

## 3.6 Wildlife

### 3.6.1 Existing Conditions

Wildlife habitat and wildlife use within the vicinity of the proposed project were analyzed through literature review, agency contacts, and on-site surveys conducted in 2000 and 2001. The proposed routes of the makeup water supply pipeline and natural gas pipeline were investigated by walking the lengths of the pipeline laterals and a 1,000-foot corridor on each side. A wintering bald eagle survey was conducted between November 2000 and April 2001; observations of raptors and other avian species were recorded (Smayda Environmental 2001). Field surveys for special-status wildlife were conducted in spring 2001 on all lands to be affected by the project (Smayda Environmental 2001). Information on wildlife from a 1996 field survey of the project site was also reviewed (Kleinfelder & EnviroNet AeroScience 1997).

Wildlife habitat and wildlife use within the transmission line right-of-way were analyzed through extensive literature review, agency contacts, and site surveys conducted in spring and early summer 2001 (Smayda Environmental 2001, ENTRIX 2001). A list of wildlife species observed in the project area is presented in Appendix B.

#### 3.6.1.1 Species of Special Concern

A total of 49 species of special concern are either known to occur in the project area or in surrounding areas, or use habitat that occurs in the project area or surrounding areas, making it possible that the species may be present. Species evaluated are those that are federally listed under the Endangered Species Act as threatened or endangered, are candidates or are proposed for such listing, are considered species of concern by the U.S. Fish and Wildlife Service (USFWS), or are listed by the State of Washington as threatened, endangered, sensitive, candidate, or monitor species.

The common names of the 49 species are listed below:

- Aleutian Canada goose
- American white pelican
- Bald eagle
- Caspian tern
- Common loon
- Ferruginous hawk
- Forster's tern
- Golden eagle
- Grasshopper sparrow
- Lewis' woodpecker
- Loggerhead shrike
- Long-billed curlew
- Merlin
- Northern goshawk
- Olive-sided flycatcher
- Oregon vesper sparrow
- Peregrine falcon
- Prairie falcon
- Sage grouse
- Sage sparrow
- Sage thrasher
- Sandhill crane
- Snowy plover

- Streaked horned lark
- Swainson's hawk
- Tricolored blackbird
- Vaux's swift
- Western burrowing owl
- Willow flycatcher
- Yellow-billed cuckoo
- Yellow-breasted chat
- Black-tailed jackrabbit
- Fringed myotis
- Long-eared myotis
- Ord's kangaroo rat
- Pale Townsend's big-eared bat
- Pallid bat
- Small-footed myotis
- Washington ground squirrel
- White-tailed jackrabbit
- Yuma myotis
- Northern sagebrush lizard
- Striped whipsnake
- Columbia spotted frog
- Northern leopard frog
- Oregon spotted frog
- Western toad
- Woodhouse toad

### **3.6.1.2 Wildlife Habitat**

Wildlife habitat in the project vicinity is a patchwork of irrigated agricultural land and remnant areas of disturbed shrub-steppe. Shrub-steppe is a priority habitat in the State of Washington. However, the shrub-steppe in the project area has been invaded with a high percentage of nonnative weed species that are found in discontinuous, disturbed small areas. Land use activities adjacent to the project site are primarily industrial and include the Boise Cascade Corporation Wallula Mill, a Ponderosa Fiber of Washington deinking plant, the Iowa Beef Processors slaughterhouse and the J.R. Simplot Company feedlot.

The project site and the Jaussaud property to the south contain seven nonjurisdictional and one potentially jurisdictional wetland created by seasonal irrigation. These ponds form open water and wetland habitats during a portion of the year. (See Section 3.4, Wetlands and Vegetation, for further detail.)

To the west and northwest of the project site, the USFWS manages lands along Lake Wallula and the Burbank Slough that are part of the McNary National Wildlife Refuge (NWR). The NWR was established in 1956 as mitigation for the impacts of McNary Dam on wildlife habitat. NWR lands include more than 15,000 acres and contain such habitat types as open water, backwater sloughs, islands, riparian, shrub-steppe and irrigated farmlands. The majority of these lands are located within the Peninsula, Two Rivers, and Burbank Slough management units.

Habitats within the project vicinity support large flocks of waterfowl and shorebirds that are present primarily during spring and fall migrations as well as during the winter. Project vicinity habitats also support a variety of nesting raptors such as red-tailed hawks, northern harriers, and kestrels; upland game birds such as ring-necked pheasants and California quail; and other nesting and songbird species such as marsh wrens, red-winged blackbirds, northern flickers, American robins, horned larks, and yellow-rumped warblers. Bald eagles are known to occur within the project area from November through March.

Project vicinity habitats are used by a wide variety of terrestrial wildlife species. Common wildlife species include small mammals such as mice, northern pocket gophers, badgers, raccoons, striped skunks, coyotes, and Nuttall's cottontail rabbits. Muskrats, beavers, and mink are found along the banks of open water and backwater sloughs. Large game animals such as mule deer and white-tailed deer are present in relatively low numbers or are occasional visitors.

Habitats within specific project component sites are discussed below.

### ***Generation Plant Site***

An irrigated crop circle currently in production of alfalfa dominates the project site. This habitat provides food and cover for a variety of insects and small mammals and forage for birds that eat seeds, insects, or small mammals. Western meadowlarks, California quail, and ring-necked pheasants are frequently observed in the cultivated fields. During late fall and winter, mallard ducks, Canada geese, and occasionally great blue herons may be seen foraging. Red-tailed hawks, rough-legged hawks, northern harriers, and kestrels hunt for small mammals on the project site. During spring and summer, when insects are abundant, sparrows, swallows and other insectivorous birds forage in and above the alfalfa field.

Recently abandoned fruit orchards and shrub-steppe habitat persist on the project site in the areas outside of the irrigation circle and associated ponds and ditches. The habitat is fragmented and highly disturbed by nearby agricultural activities and past land uses. Weedy nonnative grasses and forbs dominate the project site, with native big sagebrush and gray rabbitbrush as the primary shrub components. Song sparrows, white-crowned sparrows, savannah sparrows, meadowlarks and horned larks are commonly observed. Small mammals expected to inhabit the project site include a variety of mice and voles; evidence of Ord's kangaroo rats and northern pocket gophers has been observed. Striped skunks and Nuttall's cottontail rabbits have been observed near the project site, as have badger excavations and coyote tracks.

Palustrine scrub-shrub wetland is present around the artificial irrigation ponds and ditches at the project site. These artificial wetlands are small and characterized by high percentages of weedy species including Russian olive, reed canarygrass, perennial pepperweed, and purple loosestrife. The small trees and dense shrubs provide good cover for a large number of songbirds. American robins, cedar waxwings, western kingbirds, red-winged and yellow-headed blackbirds, and black-billed magpies have been observed in this habitat. Ring-necked pheasants and California quail are commonly flushed from the cover of the shrub habitat. The open-water areas provide forage and resting sites for waterfowl, including mallard ducks, green-winged teal, and gadwalls. Great blue herons frequent these areas, likely feeding on amphibians. Northern flickers are commonly observed in small trees.

Deer sign has been observed in the fringes of the scrub-shrub wetland habitat, where it borders on the sagebrush-steppe. Deer sign are not abundant and the habitat is not large or well enough developed to support more than the occasional transient white-tailed deer.

The deer likely use the dense, shrubby habitat for cover, venturing out into open areas to forage on grass and alfalfa.

A single row of trees lines the eastern edge of the main irrigation pond. This narrow band of palustrine forested wetland habitat functions only as edge habitat. The Great Plains cottonwoods are used for perching by red-tailed and rough-legged hawks. Great blue herons and black-crowned night herons have also been observed. Mourning doves, blackbirds, American crows, and other flocking birds are commonly seen in both the cottonwoods and the adjacent honey locust trees. An abandoned magpie nest is present in the area. Evidence of coyote and mink has been observed at this location.

### ***Access Road***

Temporary construction access to the project site would be achieved through a new temporary access road from the Jaussaud property to the south and later through a permanent county access road to the north leading to Dodd Road. The temporary access and permanent roads would pass through disturbed shrub-steppe habitat dominated by weedy nonnative plant species and cultivated alfalfa fields. Permanent onsite access roads would be located on the project site in areas currently farmed in alfalfa.

### ***Water Supply Pipeline***

The proposed makeup water supply pipeline route passes through a combination of disturbed shrub-steppe habitat and hybrid cottonwood fiber farms. Wildlife residing in the open habitats includes a variety of songbirds and small mammals, such as mice, pocket gophers, badgers, Nuttall's cottontail rabbits, and Ord's kangaroo rats. Western meadowlarks, common ravens, song sparrows and savannah sparrows are commonly observed. Raptors, including red-tailed hawks, rough-legged hawks, northern harriers, and kestrels forage in the area. Larger mammals such as coyotes and mule deer also use these areas.

The cottonwood stands of the Boise Cascade Corporation fiber farm range from newly planted to 7-year stands ready for harvest. Despite the lack of plant species diversity, the cottonwood stands are used by several species of wildlife. Red-tailed and rough-legged hawks and various species of owls use the older stands for perching. Northern flickers, American robins, American crows, and ring-necked pheasants are commonly observed within the stands. During the summer months, warbling vireos, American goldfinches, and black-headed grosbeaks nest within the stands (Denny pers. comm. as cited in Wallula Generation 2001). Hiding cover provided by the dense growth allows both mule and white-tailed deer to access adjacent crop fields. A herd of approximately 50 mule deer was observed within 1 mile of the Boise Cascade Corporation fiber farm stands during fall 2000. Coyotes have learned to obtain water from the drip irrigation system and have become a nuisance species at the Boise Cascade Corporation fiber farm (LeClerc pers. comm. as cited in Wallula Generation 2001).

## ***Transmission Line and Associated Facilities***

There are five general wildlife habitat types along the transmission line right-of-way, including shrub-steppe, grassland and agriculture, riparian, riverine, and palustrine. These habitat types are described in detail below.

### ***Shrub-Steppe***

Shrub-steppe habitat consists of perennial or annual grasses with a discontinuous overstory of shrubs. Four different plant community types were documented during vegetation surveys, including big sage-bitterbrush steppe, sage steppe, sage steppe-grassland, and burned shrubland. A total of 49% of the potential right-of-way, 316 acres, is mapped as shrub-steppe habitat type (Table 3.4-2). Shrub-steppe habitat supports more than 94 bird species and 16 mammal species. Shrub-steppe obligate species include sage thrashers, sage sparrows, and Brewer's sparrows (Dobler et al. 1996). The diversity of bird species is associated with the complexity of the shrub-steppe habitat, with areas without shrub cover supporting a lower diversity of bird species (Reynolds and Trost 1981).

Shrub-steppe habitat in the right-of-way exists in a range of different conditions (see Section 3.4, Wetlands and Vegetation). Disturbed shrub-steppe communities were documented between the irrigated crop circles along the 5.1-mile interconnect transmission line between the Wallula Power Project and the Smiths Harbor Switchyard (Wallula-Smiths Harbor segment). Shrub-steppe habitat north of Juniper Canyon has fairly sparse shrub cover and visible evidence of grazing disturbance.

On the south side of Juniper Canyon, an extensive wildfire burned a large area of shrub-steppe habitat between State Highway 37 and Juniper Canyon. The loss of sagebrush from this fire probably lowered the suitability of this area for many shrub-nesting birds and other wildlife. However, loggerhead shrikes, western kingbirds, and black-tailed jackrabbits were observed in the burn area. Between State Highway 37 and State Highway 203, shrub-steppe habitats are composed of mature sagebrush with interspersed rock outcrops. This area appears to be high quality habitat for species associated with this habitat type. Two ponds provide water and thus increase the suitability of this area for wildlife.

Species encountered in this habitat during wildlife reconnaissance surveys of the Smiths Harbor-McNary segment right-of-way include red-tailed hawks, American kestrels, California quail, northern flickers, eastern kingbirds, western kingbirds, Say's phoebes, black-billed magpies, loggerhead shrikes, western meadowlarks, northern orioles, black-tailed jackrabbits, unidentified ground squirrel species, a coyote with a pup, and mule deer. Three additional species were recorded along the interconnect transmission line: Ord's kangaroo rats, Swainson's hawks, and ferruginous hawks.

## *Grassland and Agriculture*

Grassland and agriculture habitats in the right-of-way consist of wheat fields, irrigated pasture, invasive cheatgrass, and grasslands in the palustrine area. Approximately 293 to 295 acres, or 45% of the potential right-of-way, was documented as grassland and pasture.

Between the Washington/Oregon border and the Walla Walla River, there are extensive areas of wheat fields. Cheatgrass is the main habitat type in the areas between wheat crops. Irrigated pastures that are grazed by livestock are present near State Highway 207 and Umatilla. Grasslands in the palustrine area are the most extensive in the right-of-way and support a higher diversity of species than do the cheatgrass gullies, wheat fields, or irrigated pastures.

Species encountered in the wheat field and cheatgrass habitats during wildlife reconnaissance surveys include California quail, chukar, and mule deer. Species encountered in irrigated pastures include American robins, starlings, and red-winged blackbirds. See the palustrine section below for grassland species encountered.

## *Riparian*

Riparian habitats are located on or are related to the bank of a permanent water source such as a stream, lake, or pond. This habitat type makes up about 25 acres within the right-of-way. The general project vicinity is dry and riparian habitats are scarce. Because of this scarcity, riparian habitats are important to wildlife, especially birds, bats, and large mammals. Riparian areas that are crossed by the right-of-way include Juniper Creek, the Walla Walla River, and the ponds and small dirt-lined canal in the palustrine area (see the palustrine section below).

Riparian areas and associated wetlands at the mouth of the Walla Walla River provide habitat for cavity-nesting birds and breeding waterfowl, and are important habitats for upland game. The riparian area along the Walla Walla River that is crossed by the right-of-way consists of cottonwood and willow trees that line the banks of the Walla Walla River and provide habitat for songbirds, raptors, and amphibians. The riparian habitat along Juniper Creek contains emergent vegetation but no riparian trees.

Species encountered in the riparian habitat (other than palustrine species) during wildlife reconnaissance surveys include bullfrogs, black-crowned night-herons, mourning doves, American tree sparrows, barn swallows, and red-winged blackbirds.

## *Riverine*

Riverine habitat consists of large bodies of open water. Riverine habitat in the right-of-way consists of the Walla Walla River. The lower Walla Walla River is managed as a waterfowl area. The Walla Walla River and associated Smiths Harbor are used

extensively by mallard ducks, Canada geese, and other waterfowl for wintering. Island habitats are used by nesting black-crowned night herons, great egrets, and great blue herons.

Species encountered in riverine habitats during wildlife reconnaissance surveys include bullfrogs, double-crested cormorants, American white pelicans, great blue herons, ring-billed gulls, California gulls, Forster's terns, and black terns.

### *Palustrine*

Palustrine habitat along the right-of-way is a wetland complex consisting of several ponds and other pothole-type wetlands east of the city of Umatilla, Oregon. This habitat type occurs over approximately 2 miles of the right-of-way, much of which exists in the Wanaket Wildlife Area managed by the CTUIR. Several potholes contain standing water, while others are only depressions that support low herbaceous vegetation. Grassland and Russian olive trees occur between the ponds and potholes. A small earthen canal runs through the area, but does not connect any potholes.

The water, associated riparian vegetation, undisturbed grassland, and trees are important habitat elements that are not abundant outside of this area. Wildlife associated with the ponds includes waterfowl, wading birds, and amphibians. The earthen canal also supports amphibians. Riparian vegetation consisting mainly of cattails and rushes provides cover for nesting and foraging songbirds, as well as microhabitats for amphibians and reptiles. The grasslands support small mammals, as evidenced by abundant burrows, which in turn provide a prey base for larger mammals and raptors. Land birds including raptors may use the trees for perching and nesting.

Species encountered in the palustrine area during wildlife reconnaissance surveys include Pacific treefrog tadpoles, mallards, black-necked stilts, red-tailed hawks, ring-necked pheasants, mourning doves, western kingbirds, American crows, meadow larks, yellow-headed blackbirds, and mule deer. Small and medium-sized burrows were also noted.

Approximately 500 resident mule deer are present in the project vicinity (Kirsch pers. comm. as cited in ENTRIX 2001). Mule deer and fawns were detected during reconnaissance surveys in the palustrine area and in the sage-steppe habitat between State Highway 37 and State Highway 203, although they use all of the habitats in the project area.

Mule deer are common throughout eastern Oregon and Washington, including the right-of-way and vicinity. Typically, they feed along the edges of wheat fields during spring and fall when plants are green and succulent. During summer months, they often appear near cover and irrigated fields or on steep, north-facing slopes where they can find shade and cover. In winter months, they tend to form groups and concentrate in areas with southern exposures, vegetation (nonwheat fields), and substantial isolation from human activity. Mule deer fawning occurs from May 1 to July 15.

While elk may have occupied shrublands in eastern Oregon in the past, they are now found primarily in forests, meadows, mountain valleys, and foothills. They are mobile, and move downslope out of deep snow to warmer more open habitats in winter. They may use agricultural areas. Elk primarily graze on grasses and forbs, but in winter they browse on willow, alder, aspen, oak, or other woody vegetation. Elk calving occurs from May 1 to June 15.

Approximately 150 resident elk are present in the project vicinity (Kirsch pers. comm. as cited in ENTRIX 2001), especially east of Juniper Canyon. No elk were detected during reconnaissance surveys.

### ***Natural Gas Pipeline***

The proposed natural gas pipeline route passes through disturbed shrub-steppe, fiber farm stands, and irrigated agricultural lands. Wildlife typically supported by these habitats includes small mammals, songbirds, and raptors, as described above under the makeup water supply pipeline route. Surveys conducted in spring 2001 documented the presence of badgers, pocket gophers, coyotes, western meadowlarks, and savannah sparrows along the natural gas pipeline right-of-way (Smayda Environmental 2001). Ord's kangaroo rat excavations and tracks were frequently observed along road cuts in areas of loose, sandy soil.

## **3.6.2 Impacts of the Proposed Action**

Potential impacts from the proposed action would be minimized or avoided through implementation of the BMPs described in Appendix A. The impacts described below assume the implementation of all of the BMPs. In addition, the project includes commitments to purchase water rights and revegetate approximately 145 acres of riparian habitat along the Walla Walla River. This action would help to restore wildlife habitat in the area and reduce impacts to wildlife habitat that previously occurred along the river, providing an overall benefit for local wildlife populations.

### **3.6.2.1 Construction**

#### ***Generation Plant***

The power plant and associated facilities would occupy approximately 97 acres of the 175-acre project site. Generation plant site construction would result in the conversion of approximately 78 acres of agricultural land and approximately 19 acres of disturbed shrub-steppe and abandoned orchard into an industrial facility. Another 53 acres of agricultural lands and irrigation facilities and 3 acres of existing road and bare ground would be cleared, graded, and reseeded with native grasses and shrubs. Permanent loss of habitat would occur in developed areas, which would lead to direct impacts on wildlife species using these areas. The remaining area (approximately 22 acres) would not be

directly affected by project construction because no clearing or grading would be permitted within the wetlands or buffers.

BMPs would be implemented during construction to avoid and reduce impacts resulting from construction of the power plant site and the access roads. In addition, project site-specific surveys would be conducted prior to construction to determine the presence of several special-status bird species such as merlins during migration, western burrowing owls, sage thrashers, Oregon vesper sparrows, sage sparrows, bald eagles, ferruginous hawks, loggerhead shrikes, and Swainson's hawks, and two special-status mammal species—black-tailed jackrabbits and Ord's kangaroo rats. If these species are present, specific mitigation plans would be developed and offsite mitigation would be implemented for loss of habitat required by these species.

Based on site surveys conducted during spring 2001, neither suitable nesting habitat nor foraging habitat is present at the project site or access roads for the above species, except for Ord's kangaroo rats. Suitable habitat for this species occurs in the area of the temporary access road and along the edges of the irrigated crop circle on the project site, both areas of loose soil. If this species is found to be present, impacts would include loss and/or displacement of individuals during the estimated 3 months of construction of the access road.

Upon completion of construction at the project site and after completion of the county north-south roads, the temporary road would be abandoned and the area revegetated. Assuming suitable habitat conditions, kangaroo rats are expected to repopulate the former roadway within a short time. The duration of impacts for the 24-month power plant construction period would be longer but much of the area at the edge of the irrigated circle and along the buffer around the wetland areas would be returned to habitat suitable for Ord's kangaroo rats. Loss of individual kangaroo rats may occur during construction activities, particularly ground disturbing activities that may destroy occupied burrows. This loss would be a localized impact to a small part of the local population.

Shrub-steppe habitat that is temporarily lost during construction would be revegetated with native (and nonnative, if appropriate) shrub-steppe species at the conclusion of construction. Small, remnant patches of shrub-steppe habitat would be permanently removed because of construction of the power plant. An equivalent area of damaged or permanently lost shrub-steppe habitat would be reestablished on other property in the local area.

### ***Water Supply Pipeline***

Installation of the makeup water supply pipeline would require a construction corridor 75 feet wide. It would temporarily affect approximately 4.5 acres of disturbed shrub-steppe and 22 acres of land currently in hybrid poplar stands. Impacts to wildlife, including ground-dwelling species, would be temporary and would not significantly affect most wildlife populations.

Based on the 2001 site survey, there does not appear to be suitable nesting or foraging habitat for special-status species present except for Ord's kangaroo rats, western burrowing owls and ferruginous hawks. Water supply pipeline construction would cause a loss of approximately 4.5 acres of Ord's kangaroo rat habitat during the 4-month construction period. Upon completion of construction the area would be revegetated and kangaroo rats are expected to repopulate the area within a short time. Loss of individual kangaroo rats may occur during construction activities, particularly ground disturbing activities that may destroy occupied burrows. This impact would be localized, involving a small part of the local population. No evidence of either burrowing owls or ferruginous hawks was observed or has been documented in the vicinity of the proposed makeup water supply pipeline route.

### ***Transmission Line and Associated Facilities***

Noise and visual disturbance during construction activities could affect wildlife species. Resident deer and elk could be disturbed by construction noise and activity during sensitive times of the year, such as the rutting season (September 15–October 31) and calving/fawning season (May 1–July 15). With the exception of the Walla Walla River crossing, construction would be scheduled for the winter season, thus eliminating potential impacts during these seasons.

Special-status wildlife could also be affected by noise and disturbance during project construction. The impact could be fully avoided through limited operating periods during breeding seasons as described in BMPs in Appendix A.

Estimates of both permanent and temporary habitat impacts, by habitat type, resulting from transmission line construction are described in Table 3.6-1.

Habitat loss from clearing Russian olive trees within palustrine areas of the right-of-way could affect wildlife species. These trees may provide structure for nesting and perching ferruginous and Swainson's hawks, black-crowned night herons, loggerhead shrikes, and migratory birds. Clearing during the nesting season could result in direct mortality of nestlings, while clearing trees in the nonbreeding season would result in habitat loss but would avoid potential mortality. The impact could be partially or fully avoided through minor site modifications that minimize or eliminate clearing of Russian olive trees, limited operating periods during critical breeding periods, and avoidance of occupied nests during nesting periods, as described in Appendix A.

**Table 3.6-1. Impacts to Wildlife Habitats Resulting from Tower and Conductor Construction**

Wildlife Habitats	Standard Towers (1,150-foot average span)			Alternative using Standard Towers + Alternate Towers (1,500-foot average span)				Pulling and Reeling Sites
	Number of Towers	Acres Disturbed		Number of Towers		Acres Disturbed		Acres Disturbed
		Temporary	Permanent	Standard	Alternate	Temporary	Permanent	Temporary
Grassland and agriculture	87	21.8	4.4	48	31	19.8	4.0	9.5
Sagebrush- steppe	67	16.8	3.4	28	30	14.5	2.9	7.3
Palustrine	5	1.3	0.3	5	0	1.3	0.3	0.4
Riparian	0	0.0	0.0	0	0	0.0	0.0	0.1
Subtotal	159*	39.8	8.0	81*	61	35.5	7.1	17.3
Temporary impact = 0.25 acres/tower Permanent impact = 0.05 acres/tower Pulling and reeling temporary disturbance = approximately 1 acre for every 2 miles along the transmission line *Number does not include residential/industrial estimates for tower placement								

Habitat loss from clearing willow and other riparian vegetation in the palustrine area and along the Walla Walla River may affect painted turtles, black-crowned night herons, yellow-billed cuckoos, yellow-breasted chats, willow flycatchers, and tricolored blackbirds. Additionally, removal of this vegetation could alter the hydrology and microclimates of the associated water bodies, thereby affecting habitats that potentially support amphibians.

Habitat loss from clearing sage-steppe vegetation may affect northern sagebrush lizards, striped whipsnakes, grasshopper sparrows, prairie falcons, ferruginous hawks, Swainson's hawks, loggerhead shrikes, burrowing owls, long-billed curlews, Washington ground squirrels, Ord's kangaroo rats, western small-footed myotis, and pallid bats. Clearing this vegetation during nesting seasons could result in the direct loss of grasshopper sparrows, loggerhead shrikes, and long-billed curlew nestlings. The impact could be partially or fully avoided through minor site modifications that avoid clearing sage-steppe vegetation, as described in Appendix A.

Ground disturbance from heavy equipment operation, road grading, and construction site preparation may affect burrowing animals such as Washington ground squirrels, Ord's

kangaroo rats, burrowing owls, and striped whipsnakes. Potential impacts would be fully avoided through minor site modifications that avoid burrows, as described in Appendix A.

### ***Natural Gas Pipeline***

The right-of-way (75-foot-wide) for the natural gas pipeline would pass through irrigated cropland and highly fragmented shrub-steppe adjacent to the Boise Cascade Corporation cottonwood fiber farm. A total of 54 acres of habitat would be temporarily impacted by construction, including 16 acres of disturbed shrub-steppe; 28 acres of hybrid cottonwood on the Boise Cascade Corporation fiber farm; and 10 acres of disturbed shrub-steppe between agricultural circles. In addition, approximately 5 acres of disturbed shrub-steppe habitat would be further disturbed at the natural gas pipeline connection of which 1 acre would be permanently converted to a nonvegetated state.

Installation of the natural gas pipeline would result in the loss of habitat for ground-dwelling animals within the trenched area during the construction period and for the time required for revegetation of the disturbed area. Native soil removed during construction would be returned to the trench and the area regraded and revegetated with native grasses and shrubs. Wildlife is expected to repopulate the area following construction.

Western burrowing owls were documented at two sites in the vicinity of the natural gas pipeline right-of-way near the natural gas pipeline tap site. Construction activity would be located more than 500 feet away from known burrows and is not expected to disturb breeding owls. Site-specific surveys would be conducted prior to construction to confirm the burrows and to identify any additional use areas. Currently, the State of Washington does not have formal management recommendations for burrowing owls (WDFW 2001). However, management guidelines developed for California populations of burrowing owls call for no disturbance within 50 meters (160 feet) of occupied burrows during the nonbreeding season or within 75 meters (250 feet) of occupied burrows during the breeding season (SCPBRG 2001). The applicant proposes to meet or exceed these disturbance-free buffers during the March 15 to August 15 breeding season for any occupied burrows along the natural gas pipeline right-of-way.

An artificial nesting platform for ferruginous hawks is located within 0.5 mile of the proposed natural gas pipeline route. Construction timing restrictions would be observed for occupied ferruginous hawk nests within 1 kilometer (0.62 mile) of proposed construction activities per WDFW recommendations. An aerial survey of the ferruginous hawk nest platform was conducted on May 6, 2001; no evidence of occupation was observed (Smayda Environmental 2001).

### **3.6.2.2 Operation and Maintenance**

#### **Generation Plant**

It is expected that no additional displacement of wildlife from the project site and access roads would occur after construction is complete. One impact that could potentially occur is bird collisions at project site HRSG stacks and other tall structures.

The Wallula Power Project would include four HRSG exhaust towers, each 175 feet tall. No guy wires would be needed to support the stacks. Aviation safety lighting is proposed for the HRSG exhaust stacks to address safety issues resulting from low-flying aircraft. In accordance with the guidelines outlined in Federal Code of Regulations, Title 14, CFR Part 77, the project applicant has filed the Federal Aviation Administration form entitled "Notice of Proposed Construction or Alteration" (FAA Advisory Circular No. 70/460-2H). To minimize the risk to migrating birds, the exhaust stacks would be lit in accordance with lighting recommendations in the USFWS September 14, 2000 Draft Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers (USFWS 2000a).

Maximum height of other structures on the project site would be 98 feet. These structures would be illuminated with down-shielded security lights.

The tallest building at the Boise Cascade Corporation Wallula Mill is the Power and Recovery Building E, the roof of which is 210 feet above ground level. The tallest structures are located in the center of the mill complex, where bird carcasses would be expected to fall to the ground within work areas and be readily observable. Mr. Kevin Scott, environmental manager, and Mr. Dennis Ross, retired environmental manager, were interviewed by K. Smayda of Smayda Environmental Associates (on behalf of the applicant's consultant) regarding the occurrence of avian or bat mortality associated with the plant. Neither manager has observed or heard discussion of any bird collisions at the site (Scott pers. comm. as cited in Wallula Generation 2001). This does not mean that bird strikes could not occur at the project site, only that there is no evidence, based on a nearby and similar facility, that they would occur.

Indirect effects of the operation of the power plant include the cessation of irrigation at the project site. This would likely result in a decline in wetland habitat, which ultimately would be replaced by upland plant and animal species. These wetlands contain few natural habitat features; they depend on irrigation runoff, are bermed and lined with rip rap, and contain little native vegetation. These wetlands do provide habitat for several species, however, so loss of these wetlands would mean a reduction in that type of wildlife habitat in the project vicinity. Since the wetlands that would be impacted are relatively small (see Section 3.4, Wetlands and Vegetation), they represent only a fraction of the wetland habitat available in the larger project vicinity. They are also of marginal quality as wildlife habitat. For these reasons, loss of these wetlands is not expected to lead to a decline in wetland-dependent wildlife populations in the area.

Small remnant patches of shrub-steppe habitat would be permanently removed as a result of the construction of the power plant. An equivalent area of damaged or permanently lost shrub-steppe habitat would be reestablished on other property in the local area. This reestablishment of equivalent area of shrub-steppe habitat would mitigate for the loss of this habitat type at the power plant.

### ***Water Supply Pipeline***

Maintenance or repair activities within the pipeline right-of-way would occur infrequently. Potential impacts would be similar to those described for construction.

### ***Transmission Line and Associated Facilities***

Transmission line maintenance activities would include road grading, minor vegetation clearing, and repair of ditches and culverts. Some wildlife habitat loss, noise, and disturbance could occur during maintenance activities. Impacts during maintenance activities are similar to those during construction activities, but are not as extensive. Because these activities are smaller in scope than the original construction, the resulting impacts would be less.

Some types of birds, particularly water birds such as ducks and geese, are susceptible to collisions with transmission lines. Generally, collision with transmission lines is not a major source of mortality for raptors (Olendorff and Lehman 1986). Impacts to raptors are expected to be low. Collisions typically occur in very specific locations where conditions combine to create a high potential for birds striking transmission lines (APLIC 1994). Four factors contribute to this potential:

- the current level of risk,
- the type of transmission lines,
- the amount of use of the area by avian species, and
- the inherent tendency for certain species to collide with overhead wires.

The existing transmission line creates a level of risk. Areas of highest concern are where transmission lines cross bird flight paths or areas of high bird activity. These areas of concern are located at the Walla Walla River crossing and the palustrine area. Bird diverters would be installed in this area, as described in Appendix A, in order to decrease the risk of bird collisions in this area.

Because the new Smiths Harbor-McNary transmission line segment would be placed in an area already containing the same potential risk, the impact would be less than if a new line were placed where there is no existing transmission line. Risks and associated mortality would increase to some degree relative to the existing conditions.

The Wallula-Smiths Harbor segment of the transmission line crosses an area without previous transmission lines. Additional risk to waterfowl and raptors using this area would be created by the new transmission line.

Bird electrocution occurs where two energized lines, or one energized line and a ground source, are close enough for a bird to touch both at the same time. Larger perching birds such as golden eagles, red-tailed hawks, Swainson's hawks, and ferruginous hawks are the types of birds most at risk. To prevent the problem, Bonneville provides adequate separation of poles, crossarms, and wires; insulates wires and other hardware where sufficient separation cannot be attained; and places perching platforms away from energized hardware. No avian electrocutions are expected.

Cumulative impacts on wildlife resulting from existing and proposed transmission lines and natural gas pipelines in the region are discussed in Section 3.17, Cumulative Impacts.

### ***Natural Gas Pipeline***

See discussion for water pipeline.

## **3.6.3 Impacts of Alternatives**

### ***3.6.3.1 Alternative Transmission Structure and Longer Span Design***

Using taller structures and longer spans between structures could lead to less impact on habitat from structure foundation construction and possibly access road construction. This reduction in impact would result if fewer access road miles were required. The reduction in impact would primarily occur in the shrub-steppe and grassland/agriculture habitat types as these are the predominant habitats found in the area where longer spans are proposed.

#### ***3.6.3.1 Alternative Alignment near McNary Substation***

The alternative that places the new transmission line east of the existing Lower Monumental–McNary line could potentially impact some wetland/riparian habitat during construction of one tower location. Placement of the tower would be designed to avoid any wetland, if possible. There are no other differences in impacts to wildlife between the two options.

#### ***3.6.3.2 No Action Alternative***

If the No Action Alternative were undertaken, no project-related impacts to wildlife or wildlife habitat would occur. There would be no enhancement of habitats along the Walla Walla River through the acquisition of water rights and replanting of riparian vegetation on approximately 145 acres of land.

### **3.6.4 Mitigation Measures**

No mitigation measures in addition to the BMPs already described in Appendix A would be necessary to reduce or eliminate impacts to wildlife in the project area resulting from the construction, operation, and maintenance of the proposed project.

### **3.6.5 Significant Unavoidable Adverse Impacts**

There would be no significant unavoidable adverse impacts to wildlife associated with the construction, operation, and maintenance of the Wallula Power Project.