

3.8 PUBLIC SERVICES

3.8.1 Introduction

A range of public services in Harney County could potentially be affected by the construction and operation of the proposed Project. This section presents a brief evaluation of public service impacts. The following community services were evaluated below because they have the greatest potential to be affected by the proposed Project: law enforcement, fire protection, schools and education, and health care services. Public services considered but not evaluated included water and wastewater services, trash and waste disposal, and utilities. The nature of the Project would not demand these public services. Any of these latter services would be provided either off-site or maintained and removed by the Project developer.

3.8.2 Methodology

The methodology for analyzing impacts included evaluating the conditions and potential occurrences requiring the attention and responses of public service providers. The information was compiled from various sources including the Harney County Chamber of Commerce (HCC 2009), Harney County government, Harney District Hospital, and personal communications with the local Bureau of Land Management (BLM) staff, and a representative from Crane Rangeland Fire Protection Association.

The analysis was informed by comments from the public scoping process that occurred from July to September 2009 and the DEIS comment period from July through September 2010. Comments from agency representatives, local organizations, and private citizens requested that the following issues be addressed with regards to public services:

- Housing needs for Project employees.
- Wastewater and garbage disposal for Project crews.
- Potential effects to school enrollment.
- Potential for vandalism of transmission lines.

3.8.3 Affected Environment

For the purposes of this discussion, the physical affected environment included Harney County, Oregon. The proposed Project would be located in an area susceptible to wildfires and potential vandalism, which could increase the demands placed upon fire management and law enforcement in the area. Potential increased demands upon education and health care services were also examined.

3.8.3.1 Wildfire Protection Services

The Burns Interagency Fire Zone (BIFZ) provides range and wildfire protection services for the public lands in Harney County, including the BLM, U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service (USFS), and the Oregon Department of Forestry land. BIFZ fire equipment includes bulldozers, helicopters, a single engine tanker, and heavy and light fire trucks, as well as staff to operate that equipment.

Rangeland fire protection of private lands in the Project Area is provided by the Crane Rangeland Fire Protection Association (RFPA), which is staffed entirely with volunteers. Rangeland fire protection associations are authorized by the Oregon Legislature to fill a gap in protection for the portions of the state

that are not located within a rural fire protection district or a forest protection district. Some areas within the Project Area may have dual protection for wild land fires from the BIFZ and Crane RFPA, and there is a mutual aid agreement between the two organizations. Crane RFPA equipment includes approximately 10 tanker trucks, primarily retired trucks from the Department of Forestry, and several personal pickup trucks outfitted with 100 to 250 gallon tanks (depending upon the size of the pickup truck) and hose reels. They currently have more tanks available than pickup trucks (Crane Rangeland Fire Protection 2009).

While there are no responders in Harney County specifically assigned to infrastructure fires (e.g., transmission lines or towers), most fires that begin as an electrical fire would quickly become a wildfire, in which case the BIFZ would respond on public lands and Crane RFPA would respond on private lands. The BIFZ's role in such an event would entail suppressing the wildfire and protecting the rest of the infrastructure from wildfire, as best as possible. The BIFZ however is not trained to provide electrical fire suppression to the infrastructure, and that portion of the fire would be allowed to go out on its own, or would already have gone out by the time the first responders arrived at the scene (BLM 2009g).

Crane RFPA has about 200 members, with annual dues ranging between \$50 and \$100 per year, depending upon other outside donations. Association members receive services for free, and non-members receive a bill based upon the number of man-hours and trucks required to suppress a fire. The RFPA tanker trucks are located on various members' land throughout the RFPA service area, for easier access and use (Crane Rangeland Fire Protection 2009).

3.8.3.2 Law Enforcement Services

Law enforcement in unincorporated Harney County is provided by the Harney County Sheriff's Office, which consists of a sheriff and three deputy officers. Both Burns and Hines have their own police departments. The Burns Police Department includes a chief and four patrolmen, while the Hines Police Department has a chief, a patrolman, and reserves. In addition, the Oregon State Police (OSP) has a local force consisting of a sergeant, two traffic officers, and two game officers. BLM and MNWR have law enforcement officers who enforce federal regulations on federal lands. The Burns Paiute Reservation also has its own police force (HCC 2009).

3.8.3.3 Educational Services

Ten separate school districts provide public education in Harney County, with Harney Educational Services District (ESD) providing many specialized services to all of those school districts. There are schools scattered throughout the county, with some located in the population centers of Burns and Hines, while other one- and two-room schools are located in the rural remote areas within Harney County (HCC 2009).

3.8.3.4 Health Care and Emergency Response Services

Harney District Hospital in Burns serves the entire county, with a capacity of 25 beds. It offers a full spectrum of services, many offered locally and others by visiting providers. Ambulance services and other emergency medical services are also provided by the Harney District Hospital (HDH 2009). Emergency medical helicopter or aircraft transportation services are provided by AirLink Critical Care in Bend and Life Flight in Boise (Small & Rural Hospital Summit 2009). The Harney County Sheriff's Office also provides search and rescue services (Harney County Sheriff 2010).

3.8.4 Environmental Effects and Mitigation

Potential public services impacts from construction would arise primarily from the presence of the construction workforce and equipment in the region. During operations, public service effects would depend upon the size of the operations workforce and indirect employment in the region, as well as the operating requirements of the transmission line. The Project Area would be located in a region susceptible to large-scale wildfires. The two greatest potential risks of fire from the transmission line right-of-way (ROW) and the Echanis Wind Energy Project (Echanis Project) would be catastrophic failure of transmission line and wind power equipment and lightning strikes.

The potential effects to public services during the short-term construction phase and the long-term operational phase of the Project are described below. It should be noted that a variety of project design features and best management practices to reduce the effects upon public services, from both the Echanis Project and the action alternatives, would be implemented as part of the Proposed Action. These measures are not repeated in the mitigation sections below, but are summarized in Section 2 and listed in Appendix A (A.3.6).

3.8.4.1 **Alternative A – No Action**

Under the No Action Alternative, there would be no increase in the demand for public services. Demand for services would be affected by general population and development trends that would be independent and unrelated to the proposed Project.

3.8.4.2 **Echanis Project Effects Common to All Action Alternatives**

The Echanis Project would involve the construction and operation of 40 to 69 wind turbines on a 10,500-acre privately-owned site in rural Harney County. The proposed wind turbines would be arranged in multiple “strings” placed along several exposed ridgelines on the site. The Echanis Project would include several miles of 34.5-kV underground power collection cables to connect the turbine strings to a new 100-foot by 200-foot substation located near the center of the site. A 24-foot by 48-foot operations and maintenance (O&M) building would be located next to the substation. An existing access road that currently connects the site to Ham Brown Lane and South Diamond Lane would be widened, improved, and extended to the new substation on the site. The existing access road is located exclusively on private property and would be improved with the knowledge and consent of the underlying land owners. Additional service roads would be located on the site to provide access between the operations and maintenance building, wind turbines, and other wind energy related facilities on the site.

PERMANENT EFFECTS

Operation and maintenance, including the necessary vegetation management, would involve increased activity along the line by employees and contractors, slightly increasing the potential for fire. No additional permanent BLM or USFWS staff would be required. No additional personnel or equipment would be required for fire protection services with the addition of the Project. There would not be a notable permanent effect upon wildfire protection services.

The incidence of vandalism of the Echanis Project facilities would be expected to be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. To limit new or improved recreational access into areas, all new service roads not required for maintenance would be closed as appropriate and in coordination with the BLM or USFWS Authorized Officer. Further, the temporary relocation of non-local construction and operational professionals would not likely increase unlawful behavior in Harney County, including the adjacent local communities. Therefore, no additional law enforcement demands would be generated by the Echanis Project anywhere within Harney County.

While schools in the communities closest to the Project, such as Crane and Diamond, would be the most likely to be affected by any operational professionals relocating to the area, there would be no notable permanent effects to school and educational services.

During the operational phase, an increased need for emergency and health care services would be unlikely, due to the limited number of additional operational staff relocating to the area. The existing emergency services would likely be adequate in the adjacent communities, and Harney County in general, to meet the demands.

TEMPORARY EFFECTS

During the construction period for the Echanis Project, the weather could be hot and dry, with increased danger of fire. At such times the potential for fire would be high. The potential could increase even more with the increased use of vehicles and other motorized equipment. The addition of construction workers in the area would be another source of increased fire danger. During the fire season, certain construction activities would be either restricted or prohibited, which could limit the timing of those construction activities. The Echanis Project would be subject to state, county, and federally enforced laws, ordinances, rules, and regulations that pertain to prevention and suppression of wildfires. Wildfire protection services could be temporarily affected if equipment was to ignite sparks during construction. The Project Applicant proposes several project design features (PDFs) to reduce these potential fire hazards, which are described in Appendix A (A.3.6).

Approximately one-quarter (around 25 employees) of the Echanis Project construction staff would likely be local hires. The non-local construction workforce for the Echanis Project would not be expected to relocate with their families, so the number of school-aged children in the area would not be expected to increase during construction. Thus, there would be no temporary effects to school and educational services.

During the operational phase, an increased need for emergency and health care services would be unlikely, but during construction there could be an increased need for emergency and health care services in the event of an injury accident. These services would most likely be provided in the nearest communities with health care services available. However, because accidents would likely be infrequent, the existing emergency and health care services would likely be adequate to meet any slight additional demands.

Overall, the effect of the Project upon community services would be minimal.

MITIGATION

No additional mitigation measures would be required because Project design features (PDFs) and best management practices (BMPs) taken into account in the effects analysis of the action alternatives would be implemented to reduce the effects of the Project (see Section 2 and Appendix A.3.6).

3.8.4.3 Alternative B – West Route (Proposed Action)

PERMANENT EFFECTS

Operation and maintenance, including the necessary vegetation management, would involve increased activity along the line by employees and contractors, slightly increasing the potential for fire. The effects would be minimal however because the West Route would have managed vegetation and adequate vehicular access, as long as the Applicant continued to maintain the vegetation within the ROW and the access and service roads. No additional permanent BLM or USFWS staff would be required. No additional personnel or equipment would be required for fire protection services with the addition of the Project. There would be no notable permanent effect to wildfire protection services under this alternative.

The incidence of vandalism of the transmission lines would likely be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. To limit new or improved recreational access into areas, all new service roads not required for maintenance would be closed as appropriate and in coordination with the BLM or USFWS Authorized Officer. No additional law enforcement demands would likely be generated by the Project during the operational phase. Permanent effects would be minimal.

There would be no notable permanent effects to school and educational services.

During the operational phase, an increased need for emergency and health care services would be unlikely. Thus, the existing emergency services would be adequate to meet the demands.

TEMPORARY EFFECTS

During the construction period for the Project the weather could be hot and dry, with increased danger of fire. At such times the potential for fire is high. The potential could increase even more with the increased use of vehicles and other motorized equipment. The addition of construction workers in the area would be another source of increased fire danger. During the fire season, as determined by the State of Oregon, certain construction activities would be either restricted or prohibited, which could limit the timing of those construction activities. This Project would be subject to state, county, and federally enforced laws, ordinances, rules, and regulations that pertain to prevention and suppression of wildfires. Temporary effects to wildfire protection services could occur if sparks from equipment used during construction of the transmission line, access roads, interconnection stations, and substation made contact with combustible material. The Project Applicant proposes several PDFs to reduce these potential fire hazards, which are described in Appendix A (A.3.6).

The incidence of vandalism to the transmission lines would likely be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. To limit new or improved recreational access into areas, all new service roads not required for maintenance would be closed as appropriate and in coordination with the BLM or USFWS Authorized Officer. Further, the temporary relocation of non-local construction professionals would not be expected to increase unlawful behavior in Harney County. Therefore, no additional law enforcement demands would likely be generated by the Project during the construction phase.

Approximately one-half (around 50 employees) of the transmission line construction staff would likely be local hires (Norling and Kane 2009). The non-local construction workforce for the Project would likely relocate with their families, so the number of school-aged children in the area would not be expected to increase during construction.

During construction there could be an increased need for emergency and health care services in the event of an injury accident. However, because accidents would likely occur infrequent, the existing emergency services would likely be adequate to meet any slight additional demands.

Overall, the effect of the Project upon community services would be minimal.

MITIGATION

No additional mitigation measures would be required because Project design features (PDFs) and best management practices (BMPs) taken into account in the effects analysis of the action alternatives would be implemented to reduce the effects of the Project (see Section 2 and Appendix A.3.6).

FUTURE CONSTRUCTION PHASE – UPGRADE TO 230-KV

The upgrade of the initial single-circuit transmission line to a double-circuit 230-kV transmission line would require a second construction phase at a future date when additional capacity was required on the transmission line. During the second construction phase, temporary construction related effects would be the same as those described above, where the overall effect of the Project upon community services would be minimal, and implementation of the proposed PDFs described in Appendix A (A.3.6) would further reduce the effects of the Project.

South Diamond Lane Route Option

The effects and mitigation for this option are the same as those discussed in Alternative B – West Route, including the future construction phase to upgrade to a 230-kV transmission line

Hog Wallow Route Option

The effects and mitigation for this option are the same as those discussed in Alternative B – West Route, including the future construction phase to upgrade to a 230-kV transmission line. Implementation of the proposed PDFs described in Appendix A (A.3.6) would further reduce the effects of the Project.

115-kV Transmission Line Option

The 115-kV Transmission Line Option would be a reduced capacity design configuration constructed along the same transmission line alignments described above for Alternative B – West Route and the South Diamond Lane and Hog Wallow Route Options. The only difference between the 115-kV Transmission Line Option and the others described above is the full build-out of this design option would have one 115-kV 3-conductor circuit instead of two. The line location, pole heights, pole spacing, ROW widths, construction methods, interconnection points, and access requirements would be the same as for Alternative B and the two route options described above.

PERMANENT AND TEMPORARY EFFECTS

The permanent and temporary effects of this design option would be similar to Alternative B. The only notable differences between this design option and others would be this option would not require a second round of construction to add an additional 230-kV circuit, nor would equipment upgrades be required at the interconnection station adjacent to the HEC line. This option would have less overall temporary construction related effects such as potentially increased emergency services needs (fire, medical, police) due to the presence of workers and equipment. Ongoing operations and maintenance activities would be the same as those described for Alternative B.

MITIGATION

No additional mitigation measures would be required because Project design features (PDFs) and best management practices (BMPs) taken into account in the effects analysis of the action alternatives would be implemented to reduce the effects of the Project (see Section 2 and Appendix A.3.6).

3.8.4.4 Alternative C – North Route (Preferred Alternative)

The effects for this option would be similar to those discussed for Alternative B – West Route, except that more construction workers on site for Alternative C could slightly increase the demand for public services, such as law enforcement and fire protection, in comparison to the Alternative B – West Route.

PERMANENT EFFECTS

Operation and maintenance, including the necessary vegetation management, would involve increased activity along the line by employees and contractors, slightly increasing the potential for fire, compared to the existing conditions. The Alternative C – North Route would require more poles than the Alternative B – West Route and a second, parallel, north-south transmission line. Although these additional Project components could slightly increase the potential for increases in the demand for public services, such as law enforcement and fire protection, the effects would likely be similar to those for Alternative B – West Route. The effects would be minimal and there would be no notable permanent effect to wildfire protection services under this alternative.

The incidence of vandalism of the transmission lines would likely be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. No additional law enforcement demands would be expected.

There would be no notable permanent effects to school and educational services.

During the operational phase, an increased need for emergency and health care services would be unlikely. The existing emergency services would likely be adequate to meet any demands.

TEMPORARY EFFECTS

During the construction period the potential for fire would likely be high. The potential could increase even more with the increased use of vehicles and other motorized equipment. The addition of construction workers in the area would be another source of increased fire danger. During the fire season, as determined by the State of Oregon, certain construction activities would be either restricted or prohibited, which could limit the timing of those construction activities. This Project would be subject to state, county, and federally enforced laws, ordinances, rules, and regulations that pertain to prevention and suppression of wildfires. Temporary effects to wildfire protection services could occur if sparks from equipment used during construction of the transmission line, access roads, interconnection stations, and substation made contact with combustible material. The Project Applicant proposes several PDFs to reduce these potential fire hazards, which are described in Appendix A (A.3.6).

The incidence of vandalism of the transmission lines would likely be a rare occurrence, given the remoteness of the Project Area and limited public access to the proposed developments. No additional law enforcement demands would likely be generated by the Project during the construction phase.

The temporary effects of the Project upon education and school services would be minimal, because construction would bring a short-term increase in population, few of which are likely to be school-age children. Approximately one-half (around 50 employees) of the transmission line construction staff would likely be local hires (Norling and Kane 2009). The non-local construction workforce for the Project would not likely relocate with their families, so the number of school-aged children in the area would not be likely to increase during construction.

During construction, there could be an increased need for emergency and health care services in the event of an injury accident. However, because accidents would likely be infrequent, the existing emergency services would likely be adequate to meet any slight additional demands.

Overall, the effect of the Project on community services would be minimal.

MITIGATION

No additional mitigation measures would be required because Project design features (PDFs) and best management practices (BMPs) taken into account in the effects analysis of the action alternatives would be implemented to reduce the effects of the Project (see Section 2 and Appendix A.3.6).

FUTURE CONSTRUCTION PHASE – UPGRADE TO 230-KV

The upgrade of the initial single-circuit transmission line to a double-circuit 230-kV transmission line would require a second construction phase at a future date when additional capacity was required on the transmission line. During the second construction phase, similar temporary construction related effects would be experienced, as described above, where the overall effect of the Project on community services would be minimal, and the proposed PDFs described in Appendix A (A.3.6) would be implemented.

115-kV Transmission Line Option

The only difference between the 115-kV Transmission Line Option and Alternative C, described above, would be that the build-out of this design option would have one 115-kV 3-conductor circuit instead of two. The line location, pole heights, pole spacing, ROW widths, construction methods, interconnection points, and access requirements would be the same as for Alternative B and the two route options described above.

PERMANENT AND TEMPORARY EFFECTS

The permanent and temporary effects of this design option would be similar to those for Alternative C. The only notable differences between this design option and others is that this option would not require a second round of construction to add an additional 230-kV circuit, nor would equipment upgrades be required at the interconnection station adjacent to the HEC line. This option would have lower overall temporary construction related effects, such as potentially increased emergency services needs (fire, medical, police) due to the presence of workers and equipment. Ongoing operations and maintenance activities would be the same as those described for Alternative C.

MITIGATION

No additional mitigation measures would be required because Project design features (PDFs) and best management practices (BMPs) taken into account in the effects analysis of the action alternatives would be implemented to reduce the effects of the Project (see Section 2 and Appendix A.3.6).

3.8.4.5 Residual Effects after Mitigation

There would be no anticipated residual effects to public services after mitigation measures were implemented.

3.8.4.6 Summary Comparison of Alternatives

The effect to public services from development of the Echanis Project, primary access road, and each alternative is summarized in Table 3.8-1.

Table 3.8-1 Summary of Effects to Public Services

	Alternative A - No Action	Echanis Wind Energy Project	Alternative B			Alternative C - North Route (Preferred Alternative)
			West Route (Proposed Action)	S. Diamond Lane Route Option	Hog Wallow Route Option	
Wildfire Protection Services	No increase in demand anticipated. Demand would be affected by population and development trends that are independent and unrelated to the proposed Project.	Increased use of vehicles and other motorized equipment during hot dry weather could increase the risk of fire.	Increased risk of fire during construction when weather is hot and dry.	Same as Alternative B - West Route	Same as Alternative B - West Route	Same as Alternative B - West Route
Law Enforcement Services	Same as above	No effect	No effect	No effect	No effect	No effect
Educational Services	Same as above	No effect	No effect	No effect	No effect	No effect
Health Care and Emergency Response Services	Same as above	No effect	No effect	No effect	No effect	No effect

This Page Intentionally Left Blank