetation treatment, and describe what actions would be taken to assure that impacts by toxic substances released to the environment would be minimized.

Equipment operation issues noted include static electricity and shock from irrigated agriculture operations near the proposed transmission line. Commenters noted that static electricity is more of a concern in the winter. Commenters discussed their use of seasonal farm equipment which may exceed the height limits for operating under the transmission line.

The OMSB noted possible boating and navigation hazards associated with project structures in or over navigable waters and recommended ensuring adequate clearance between the transmission lines and the water surface.

ELECTROMAGNETIC FIELDS

Commenters questioned the possible impacts of electromagnetic fields (EMF) on human health and electrical equipment.

Commenters questioned the impacts of EMF on human health. Commenters discussed the possibility of mitigating for EMF effects on communities near the transmission line and recommended a buffer zone from the line. Commenters recommended limiting the strength of EMF in areas “accessible to the public, including roads, campgrounds and hiking trails.”

Commenters also expressed concerns about EMF potentially interfering with electronics and equipment. Technologies cited include telephones, internet, computers, global positioning systems, television and

AM/FM radio. Commenters recommended an evaluation of the impacts of spurious currents on digital farm equipment needs to be included in the draft EIS.

NOISE

Commenters expressed general concern about the noise caused by the proposed transmission line including buzzing and humming sounds. Commenters stated that if they already live near an existing transmission line, the increase in cumulative voltage along the corridor due to the project will cause an increase in total noise.

The OPRD expressed concerns about the noise of the lines in the proximity of Cottonwood Canyon State Park. Commenters requested the project meet the ODEQ's noise standards.

AESTHETICS

Many commenters expressed general concern that the project would impact the viewshed on their property and in natural, rural and scenic areas. Commenters stated that some of the existing towers are small while the new towers would be larger and have a more dramatic visual effect.

Commenters were concerned about the combined aesthetic impact of adding more towers to their viewshed and also expressed concern if the old towers remained in place in addition to the new towers.

The OPRD expressed concerns about protecting dark skies in the eastern portion of the project study area and recommended the draft EIS include a study of the light pollution from the lighting of the towers, lines and other structures to be built for the project.

Commenters expressed concern about impacts to the viewshed in specific areas. These areas included:

- Breitenbush Hot Springs Resort – Commenters were concerned the towers proposed by the project will be taller than the existing towers, which will cause them to be seen in many key guest areas of the resort.
- Taylor Park private campground – Commenters expressed concern that the large steel towers may impact the natural landscape of the area.
- Cottonwood Canyon State Park – The OPRD expressed concerns about viewshed impacts within the park from the rim and the canyon bottom, and particularly east of the park where the view is relatively unobstructed.

- Mongold State Park, Detroit Lake State Park and Silver Falls State Park – The OPRD also commented the project would impact the viewshed of these parks, which are dominated by farm and forest landscapes.

Commenters also had general concerns about viewshed impacts in the following scenic areas:

- Historic trails including:
    - Oregon Trail.
    - Upper Columbia Route.
    - Cutoff to Barlow Road.
    - Meek Cutoff.
    - Lewis and Clark Trail.
    - Klamath Trail.
    - Benjamin Bonneville Route.
    - Nathaniel Wyeth Route.
    - John Freemont Route.
- The Breitenbush River corridor.

CUMULATIVE IMPACTS

Commenters requested PGE disclose where potential new developments could be facilitated by the new transmission line and whether the area is more likely to see new development of biomass or wind facilities along the corridor.

Commenters identified existing transmission lines located on their property or in recreational areas and stated that a new transmission line would add to existing burden and impacts. The USFWS stated that PGE should analyze all interrelated and interconnected actions, cumulative impacts, and anticipated future actions or projects that will be associated with the project.

The EPA provided guidance on assessing the adequacy of the cumulative impacts assessment, in consideration of five key areas, which include:

- Resources, if any, being cumulatively impacted.
- Appropriate geographic area and the time over which the effects have occurred and will occur.
- All past, present and reasonably foreseeable future actions that have affected, are affecting or would affect resources of concern.
- A benchmark or baseline.
- Scientifically defensible threshold levels.

The agency also stated that the proposed project should assess the environmental impacts within a broader context and consider the effects of the proposed project when added to other past, present, and reasonably foreseeable future projects in and outside the project corridor.

Other recommendations for consideration in the draft EIS include:

- Evaluating effects of planned biomass or wind developments in the cumulative impacts analysis (including adverse effects of biomass feedstock acquisition).
- Including the connector lines from any existing or known electricity generation source in the cumulative impacts analysis as a foreseeable future action, if not included in this analysis as a connected project entirely.
- Considering if the project will ultimately support transmission for a gas-fired generation plant to replace the Boardman Power Plant. In that case, all associated development must be recognized in the cumulative impacts analysis including but not limited to a new gas-fired facility, importing development such as existing or proposed pipelines, use of existing infrastructure such as railtracks, roads, and other power lines, and waste removal from the retirement of the coal-fired generation plant.
- Analyzing any ongoing impacts from coal-powered plants if the Boardman Power Plant is not closed in 2020 or the potential effects of transitioning the site to other forms of energy production.
- Identifying and analyzing potential new roads and other necessary infrastructure if regular site visits will be required for ongoing non-native plant management.

LAND USE

Commenters said they were concerned about the project's compliance with zoning laws. Specifically, some commenters questioned whether the project violates land use laws because it does not follow the most direct route to PGE's service area.

Commenters recommended that any amendments to existing land use designations through the proposed project area should be circulated to the public as soon as practicable. Commenters provided guidance about local government zoning designations and whether the project would be compliant.

Commenters requested the draft EIS include any national or regional guidance that PGE used in siting the transmission corridor they are intending to build. Commenters inquired whether PGE had consulted any regional planning agencies to evaluate environmental impacts. The ODLCD also encouraged PGE to consider its proposal according to Oregon's Statewide Planning Program and described specific goals

within the program for which the project should seek compliance. Commenters stated that the project does not comply with EFSC's land use standard and has not demonstrated its entitlement to an exception.

Commenters provided several comments pertaining to federal lands. Commenters indentified certain categories of land uses they considered inappropriate for large-scale transmission lines that should be avoided on USFS- and BLM-managed lands. They selected these land types based on their important natural values and potential for damage from the construction, use and maintenance of transmission lines. These included:

- Wilderness Areas.
- Wilderness Study Areas.
- National Monuments.
- National Conservation Areas.
- Other lands within BLM's National Landscape Conservation System, such as Outstanding Natural Areas.
- National Historic and National Scenic Trails.
- National Wild, Scenic, and Recreational Rivers, study rivers and segments, and eligible rivers and segments.
- Areas of Critical Environmental Concern.
- Special Recreation Management Areas.
- Threatened, endangered and sensitive species habitat, as well as critical cores and linkages for wildlife habitat.
- Citizen-proposed wilderness areas.
- Other lands with wilderness characteristics.
- Late-successional reserves under the Northwest Forest Plan.
- Any lands that are included in pending legislation for designation in one of the above categories or would otherwise include provisions that prohibit siting of large-scale transmission lines.

Commenters also stated that the Mt. Hood and Willamette Land and Resource Management Plans are overdue for revision and do not provide sufficient guidance on the expansion of the energy transmission grid. Commenters expected that if the project causes any changes to the Land Resource Management Plans, PGE will utilize guidance for significant changes to a Land Resource Management Plan, which are described in the National Forest Management Act and for BLM under the Federal Land and Policy Management Act. Commenters further stated that if any amendments to these plans are anticipated, this information should have been disclosed in the scoping letter sent to the public.

Commenters recommended evaluating anticipated impacts to each designated Wild and Scenic River corridor, including the Clackamas, Deschutes and John Day Rivers. Commenters indicated the project crosses the John Day River, the Upper Clackamas River and the Lower Deschutes Rivers, all of which are State Scenic Waterways and would need to be reviewed by the OPRD in accordance with State Scenic Waterway regulations. Commenters also recommended the draft EIS discuss interim protective management of proposed Wild and Scenic River corridors prior to their official designation.

The Little North Fork of the Santiam River is also a State Scenic Waterway. The project is a quarter-mile outside of the State Scenic Waterway boundary, but the towers could pose a visual impact to the waterway. The proposed route will also cross the Blue Mountain Scenic Byway.

Commenters addressed site-specific land use concerns, which included:

- Crossing the Little North Fork Santiam, and then heading west, the project will cross established residential properties, a state park and impact the viewshed at the entry point of a Wild and Scenic River Corridor.
- Commenters stated the project is incompatible with the type of business operated at the Breitenbush Hot Springs Retreat and Conference Center. Commenters also stated that the project easement could potentially impact a recently approved planned development at the facility.

Commenters said the project was generally incompatible with forest and agricultural land types. Commenters addressed specific concerns about agricultural land uses, which are included in the Land Use and Agriculture and Irrigation sections.

AGRICULTURE AND IRRIGATION

Commenters indicated the proposed project would cross farmland at many points along the route. They stated that the project would impose restrictions on farmland activities including:

- Irrigation, including pivot irrigation.
- Field burning, comments stated this is required for growing creeping red fescue, hazelnuts, seeds and grains, and controlling pests and disease.
- Harvesting.
- Operating combines and other tall farm equipment.
- Aerial applications, including spray planes.
- Growing timber and tall Christmas trees.

Commenters stated that towers and rights of way over farmland create obstructions requiring additional maintenance and eliminate productive land. Additionally, the towers may impact efficiently farming the land and fragmentation of agricultural properties. Commenters emphasized that due to small profit margins in the farming industry even slight losses in efficiency could threaten the survival of a farming operation. Commenters suggested that farmland is already disappearing or impacted by other power lines and the project is further contributing to the loss of farmland in Oregon. Some commenters suggested the route was selected over farmland to reduce PGE's easement acquisition costs and stated that it was not valid justification for impacting farms.

Commenters stated that the project violates Oregon's Statewide Planning Goals and statutory protections for farmland and provided specific conflicts with these goals and laws as well as local conditional land use criteria. Commenters said the project crosses private lands zoned as exclusive farm use and PGE is required to demonstrate compliance with Oregon's regulations related to it.

Commenters stated that if routes are approved through exclusive farm use land, PGE is legally obligated to consult the owner of high-value farmland to locate and construct the transmission line "in a manner that minimizes the impact on farming operations."

Commenters mentioned specific areas of concern which included the portion of the corridor from the Mehama to Bethel substations and potential impacts to ponds with water rights that are used for irrigation. Commenters also identified a farm which produces Christmas trees that is currently under a conservation easement with the American Farmland Trust.

RECREATION

Commenters expressed concerns related to the project corridor and recreation opportunities, including loss of campgrounds, degradation of wilderness and trail experience, and impacts to public recreation on both public and private lands. Commenters recommended protecting public recreation areas impacted by the project, including those identified under Oregon's Scenic Waterway designation.

Commenters identified specific recreation areas that could be impacted by the transmission line project, which include:

- Parks and scenic areas, including Mt. Hood National Forest, Olallie Scenic Area and Cottonwood Canyon State Park
- State scenic waterways, including the North Fork of the Santiam River, John Day River Wild and Scenic River corridor and the Deschutes River Wild and Scenic River corridor.
- Camping areas, such as those in Taylor Park and Olallie Scenic Area.

- Existing trails, such as the Pacific Crest Trail in Mt. Hood National Forest.
- Public recreation facilities, such as Oregon Exposition Center's State Fairgrounds.

In addition to concerns about the loss of campsites in both public and private parks, commenters were concerned about noise impacts at the campgrounds and the removal of timber impacting wildlife utilizing the campground.

OPRD made a number of comments regarding possible impacts to state parks and scenic waterways, which are included earlier in this section. In addition, the ODLCD expressed concerns related to impacts on parks and waterways as they relate to impacts to historical, scenic and cultural resources, as well as to tourism and Oregon's economy.

Commenters also suggested identifying recreation opportunities that may be impacted during the project's construction and studying the impacts of construction of maintenance roads and towers, as well as vehicle traffic and exhaust, litter and noise.

NATURAL RESOURCES

FISH AND WILDLIFE

Commenters provided a range of comments on the effects of transmission line construction and operation on fish and wildlife in the project area. Commenters discussed impacts to wildlife and their habitat, as well as the scenic value of the area.

Commenters recommended conducting pre-disturbance surveys for protected species and making the results available in the draft EIS.

Commenters expressed concerns about potential impacts to wildlife related to right of way clearance and construction of the transmission lines, substations, access roads and ancillary facilities. Commenters asked about impacts such as disturbance, habitat fragmentation, exposure to contaminants and direct mortality. Commenters questioned how the transmission line conductors would affect wildlife.

Commenters recommended protecting biodiversity and limiting vehicular traffic on access roads to limit disturbances to wildlife. Commenters discussed that the project may serve as an opportunity to enhance wildlife habitat on federal lands.

State, federal and local agencies noted the need to conduct species surveys and assessments to identify potential impacts to wildlife and habitat areas. Such assessments include impacts to wildlife movement

patterns and habitat connectivity corridors. Agencies also listed specific wildlife plans, policies, requirements and regulations. Commenters noted that some habitats are Oregon Scenic Waterways, which include fish, wildlife and scientific values.

ODFW provided information regarding Oregon's habitat categorization policy goals and requirements. Commenters recommended addressing impacts to Oregon Conservation Strategy priority habitats. In addition, the agency also noted specific surface and ground water use reporting regarding affected fish and wildlife.

Other comments included:

- Requesting PGE share all relevant non-proprietary site and survey data concerning wildlife and plants with the USFWS.
- Recommending PGE initiate a biological workgroup to collaboratively discuss and resolve project-related issues concerning biological resources.

Specific areas identified with regard to wildlife concerns included: Taylor Park, Columbia Plateau ecoregion and Coyote Springs Wildlife Area.

AMPHIBIANS AND REPTILES

ODFW expressed concern about the impact of the project on reptiles and amphibians. Specific species include the Columbia spotted frog.

BIRDS

State, federal and local agencies noted the need to survey bird species and assess impacts to them, including nesting sites. Agencies also listed specific plans and requirements related to birds, including golden eagles and other raptors. Furthermore, the USFWS stated that the project should strive to protect breeding and foraging habitats of raptors including maintaining natural areas between the project and nesting/roosting perches, nest distance buffers to limit disturbance and seasonal restrictions on certain activities.

The USFWS also noted migratory birds are protected under the Migratory Bird Treaty Act and that migratory birds could be impacted throughout the project. The agency recommended discussing with it and state wildlife agencies how to re-route project activities and minimize project effects.

Commenters recommended the project adopt an avian protection plan and include activities related to it in the proposed action in the draft and final EIS.

There were a number of comments about bird migration routes being impacted by the proposed transmission line project. Commenters recommended developing habitat characterization maps to define the migratory bird habitats and associated migratory bird species that would be impacted by project construction. These maps should serve as the foundation for future discussions of avoidance, minimization, restoration, enhancement and conservation offsets for impacts to migratory bird habitats.

Commenters noted the potential for birds to collide with the transmission line towers and wires. Commenters recommended avoiding locating the project in bird migration routes.

Commenters were also concerned about the impacts to bird nesting and roosting. Others were concerned about possible increases in predation from raptors perching on towers.

Species and specific areas identified by commenters include:

- Species: ducks, geese, streaked horned lark, grouse, quail, long-billed curlew, bald eagles, golden eagles, ferruginous hawk, loggerhead shike and sage sparrow.
- Specific areas: Taylor Park, John Day River, Thirty Mile Creek and John Day Wildlife Refuge.

SMALL MAMMALS

Commenters discussed specific impacts on bat species from collision with transmission line towers and wires, as well as migratory, nesting and roosting interruptions. Commenters suggested avoiding bat migration areas.

The USFWS noted the need for bat species surveys in the project area. The agency recommended coordinating the results with it and the ODFW to re-route project activities and/or develop measures to minimize project effects.

The ODFW expressed concern about the impact of the project on burrowing small mammals.

Species and specific areas identified by commenters include:

- Species: Washington ground squirrels, bats, rabbits and squirrels.
- Specific areas: Taylor Park.

LARGE MAMMALS

The ODFW expressed concern about the impact of the project on game animals. Commenters stated that big game populations have declined recently, and the project may provide an opportunity to provide early seral vegetation, which would help support deer and elk populations.

Species and specific areas identified by commenters include:

- Species: deer and elk.
- Specific areas: Taylor Park.

FISH

Commenters recommended not disturbing anadromous fish habitat. The ODFW suggested potential impacts to fish "are related to erosion and degraded water quality caused by grading, clearing, and removal of riparian vegetation adjacent to waterways" and noted specific fish-related policies.

THREATENED, ENDANGERED AND SENSITIVE SPECIES

Commenters provided specific recommendations on threatened, endangered and sensitive species and identified species of concern which may be in the project area.

The USFWS recommended including a biological assessment and a description of the outcome of consultation with the USFWS under Section 7 of the Endangered Species Act.

Animal species and specific areas identified by commenters include:

- Species: burrowing owls, loggerhead shikes, long-billed curlews, white-tailed jack rabbits, grasshopper sparrows, sage sparrows, Washington ground squirrel, Oregon spotted frog, Fender's blue butterfly and Northern spotted owl.
- Specific areas: Boardman, Willow Creek and Willamette Valley.

Plant species and specific areas identified by commenters include:

- Plants: Willamette daisy, Bradshaw's lomatium, Kincaid's lupine and Nelson's checkermallow.
- Specific areas: Willamette Valley.

Habitat types identified by commenters include:

- Priority Habitats: rangeland, oak woodlands/oak savannah, upland and wet prairies, riparian areas, wetlands and old-growth forests.

Both state and federal agencies noted the need to identify the presence of any threatened, endangered or sensitive species and assess impacts to those species. Commenters recommended avoiding and/or minimizing project impacts to areas of known species of concern. In addition, many included construction and maintenance requirements associated with specific species of concern.

WETLANDS

Commenters were concerned about the potential stream temperature increases due to removal of riparian vegetation during right of way construction and maintenance, especially in areas where the transmission line right of way would be next to an existing right of way.

WATER AND WATER QUALITY

Commenters discussed a variety of water and water quality issues, including surface water, groundwater, Wild and Scenic Rivers, watersheds, riparian areas, sediments, waterway degradation, water crossings and water contamination.

Commenters identified sources and uses of surface water on their property, as well as rivers designated as Wild and Scenic Rivers, such as the Clackamas, Deschutes and John Day rivers. Commenters recommended protecting those rivers, as well as not disturbing stream beds and banks, riparian areas and anadromous fish habitat. Other recommendations included avoiding watersheds and riparian areas along these rivers.

Commenters discussed the possibility of waterway degradation due to tree clearing for construction of the right of way. Additionally, commenters recommended the analysis disclose effects of stream crossing related to "stream share and loss of large woody structure." Others questioned the effects of transmission line conductors on water. Commenters also noted that sediment delivery may come from use, modification and/or construction of access roads, as well as clearing of right of way and site restoration can increase the turbidity within streams.

Commenters expressed concerns about potential drinking water contamination from the proposed project's construction and operations. Specific concerns included contamination from runoff and herbicides from clearing and maintaining the right of way.

Commenters also discussed including the following in the draft EIS:

- Discuss alternatives to avoid if dredged or fill material would be discharged into waters of the U.S. If a discharge becomes necessary, discuss how potential impacts would be minimized and mitigated.

- Describe all waters that could be affected by the project and include maps that clearly identify all waters within the project area. The discussion should include acreages and channel lengths, habitat types, values, and functions of these waters.
- Disclose potential impacts and specific pollutants likely to impact waters.
- Document the project's consistency with applicable storm water permitting requirements and discuss specific mitigation measures that may be necessary or beneficial in reducing adverse impacts to water quality.
- Include data about existing road networks and evaluate the change in road miles and density that will occur because of the project and predicted impacts to water quality by roads.
- Describe existing restoration and enhancement efforts of impaired waters and how the proposed project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of impaired waters.

The USFWS recommended as part of the post-construction adaptive management plan for agency trust aquatic resources (such as the Oregon spotted frog) the watershed condition should be the basis of scale for evaluation.

Further discussion of water is included in the Land Use section.

VEGETATION AND WEEDS

There were a number of comments concerning vegetation and weeds. Commenters particularly focused on vegetation removal and maintenance.

Commenters expressed concern regarding the amount of vegetation, particularly trees that would need to be removed for the transmission line right of way.

Commenters suggested that no trees be removed and questioned the number of trees to be removed. Others expressed concern over the impacts that a potential clear cut of trees might have to watersheds and forests.

Commenters recommended identifying the acreage of mature or old growth forest in the Mt. Hood National Forest (and/or neighboring BLM managed-lands) that will need to be cut to accommodate the project and associated roads. The tree species noted most in commenter's concerns included Douglas-fir, juniper and Oregon White Oak. Commenters were particularly concerned about long-lived species juniper and Oregon white oak given their age. The ODFW recommended avoiding Oregon white oak habitat, as well as native upland grassland prairie, native wet prairie and old-growth forest.

Commenters wanted to know more about current vegetation management practices in existing transmission corridors and the effectiveness of these strategies. In addition, commenters wanted more information regarding the vegetation management plan for the project, including specifics on invasive species, non-native species, plant management, hazard tree removal and invasive species treatment strategies. In addition, commenters suggested analyzing the impacts to surrounding forests if PGE plans to perpetually fell trees that pose a risk to the transmission line. Commenters also suggested including general locations of rare plants and how these sites would be managed to minimize impacts on the plants.

Other comments included concerns about impacts to plants from vehicle traffic and congestion in the Columbia Plateau ecoregion.

The USFWS recommended a number of post-construction activities related to re-vegetation, including post-construction monitoring and adaptive management. In addition, there were recommendations on management of Endangered Species Act-listed plants and habitat, including Fender's blue butterfly habitat. Other recommendations included evaluating impacts of off road vehicles and exotic species on these habitats.

There were a number of comments regarding management and treatment of non-native and invasive species. Commenters expressed concern about the spread of invasive species before and after construction because of impacts to private land, crops and rangeland as well as the resources needed to remove them. Noxious weeds species noted include: knapweed, puncture vine, star thistle, skeleton weed, Scotch broom, Himalayan blackberry and tansy ragwort. Commenters wanted to know more about which species would be "targeted or eradicated."

Commenters recommended the following regarding noxious and invasive species:

- Develop an invasive plant management plan to monitor and control noxious weeds and to utilize native plants for restoration of disturbed areas by the project.
- Controlling access to the access roads and cleaning of vehicles to prevent spread of noxious weeds.
- Compensate landowners if any weeds are spread.
- Regularly control and monitor for non-native and invasive vegetation.
- Weed control should be to landowner specifications.

Commenters also questioned whether invasive plant management will be the responsibility of the USFS and the BLM, or PGE, and who will monitor the effectiveness of the program. Commenters expressed concerns about PGE's ability to control the spread of noxious weeds. In addition, commenters were

concerned about herbicides used on weeds drifting to adjacent crop land and recommended not using herbicides within the transmission right of way.

Additionally, commenters recommended documentation of all land cover and uses within the project corridor, impacts by the project to the land cover and uses, and mitigation measures that would be implemented to reduce the impacts. The draft EIS should also specify wildlife refuges and parkways, impacts to them, what alternatives were considered to avoid such areas, and mitigation measures for impacts to the areas.

NATURAL AND CULTURAL RESOURCES, NATIVE AMERICAN INTERESTS

Commenters stated the project crosses areas that may have a high probability of containing archaeological sites and buried remains. The OSHPO stated that impact to archaeological sites protected by state law could be avoided by allowing the State Historic Preservation Office to provide an archaeological survey. Commenters identified a pioneer grave site on their property that they would not like to be disturbed.

Commenters had concerns about protecting state and national historic trails and requested that the project avoid impacts to the trails and minimize impacts to trail viewsheds. They also requested mitigation in areas where avoiding impacts is not possible. Commenters questioned whether the Oregon Historic Trails Advisory Council had been consulted.

Commenters recommended analyzing the impacts to an intact segment of the Oregon National Historic Trail in the vicinity of the Boardman Power Plant and proposed Grassland Substation, and west of that along the proposed transmission corridor for several miles.

Specific trails that could be impacted were mentioned, including:

- Oregon Trail – Commenters identified Class 1 ruts in the Boardman Desert at the northeast end of the project.
- Cutoff to Barlow Road – Commenters identified the area near the junction at the top of the grade coming up out of the canyon of the John Day River at McDonalds Ford/Ferry.
- Meek Cutoff – Commenters mentioned the area near Maupin on the Deschutes River.
- Routes, including John Fremont Route, Upper Columbia Route, Benjamin Bonneville Route and Nathaniel Wyeth Route.
- Other trails including, Fremont Trail, Klamath Trail, Lewis and Clark Trail, and Santiam Wagon Road.

Some commenters considered the private campground, Taylor Park, historical site because it is located on land originally homesteaded in 1871. Commenters expressed concern that the project may impact native communities.

GEOLOGY AND SOILS

Commenters discussed the location of the transmission line with regard to geology and soils. Commenters noted that some of the proposed project locations are in areas of steep terrain. Commenters expressed concern about soil fragility given use and weather conditions.

Commenters requested controlling vehicular access to the roads by recommending that surface maintenance be required and access roads and drainage be designed to help reduce erosion.

AIR QUALITY AND CLIMATE

Commenters provided a variety of air quality and climate change comments to be considered in the draft EIS, including:

- Evaluating air quality impacts and detailing mitigation steps that would be taken to minimize associated impacts. The analysis should address and disclose the project's potential effect on all criteria pollutants under the National Ambient Air Quality Standards including ozone, visibility impairment, and air quality related values in the protection of any affected Class I areas, any significant concentrations of hazardous air pollutants, and protection of public health.
- Documenting how resources affected by climate change could potentially influence the project and vice versa, especially within sensitive areas. The analysis should quantify and disclose greenhouse gas emissions from the project activities and discuss mitigation measures to reduce emissions.

Commenters also suggested including a smoke management program that would be followed to reduce public health impacts and potential ambient air quality exceedances, if vegetation will be burnt.

ENVIRONMENTAL JUSTICE

The EPA recommended including an evaluation of environmental justice populations within the geographic scope of the project. If such populations exist, the draft EIS should address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation by these populations. Assessment of the project's impact on minority and low-income populations should reflect coordination with those affected populations.

NEXT STEPS

Moving forward the USFS and participating federal agencies, including the BLM, will focus on developing the draft EIS. Over the next year the agencies will begin to study issues of concern, evaluate a range of reasonable alternatives, assess potential impacts and identify possible mitigation measures.

Once complete, the federal agencies will publicly circulate the draft EIS and host a public comment period. During this period, the federal agencies will notify the public and hold public meetings. Public comments on the draft EIS will be responded to in the final EIS.

The federal agencies are committed to involving the public in the NEPA process. The agencies anticipate providing periodic status updates and publishing all project documents on the project website www.cascadecrossingproject.com. In addition, the federal agencies will continue to coordinate public participation opportunities with the ODOE-EFSC state review process to the extent possible.