

# **Scoping/Information Package:**



# Table of Contents

<b>1. Idaho Power Company – Langley Gulch Power Plant Transmission and Water Lines .....</b>	<b>1</b>
1.1. Introduction .....	1
1.2. Background .....	1
1.3. Purpose and Need for Action .....	2
1.4. Existing Condition .....	3
1.4.1. Soils .....	3
1.4.2. Minerals .....	3
1.4.3. Air Quality .....	3
1.4.4. Climate/Precipitation .....	4
1.4.5. Surface Water Features and Water Quality .....	4
1.4.6. Groundwater .....	5
1.4.7. Vegetation .....	6
1.4.8. Wildlife and Wildlife Habitat .....	7
1.4.9. Federally Listed, Proposed, and Candidate Species .....	7
1.4.10. Special Status Species .....	7
1.4.11. Long-billed Curlew Habitat Area of Critical Environmental Concern (ACEC) .....	10
1.4.12. Cultural Resources .....	11
1.4.13. Recreation .....	11
1.4.14. Transportation .....	11
1.4.15. Visual Resources .....	11
1.4.16. Economic and Social Values .....	12
1.4.17. Livestock Grazing .....	12
1.4.18. Utility Rights-of-Way and Communication Facilities .....	12
1.5. Proposed Action .....	12
1.5.1. Transmission Line Construction Activities .....	13
1.5.2. Transmission Structures .....	14
1.5.3. Pipeline Construction Activities .....	14
1.5.4. Operation and Maintenance (O&M) Activities and Emergency Situations .....	16
1.5.5. Environmental Protection Measures .....	17
1.6. Preliminary Issues .....	20
1.7. Preliminary Alternative Development .....	21
1.8. Decision to be Made .....	22
1.9. Public Input Needed .....	22
1.10. Literature Cited .....	22
1.11. Figures .....	23



**List of Figures**

Figure 1.1. Vicinity Map ..... 26

Figure 1.2. Project Features, Land Ownership, and Use ..... 28

Figure 1.3. Water Resources ..... 30

Figure 1.4. Waters of the U.S. .... 32

Figure 1.5. Slickspot Peppergrass Management Area ..... 34

Figure 1.6. Long-billed Curlew Habitat Area of Critical Environmental Concern ..... 36

Figure 1.7. Transportation Facilities ..... 38

Figure 1.8. Structures for the 138kV Transmission Line ..... 40

Figure 1.9. Structures for the 230kV Transmission Line ..... 42

Figure 1.10. Alternate 138kV Transmission and Water Line Routes ..... 44



# **Chapter 1. Idaho Power Company – Langley Gulch Power Plant Transmission and Water Lines**



## Four Rivers Field Office

### 1.1. Introduction

Idaho Power Company (Idaho Power) submitted right of way (ROW) applications to the BLM for the construction, operation, and maintenance of water and transmission lines and associated access roads to serve the Langley Gulch Power Plant (LGPP). The planned LGPP is a 300-megawatt (MW) combined cycle combustion turbine located on private property in the New Plymouth area in southwestern Idaho (Figure 1 and Figure 2).

This information package summarizes a Bureau of Land Management (BLM) proposal to grant new ROWs and amend an existing ROW in accordance with the Cascade Resource Management Plan (RMP) (BLM 1987). Federal actions must be analyzed in accordance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations to determine potential environmental consequences.

The purpose of this package is to inform interested and affected parties of the proposal and to solicit comments to assist with the NEPA review of the proposal. Analysis of the proposal is ongoing, and will be documented in an Environmental Assessment (EA) with an estimated completion date of May 2010. Comments received in response to this solicitation will be used to identify potential environmental issues related to the proposed action and to identify alternatives to the proposed action that meet the purpose of and need for the project.

### 1.2. Background

The need for a resource like LGPP was identified in Idaho Power's 2004 and 2006 Integrated Resource Plans (IRP) and is treated as a committed resource in the 2009 IRP (Idaho Power 2004, 2006, 2009). The IRP is a comprehensive look at present and future demands for electricity, as well as a plan for meeting those demands. The IRP describes the company's projected need for additional electricity and the resources necessary to meet that need while balancing cost, risk, and environmental concerns. Idaho Power expects to add about 10,000 new retail customers (e.g., subject to retail and not wholesale rates) annually over the next 20 years. This will result in an increase in average annual load of 13 average megawatts (aMW) per year and an increase in peak-hour demand of 53 megawatt (MW) per year over the next 20 years.

The load forecast prepared for the 2009 IRP indicates the number of residential customers in Idaho Power's service area is expected to increase 1.7 percent annually from about 404,000 at the end of 2008 to over 563,000 by 2029. On June 30, 2008, Idaho Power established a new peak demand record of 3,214 MW. As a result of the expected increase in population and the continued growth in the demand for energy, the LGPP is necessary for Idaho Power to continue to reliably provide electricity to customers.

While Idaho Power's demand side management (DSM) programs have exceeded expectations, there is still a need to increase capacity and energy production by 2012. Existing and new energy efficiency programs are expected to reduce summer energy deficits by approximately 60 aMW in 2012. Demand response programs are forecast to reduce peak-hour load in the summer of 2012 by more than 350 MW; however, demand response programs are assumed to produce little or no reduction in average load. While the DSM programs represent significant increases in energy

efficiency and demand response, the impact is not large enough to eliminate the need for new generation to address projected energy deficits.

The 2009 IRP demonstrates that monthly average energy deficits continue to support the need for additional resources. With existing resources, Idaho Power projects monthly energy deficits will reach 187 aMW by the summer of 2012, and more than 300 aMW by the summer of 2013. Adding the LGPP and other committed resources from the 2006 IRP eliminates these near-term energy deficits, and results in substantially reduced energy deficits for 2014 and beyond. A similar reduction in monthly peak-hour deficits is projected as a result of LGPP and other resources. The deficits forecast in the 2009 IRP are based on Idaho Power's planning criteria assumptions and several scenarios exist that could make these deficits greater than forecast. These include:

1. Hydrologic conditions may be worse than forecast,
2. Economic recovery could take place sooner than forecast,
3. New, large load customers could decide to locate in Idaho Power's service area, and
4. Energy efficiency and demand response programs may not perform as expected.

These potential scenarios, along with Idaho Power's obligation to serve new and existing loads, underscore the need for LGPP.

The LGPP project was selected through a competitive selection process in response to a Request For Proposal (RFP) for supplying power. Idaho Power submitted a self-build proposal and competed against four other proposals submitted by independent power producers. Through a lengthy evaluation process validated by the Idaho Public Utilities Commission, the LGPP project was selected.

Idaho Power's self-build team evaluated 13 different sites from Ontario, OR to Hammett, ID prior to selecting the Langley Gulch site submitted in the RFP. Each of the sites were evaluated for air quality and ability to permit, proximity to an existing gas line, integration to the existing transmission grid, compatibility with zoning, development costs, power plant performance, access to water, and several other site related components. The Langley Gulch site near New Plymouth was selected as a result of this evaluation and overall lowest cost.

### **1.3. Purpose and Need for Action**

BLM is processing Idaho Power's applications under the Federal Land Policy and Management Act, Title V. The action corresponds to the Cascade RMP direction to consider ROW actions in areas where they are not specifically excluded if there is a demonstrated need and resource conflicts are low or can be mitigated. The action is also consistent with the Energy Policy Act of 2005 (Public Law [PL] 109 58), which encourages energy efficiency and conservation, promotes alternative and renewable energy sources, reduces dependence on foreign sources of energy, and increases domestic production.

Idaho Power is proposing the construction, operation, and maintenance of the transmission lines, water line, and roads to support the LGPP. The transmission lines would be necessary to export the power to Idaho Power's customers and the water line would be necessary for plant operation. The roads would be used to access the transmission and water lines.

The purpose of this action is to provide opportunities for transmission line, water line, and road ROWs that minimize impacts to sensitive resources including slickspot peppergrass and long-billed curlew.

## 1.4. Existing Condition

The following information provides a general overview of the resources within the study area that could be affected by the construction, operation, and maintenance of the proposed transmission lines, water line, and access roads. The study area, shown on Figure 2, includes project features and resources that may be affected, either directly or indirectly, by project activities. Existing data were primarily used to characterize the study area. Resource specific surveys were conducted for botanical, wildlife, and cultural resources. In these cases, information is specific to the survey area. The survey area is a subset of the study area and includes the proposed ROW and adjacent area. Specific survey areas are defined in the appropriate sections below.

### 1.4.1. Soils

The study area is generally dominated by silt loam and sandy loam soil types. The southern portion of the study area generally includes lower slope grade (less than 10 percent), while the mid-to more northern portion of the study area is interspersed with soils of greater slope ranges (10 to 40 percent). Silt loams and the steep Lolita-Saralegni Association soils, as well as, the Tindahay coarse sand loam soils are present along the transmission line ROW. The study area is dominated by the low hazard level of shrink-swell soil types. Within Canyon County, areas are dominated by slightly erodible soils, while the southern portion of the study area in Payette County is fairly evenly divided between slightly and highly erodible soils. The northern portion of the study area is dominated by moderately and slightly erodible soils.

### 1.4.2. Minerals

A search of the Idaho Geological Survey's (IGS) Mines and Prospects Digital Database, Geocommunicator, and BLM/LR2000 was performed for Payette County (IGS 2009); no mining and oil and gas property records were identified in the study area. The general area west of Caldwell and Emmett and south of Weiser has been determined to have a medium potential for the discovery and development of natural gas (BLM 2009a). There are currently no active oil and gas leases in the Four Rivers Field Office planning area; however in 2006, approximately 181,000 acres (75 parcels) were nominated for oil and gas leasing on BLM and split estate lands between Caldwell and Weiser, west of Emmett. A leasing decision is being deferred on these parcels pending completion of the FRFO RMP/EIS (BLM 2009a).

### 1.4.3. Air Quality

The Clean Air Act (CAA), 42 USC 7401 et seq. as amended in 1977 and 1990, is the principal federal statute governing air pollution. The CAA empowered the U.S. Environmental Protection Agency (U.S. EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. These pollutants are called "criteria" air pollutants and include carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead, particulate matter equal to or less than 10 microns in diameter (PM<sub>10</sub>), and fine particulate matter equal to or less than 2.5 microns in diameter (PM<sub>2.5</sub>). The NAAQS include primary standards designed to protect human health and secondary standards to protect public welfare, including visibility and damage to crops and vegetation.

Regions of the country that meet the NAAQS are considered “attainment” areas and regions that do not meet the NAAQS are designated as “nonattainment” areas. Certain rural parts of the country do not have extensive air quality monitoring networks, and these areas are considered “unclassifiable” and are presumed to be in attainment with the NAAQS. The study area includes portions of Canyon and Payette counties. Air quality in each of these counties falls into the categories of either “better than national standards” or “unclassifiable/attainment” for all criteria air pollutants (U.S. EPA 2009).

There are seven Class I areas that are located within 300 kilometers of the proposed project site. Three Class I areas are located within 145 km with the closest being Eagle Cap Wilderness Area at 125 km. The Class I Areas within 300 km include:

- Eagle Cap Wilderness Area Oregon—125 km
- Sawtooth Wilderness Area Idaho—126 km
- Hells Canyon Wilderness Area Idaho—130 km
- Strawberry Mountain Wilderness Area Oregon—144 km
- Jarbidge Wilderness Area Nevada—255 km
- Craters of the Moon National Park Idaho—265 km
- Selway Bitterroot Idaho—275 km

Currently, estimated emissions from the LGPP of PM, NO<sub>x</sub>, SO<sub>x</sub>, and H<sub>2</sub>SO<sub>4</sub> are approximately 149.2 total per year (tpy), far below 1,350 tpy. Therefore, no air quality related values (AQRV) analysis was required at any Class I Area. Modeling results indicate the proposed LGPP project would not cause or significantly contribute to an exceedance of the Class I increments.

#### **1.4.4. Climate/Precipitation**

The climate of the study area may be described as mid-latitude, semiarid, on the boundary between steppe (semiarid) and desert (arid). This type of climate typically has warm dry summers, relatively low annual precipitation, and sparse natural vegetation (USDA NRCS 1972). In the study area annual precipitation totals can range from slightly more than 5 inches to more than 16 inches with an average of 10.75 inches (<http://www.wrcc.dri.edu/summary/climsmid.html>; accessed December 21, 2009). Moisture from snowfall is variable; however, the annual average of 16.4 inches of snow at Payette is evidence that snowfall is not uncommon.

#### **1.4.5. Surface Water Features and Water Quality**

The Payette River bounds the north/northeastern portion of the study area and flows northwestward to join the Snake River approximately seven miles north of the study area. The Snake River flows north through the western portion of the study area. The Boise River enters the southern portion of the study area near Caldwell, and flows westward where it joins the Snake River approximately four miles south of the study area. The only other named natural drainages in the study area are Langley Gulch, Homestead Gulch and Ashlock Gulch—tributaries to the Snake River, and Sand Hollow Creek—a tributary/canal flowing east/southeast in the Lower Boise Watershed. Numerous irrigation canals/ditches traverse the study area primarily outside of BLM lands. Several ephemeral drainages occur within the proposed ROWs. These drainages have poorly defined bed and bank or topographic valley features where debris is collected. The drainage bottoms have native/non-native grasslands except where cattle have trampled a path. These drainages are indicative of typical drainages throughout the study area. Interstate 84 (I-84)

intercepts and diverts water to low-lying areas along the highway, thus potentially preventing surface connectivity to drainages. Water resources and floodplains are shown on Figure 3.

Jurisdictional and non-jurisdictional waters of the U.S., as regulated and defined by the U.S. Army Corps of Engineers (Corps), do occur within the study area (Figure 4). A jurisdictional wetland delineation was conducted on December 1, 2009. Jurisdictional waters of the U.S. include the Snake River and an intermittent drainage that the proposed water line runs adjacent to and that is across the street from the proposed pump house area. The riparian area associated with the intermittent drainage exhibits all of the necessary wetland indicators; however, the drainage is bisected by a road without a culvert. While there is not an obvious hydrologic connection on either side of the road there is likely a sub-surface significant nexus as the riparian community continues downstream on the other side of the road.

An existing six-foot wide irrigation ditch that was flowing at the time of the delineation, when most irrigation has been shut off, was also identified. A small wetland fringe occurred on either bank of the ditch and is considered in the mean six foot width. The irrigation ditch appears to ultimately issue into an adjacent agricultural field. No surface connection was observed and no indications of a subsurface connection appear to be contributing to a significant nexus with the Snake River; therefore, it was determined not to be jurisdictional.

The proposed waterline crosses the A-Line canal twice and one of its spurs once.

The Idaho Department of Environmental Quality (IDEQ) has identified a segment of the Snake River (from the Boise River inflow to Weiser River inflow) as impaired for bacteria, dissolved oxygen, nutrients, pH, sediment, mercury, pesticides, and temperature in accordance with section 303(d) of the Clean Water Act. IDEQ has designated cold water aquatic life, primary contact recreation, domestic water supply, special resource water, and salmonid spawning as beneficial uses within this segment. Total maximum daily loads (TMDLs) for nutrients / dissolved oxygen, pesticides, sediment, temperature, and total dissolved gas have been developed by IDEQ (IDEQ and ODEQ July 2004).

## 1.4.6. Groundwater

The lower Boise valley is underlain by two aquifers: (1) the shallow, unconfined Boise River gravel aquifer and (2) deep, semi-confined to confined Idaho Group aquifer. An unconfined aquifer is one that is open to receive water from the surface, and whose water table surface is free to fluctuate up and down, depending on the recharge/discharge rate. There are no overlying "confining beds" of low permeability to physically isolate the groundwater system. During the winter and spring, the water table will typically rise since there is usually abundant water on the surface. During the dryer months of the year, into summer and fall, the water table will slowly drop as there is less recharge, and the ground water slowly moves to other parts of the aquifer. Also, use of the ground water by pumping wells will lead to a decline in the water table surface. A semi-confined (leaky) aquifer is a completely saturated aquifer overlain by a semi-impervious layer and underlain by an impervious layer. The boundaries of the aquifer system are related to changes in the types and occurrence of lake and river sediments, and crustal faulting.

### 1.4.7. Vegetation

Field surveys were conducted along the proposed transmission and waterline ROWs and adjacent areas on May 12-18 and June 22-24, 2009. The survey area was 500-feet wide; 250-feet on either side of the centerline of the proposed ROW. These surveys were designed to document vegetation types, potential wetlands and other waters, potential special status plant species and associated habitats, and noxious weeds in the survey area. Based on pre-field reviews of existing data and field surveys, two plant communities were observed during the surveys: Native / Non-Native Grasslands and Native Shrublands.

The native grass species Sandberg bluegrass and small sixweeks fescue, and the non-native cheatgrass are the most abundant species in the survey area. The relative abundance of each of the grass species changes often along different portions of the survey areas depending on aspect, prevalence of ground disturbance, and topographic position as it relates to changes in substrate conditions. Hotter aspects and ridgetops generally support relatively higher abundance of cheatgrass, while Sandberg bluegrass and small sixweeks fescue occur at relatively higher abundances on cooler aspects and valley bottoms. The non-native herb species tumble mustard, redstem storksbill, and clasping pepperweed are ruderal species that co-dominate the herb layer with the annual and perennial grass species in generally more disturbed portions of public rangeland.

The relative abundance of the ruderal herb species is generally highest in areas where livestock use is concentrated, particularly on drier, more exposed aspects, and on the exposed sub-soil mounds of Piute ground squirrel colonies that are ubiquitous at varying and often high densities throughout the survey area. The composition of Native / Non-Native Grasslands generally includes only a few native species at low abundance. The most common native grass and herb species include purple threeawn, Nelson's needlegrass, bluebunch wheatgrass, squirreltail grass, basin wildrye, gooseberryleaf globemallow, flatspine stickseed, and common sunflower.

The Native Shrubland vegetation is characterized by three species assemblages. The first assemblage is dominated by big sagebrush, representing large old shrubs that have survived previous wildfires. The canopy of these stands is often open, consisting of one to several distinct clumps and an abundant herb layer dominated primarily by Sandberg bluegrass, small sixweeks fescue, and tumbledustard. Several stands had sparse herb layers and evidence of some ponding during spring snowmelt. Small amounts of biological soil crusts persist in some stands having survived inundation and trampling by cattle. The Native Shrubland vegetation dominated by forage kochia, revealed no evidence of having been affected by wildfires and is associated with generally low-gradient surfaces and alkaline soils. The third Native Shrubland species assemblage represents just a few small isolated patches of the shrub dominated vegetation along the surveyed areas. Green rabbitbrush forms the dominant shrub layer species with an herb layer best represented by a sparse cover of cheatgrass and tumbledustard.

Agricultural crops are the prevalent vegetation on surrounding private lands.

The noxious weeds observed in the proposed ROWs include Scotch thistle, diffuse knapweed, rush skeletonweed, and Canada thistle. The BLM has documented Mediterranean sage, an invasive plant species, in the area of the existing 230kV transmission line.

### **1.4.8. Wildlife and Wildlife Habitat**

Field surveys were conducted along the proposed transmission and waterline ROWs and adjacent areas on May 12-18 and June 22-24, 2009. The survey area was 500-feet wide; 250-feet on either side of the centerline of the proposed ROW. These surveys were designed to document wildlife species that occur within the project area and their use of the existing habitat.

The grassland habitat in the survey area is degraded from recreational uses, livestock grazing, wildfires, and the prevalence of non-native species. The Piute ground squirrel is abundant, with densely populated colonies throughout the study area. These colonies provide a prey base for a variety of wildlife. Raptors regularly forage in these grasslands; American kestrel, red-tailed hawk, and northern harrier were observed during field surveys. Horned larks are also abundant and are associated with areas where ground squirrels have abandoned their burrows. Other common wildlife species observed included gopher snake, badger, coyote, barn swallow, western kingbird, common raven, and black-billed magpie. Common invertebrates observed include mustard white, western white, western tailed-blue, fritillary, ground beetles, and jewel beetles.

In general, native shrubland habitat within the study area is degraded because of livestock grazing, the prevalence of non-native species, and recreational uses. The habitat has been disturbed and is fragmented, and non-native species including cheatgrass and other non-native plants have become established in the herbaceous layer. Common wildlife species observed during the field surveys included Piute ground squirrel, badger, barn swallow, red-tailed hawk, horned lark, chipping sparrow, western kingbird, northern harrier, mourning dove, jackrabbit, cottontail, and coyote.

### **1.4.9. Federally Listed, Proposed, and Candidate Species**

Based on a review of existing data and field surveys, one federally listed threatened or endangered species and/or suitable habitat occurs in the study area; the federally-listed as threatened slickspot peppergrass, has been documented in the study area and adjacent to the proposed ROW for the 138kV transmission line that parallels I-84.

The proposed ROWs are located in a portion of the New Plymouth / Canyon County Slickspot Peppergrass Management Area which represents the northwest extent of the species' range. Most of the area has burned in the past and has converted to annual grassland vegetation, with small scattered remnant stands of unburned vegetation. The distribution of slickspots is limited, occurring mainly along ridgelines (CCA 2003). A database search of the Idaho Fish and Wildlife Information System (IFWIS) resulted in four slickspot peppergrass Element Occurrences (EOs) documented within the study area (IDFG 2009a). Three of these four occurrences are more than 0.5 mile from the areas that were surveyed for the Proposed Action. The fourth occurrence (EO #68 [ID 6035]: South of New Plymouth/ I-84) was documented adjacent to the proposed 138kV transmission line ROW that parallels I 84. The slickspot management area is shown on Figure 5.

### **1.4.10. Special Status Species**

The BLM's Four Rivers Field Office has identified 34 sensitive plant species that can occur on BLM lands within their planning area (BLM 2008a). There are 72 animal species on the Idaho BLM special status species list for the Planning Area; these include 14 mammals, 43 birds, 10 reptiles and amphibians, four fish, and one invertebrate. Based on a review of habitat associations, documented occurrences, and potential habitat identified during the 2009 field surveys, one

sensitive plant species was identified as likely to occur within the study area (Table 1); the other species identified in the BLM planning area were not likely to occur due to the lack of suitable habitat. Of the 10 reptile and amphibian species that potentially occur within the BLM's planning area, three have the potential to occur within the study area; primarily due to the presence of irrigation canals (Table 1). Numerous raptors, shrubland and grassland birds, and bats also have the potential to occur in the study area (Table 1). Special status species observed in grassland habitat during the field surveys included golden eagles, a prairie falcon, and a long-billed curlew. Special status species observed in native shrublands during the field surveys included Swainson's hawk and Brewer's sparrow. Because most of the study area has been previously disturbed and continues to be disturbed, the majority of these species probably use the area for foraging and not for nesting; the exception is the long-billed curlew (as discussed below).

Table 1. Special Status or Listed Species, Federal Status, Habitat Association, and Potential to Occur Within the Study area

Common Name	Scientific Name	Status <sup>a</sup>	Habitat Association <sup>b</sup> /Potential Occurrence
<b>Plants</b>			
Slickspot peppergrass	<i>Lepidium papilliferum</i>	Federally-listed as threatened; BLM Type 1	Bare slickspot soils within big sagebrush. Suitable habitat of bare slickspot soils within sagebrush and nonnative grasslands occurs inside the survey area. No plants were observed in the survey area during the 2009 field visits, but plants were observed in a known element occurrence located outside of the survey area but within the study area. Additional plants may occur within the study area due to the presence of slickspots.
<b>Amphibians and Reptiles</b>			
Common garter snake	<i>Thamnophis sirtalis</i>	BLM Type 3	Canals and intermittent ponds, prairie swales, and roadside ditches. May be seasonally present within the study area due to the presence of irrigation canals
Woodhouse toad	<i>Bufo woodhousii</i>	BLM Type 3	Xeric to slightly mesic grassland and shrubland, often in washes, floodplains, or riparian areas. May occur within the study area due to the presence of irrigation canals.
Western toad	<i>Bufo boreas</i>	BLM Type 3	Canals and sagebrush/ grassland within 2 miles of water. May occur within the study area due to the presence of irrigation canals.
<b>Raptors</b>			
Golden eagle	<i>Aquila chrysaetos</i>	BGEP Act <sup>c</sup>	Foraging habitat only; observed in grassland and sagebrush. Requires cliffs or platforms on utility towers for nesting.
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEP Act <sup>c</sup>	Near open water. Closest open water is the Snake River, approximately 5 miles west. Overwintering habitat exists in survey area. Low potential to occur due to lack of suitable habitat.

Common Name	Scientific Name	Status <sup>a</sup>	Habitat Association <sup>b</sup> /Potential Occurrence
Prairie falcon	<i>Falco mexicanus</i>	BLM Type 3	Foraging habitat only, in grassland and sagebrush. Nests on cliffs. Observed flying over study area.
Ferruginous hawk	<i>Buteo regalis</i>	BLM Type 3	Grassland and sagebrush. Nests in trees, on cliffs, utility poles, and ground. Low potential to occur due to lack of suitable habitat.
Swainson's hawk	<i>Buteo swainsoni</i>	BLM Type 5	Foraging habitat only, in grassland and sagebrush. Nests in trees. Closest known nest is 0.5 mile south of the survey area. Observed flying over study area.
Burrowing owl	<i>Athene cunicularia</i>	BLM Type 5	Grassland and sagebrush, during nesting season. Nests underground. Low potential to occur due to lack of suitable habitat.
Short-eared owl	<i>Asio flammeus</i>	BLM Type 5	Grassland and sagebrush, during nesting season. Nests on the ground. Not expected to occur due to lack of suitable habitat.
<b>Shrubland Birds</b>			
Brewer's sparrow	<i>Spizella breweri</i>	BLM Type 3	Sagebrush, especially big sagebrush, during nesting season. Observed in study area.
Sage sparrow	<i>Amphispiza belli</i>	BLM Type 3	Sagebrush, especially big sagebrush, during nesting season. Low potential to occur due to lack of suitable habitat.
Loggerhead shrike	<i>Lanius ludovicianus</i>	BLM Type 3	Open sagebrush, grasslands during nesting season. Low potential to occur due to lack of suitable habitat.
Sage thrasher	<i>Oreoscoptes montanus</i>	BLM Type 5	Sagebrush, especially big sagebrush, during nesting season. Low potential to occur due to lack of suitable habitat.
Brewer's blackbird	<i>Euphagus cyancephalus</i>	BLM Type 5	Shrubland, prairies, and agricultural fields. Low potential to occur due to lack of suitable habitat.
<b>Grassland Birds</b>			
Grasshopper sparrow	<i>Ammodramus saviannarum</i>	BLM Type 3	Open grassland with patchy bare ground, during nesting season. Low potential to occur due to lack of suitable habitat.
Long-billed curlew	<i>Numenius americanus</i>	BLM Type 5	Prefers open, recently grazed shrub steppe containing short vegetation for nesting; often feeds in agricultural areas. Species observed in and known to use study area.
<b>Bats</b>			
Spotted bat	<i>Euderma maculatum</i>	BLM Type 3	Forages in various habitats from desert to montane. Roosts in cracks and crevices in cliffs and canyons. Low to no potential to occur due to lack of suitable habitat.
Townsend's big-eared bat	<i>Plecotus townsendii</i>	BLM Type 3	Forages in sagebrush. Roosts colonially in caves, buildings. Low to no potential to occur due to lack of suitable habitat.

Common Name	Scientific Name	Status <sup>a</sup>	Habitat Association <sup>b</sup> /Potential Occurrence
Yuma myotis	<i>Myotis yumanensis</i>	BLM Type 5	Forages in sagebrush. Roosts in caves, tunnels, or buildings. Low to no potential to occur due to lack of suitable habitat.
Western small-footed myotis	<i>Myotis ciliolabrum</i>	BLM Type 5	Forages in sagebrush. Roosts in caves, mine tunnels, crevices in rocks, buildings. Low to no potential to occur due to lack of suitable habitat.

<sup>a</sup> Status: BLM Type 1: Threatened, Endangered, Proposed, and Candidate species. These species are listed by the USFWS or they are proposed for listing under the Endangered Species Act.

BLM Type 2: Rangewide/global imperilment species. Species that are experiencing significant declines throughout their range with a high likelihood of being listed under the ESA in the foreseeable future because of their rarity and/or significant endangerment factors. BLM

Type 3: Regional/state imperilment species. Species that are experiencing significant declines in population or habitat and are in danger of regional or local extinctions in Idaho in the foreseeable future.

BLM Type 4: Peripheral species in Idaho. Species that are generally rare in Idaho with the majority of their breeding range outside the state.

BLM Type 5: Watch list species. Species that are not considered Idaho BLM sensitive species, but current population or habitat information suggests that species may warrant sensitive status in the future.

<sup>b</sup> BLM 2000, IDFG 2005d, INPS 2007, Scott et al. 2002, Ehrlich et al. 1988.

<sup>c</sup> BGEP Act: The Bald and Golden Eagle Protection Act (16 USC 668a–d) prohibits the taking or possession of and commerce in bald and golden eagles.

### 1.4.11. Long-billed Curlew Habitat Area of Critical Environmental Concern (ACEC)

The Federal Land Policy Management Act (FLPMA) Section 103 (43 USC 1702[a]) and 43 CFR 1601.0-5(a) describes ACECs as “areas within the public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.” Designation of an ACEC does not automatically prohibit or restrict other uses within the area. The Cascade RMP designated the approximately 61,000 acre ACEC as crucial nesting habitat for this species (Figure 6). The main management objective is to maintain nesting habitat for the 1,000 curlew pairs that nest and raise their young in the area (BLM 1987). The Cascade RMP has a no surface occupancy and major construction restrictions within the ACEC from March 15 through June 30.

In 1987, the RMP estimated 1,000 long-billed curlew breeding pairs in the ACEC (BLM 1987). In 2006, the IDFG Idaho Bird Inventory and Survey (IBIS) program initiated standardized long-billed curlew surveys in the ACEC (IDFG 2009b). Curlews were surveyed according to the Long-billed Curlew Rangewide Survey and Monitoring Guidelines (Jones et al. 2003). Within the

ACEC, “off-road” (2-track) survey routes were delineated and surveyed. One of these survey routes, the New Plymouth route, covers a large portion of the study area. In 2006, IBIS biologists detected 85 curlews in the ACEC. However, only 2 detections were observed along the New Plymouth route that follows the study area. In 2008, 178 curlews were detected in the ACEC; only 11 curlews were detected along the New Plymouth route.

One long-billed curlew was observed flying over the study area during the 2009 field surveys.

### **1.4.12. Cultural Resources**

Before the arrival of trappers and explorers in the early 1800s, there is good evidence to suggest that Native Americans lived in the region for at least 12,000 years. Northern Paiute, Northern Shoshoni and Bannock populations are known to have occupied the Boise, Payette and Snake River drainages (Liljeblad 1957). They engaged in a highly mobile lifestyle in order to follow resources. Given a lack of sources of permanent water in the project area there is a low probability for the presence of Native American archaeological sites.

An examination of homestead claim records indicates that the area was patented in 1914 and 1919 and has been in private ownership since (BLM 2008b). The entire area was patented under homestead claims between 1912 and 1914; adjoining areas were patented as late as 1947. As such, there is a moderate probability for the location of historic archaeological resources.

### **1.4.13. Recreation**

BLM uses an inventory concept known as the Recreation Opportunity Spectrum (ROS) to define the type of recreation opportunities and settings available in a Planning Area based on the proximity of lands to road and trail travel corridors; the study area has not been classified. Several dirt roads cross BLM land throughout the study area and horseback riders and OHV use occur regularly. The seasonal hunting of ground squirrels (i.e., whistle-pigs) and target shooting are also common activities on BLM and private lands.

### **1.4.14. Transportation**

Transportation features within and near the study area include I-84, U.S. Highway 95, U.S. Highway 30; county, local, BLM, and private roads; two railroad lines; three public airports; and three private airports (Figure 7).

### **1.4.15. Visual Resources**

The BLM identifies visual resources and assigns them to inventory classes using the process described in BLM Handbook H-8410-1. The process involves rating the visual appeal of a tract of land, measuring public concern for scenic quality, and determining whether the tract of land is visible from travel routes or observation points. The area’s visual resources are then assigned to visual resource management (VRM) classes with established objectives. All of the BLM land within the study area is defined as a BLM VRM Class III area (BLM 1987). The objective of VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but

should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

The existing man-made landscape in the study area consists of one interstate highway (I-84), two U.S. highways (U.S. Highway 95 and U.S. Highway 30), and numerous local and 2-track BLM roads. The Williams Northwest Gas Pipeline and the Chevron Refined Products Pipeline pass through the project study area on the east side of I-84. In addition, the existing Caldwell to Ontario 230 kV transmission line passes through the study area on the west side of I-84. There are also several communications facilities and other structures on BLM land. A microwave tower is located in the northern portion of the study area and a second microwave tower is located on the east side of Sand Hollow Road. There are several cellular towers and private land mobile communications facilities located in the southeast portion of the study area. Existing utilities, transportation facilities, and communication facilities are shown on Figure 2. Private lands surrounding the BLM parcels consist generally of agricultural uses with some parcels containing various commercial and industrial uses.

### **1.4.16. Economic and Social Values**

From 1990 to 2007 (cities) or 2008 (counties), population increased for all cities and counties within the study area. The population of Canyon County more than doubled during this time period and the population of Gem and Payette counties increased approximately 40 percent. Among the cities evaluated, the city of Caldwell more than doubled to nearly 40,000 residents and the city of New Plymouth increased by 10 percent. The median per capita income in all cities and counties in the study area is lower than Idaho's state average of \$21,844.

### **1.4.17. Livestock Grazing**

The study area includes all or portions of the following BLM grazing allotments: C-line (#00035), Burt Individual (#00054), Black Canyon (#00176 and #00310), M.C. & M. Individual (#00180), Whitney (#00285), Little Emmett (#00391), Silver Sage FFR (#00400), Homestead Gulch (#20127), and Black Canyon (Shaw) (#20135). These encompass approximately 400,120 acres total (BLM 2009b) and also include some State, Bureau of Reclamation (BOR), and private land holdings.

### **1.4.18. Utility Rights-of-Way and Communication Facilities**

Existing utility ROWs within the study area that traverse BLM land include the Caldwell-Ontario 230 kV transmission line, the Chevron pipeline, and the Williams Northwest Gas pipeline. An Intermountain Gas pipeline has also been reported to occur in the study area, but the exact location has not been confirmed. In addition to these utility ROWs, numerous communications structures are located within the study area, including cellular towers, microwave towers, paging towers, and other communications facilities (Figure 2).

## **1.5. Proposed Action**

Idaho Power is proposing to construct, operate, and maintain two new transmission lines, a new water line, and roads to access these facilities and to modify the existing Caldwell-Ontario 230 kV transmission line (Figure 2). Approximately 0.2 mile of 10-foot wide new roads located on

BLM - managed lands would be constructed and approximately 3.81 miles of existing roads on BLM-managed lands would be used for the construction and O&M of the 230kV line. An additional 2.23 miles of existing roads would be used in association with the construction and O of the water line. Overland travel within the proposed ROW would be used for the construction and O of the 138 kV transmission line. The proposed actions would be for BLM to issue or amend ROWs for the following project features:

- A new 138 kV transmission line from the LGPP to an existing 138 kV transmission line adjacent to Willis Road. This line would be approximately 16.2 miles long, with approximately 6.5 miles proposed on BLM managed lands and the remainder on private lands and in the road ROW.
- A new double-circuit 230 kV transmission line from the LGPP to the existing Caldwell – Ontario 230 kV line. This line would be approximately 2.8 miles long and would occur on BLM managed lands.
- Replacement of an existing shield wire on the Caldwell – Ontario 230 kV line with a fiber optic shield wire. The 24 pair fiber optic shield wire would be placed at the top of the proposed 230 kV line and serves as a shield wire and as a fiber optic circuit. The fiber optic shield wire would also replace one of the existing shield wires on the existing Caldwell – Ontario 230 kV line. The fiber optics would serve as a communication link for the LGPP facilities to Idaho Power’s dispatch center in Boise and would not be used by other entities.
- Modification of the existing Caldwell – Ontario 230 kV line to allow connection with the proposed 230 kV line. This line would be broken to connect to the proposed 230 kV line to the LGPP. This would create a Caldwell to Langley Gulch 230 kV line and a Langley Gulch to Ontario 230 kV line. Existing structures at the location of the break would be replaced with steel H-frame structures.
- A new water line from the LGPP to the Snake River, including a pump station at the Snake River. This line would be approximately 9 miles long, with approximately 3 miles proposed on BLM managed lands and the remainder on private lands and in the road ROW. • Operation and maintenance of existing roads to access project facilities and creation of spur roads to access the proposed 230 kV line. Approximately 0.2 mile of 10-foot wide new roads located on BLM managed lands would be constructed. Overland travel, which will result in a two-track road, will be used for the construction and O of the 138 kV line.
- Idaho Power has requested a 500-foot wide (250-foot on either side of centerline) temporary construction ROW for the 230 kV line and 300-foot wide (150-foot on either side of centerline) temporary construction ROW for the 138 kV and water lines. Idaho Power has also requested ROW for two temporary staging areas (500-feet by 500-feet) associated with the construction of the proposed 230 kV line. Idaho Power has requested a permanent 150-foot wide ROW for both transmission lines, a permanent 30-foot wide ROW for the water line, and a permanent 10-foot wide ROW for existing and new roads.

### **1.5.1. Transmission Line Construction Activities**

Construction of the transmission lines would include the following:

1. Survey and staking of the centerline;
2. Maintain, repair, and construct access roads;
3. Prepare (i.e., clear and/or grade) work areas as needed;
4. Excavate structure holes and pour foundations where necessary;
5. Assemble and erect structures;
6. Install conductors and ground wires; and

## 7. Site reclamation.

Various phases of construction would occur at different locations for each project component throughout the construction process. Construction could involve several crews operating at the same time at different locations. Idaho Power and/or or contract construction crews would complete construction activities. Idaho Power expects that 12-20 crew members would be required and equipment could include, but would not be limited to, low drill, bucket trucks, line beds, wire pulling trailer, concrete trucks, crane, crew cab pickups, and flat bed trailers.

Idaho Power is proposing to start work on the 230 kV line in October 2010 and be completed by March 2011. Work on the proposed 138 kV line is proposed to start in July 2011 and be completed by June 2012; work on the portion that would occur on BLM managed lands would be completed by March 1, 2012.

### 1.5.2. Transmission Structures

The 138 kV line structures would be single circuit H-frame steel pole structures on BLM and uncultivated private lands; these structures range from 60 to 80 feet in height (Figure 8). This transmission line would be built using 230 kV construction, but would be initially operated at 138 kV. Single steel pole single circuit structures would be utilized along road rights of way and along cultivated private ground; these structures would range from 95 to 120 feet in height (Figure 8). The steel H-frame structures would be direct buried and the single steel poles would have a single concrete foundation. Approximately 120 to 140 poles would be required for the entire route.

The 230 kV transmission line would be constructed using single pole, galvanized steel double circuit structures, each with drilled pier steel-reinforced concrete foundations. Pole heights for the 230 kV line could range from 80 feet to 120 feet, depending on structure type. Span lengths could range from 800 to 1200 feet and the number of structures could range from 15 to 20.

Tangent structures would utilize braced post insulators. Angle and dead-end structures would be designed with tubular steel davit arms and suspension/dead-end insulators. All poles would be grounded using 2/0 AWG stranded copper wire from a 1/2" hex nut on the structure to a 5/8" x 8" copper ground rod embedded into earth at each structure. Structure types are shown on Figure 9.

The north circuit on the 230 kV line and the 138 kV line would be "Bittern" 45/7 ACSR and the south circuit would be "Cardinal" 54/7 ACSR. The vertical design clearances would be based on the transmission conductor's final sag at the maximum design operating temperature (194°F, final) or at the NESC loaded condition, whichever produces the greater sag. The minimum ground clearance would be 27 feet.

### 1.5.3. Pipeline Construction Activities

Work on the water line would be expected to start in summer 2010 and be completed in 2011. Waterline construction would likely be conducted with two crews; each would use one front end loader and two track-mounted back hoes. The two track hoes would do the trench excavation and backfill and the front end loader would handle the pipe and move excavated soil material. Three or four trucks would also be needed to haul pipe and other materials to the site. Construction of the proposed waterline would involve surveying the centerline, removing vegetation as needed, removing and stockpiling topsoil and subsoil, excavating a trench, laying pipe sections along the trench, welding the pipe, lowering the pipe into the trench, backfilling the trench, pressure testing

the pipe, replacement of topsoil and topsoil stabilization, recontouring, and revegetation. The activities would occur sequentially along the entire length of the pipeline, so a substantial portion of the pipeline trench could remain open for several weeks.

Sections of pipe and other materials would be staged along the pipeline ROW and at additional designated material staging areas on privately owned lands as necessary. Excavation for the pipeline trench would be conducted using a tracked or wheeled excavator. The trench would be approximately 5 feet deep and 4 feet wide depending on subsurface material. Topsoil and subsoil from trench excavation would be stockpiled separately along the open trench. Where the pipeline route crosses small drainages, a temporary swale or other feature would be installed to allow for continued water flow and to prevent runoff from entering the trench. Once the pipeline trench has been excavated, sections of pipe that have been staged along the ROW would be welded together and lowered into the trench and the trench would be backfilled and compacted with subsoil. Following backfill and compaction, the stockpiled topsoil would be spread over the disturbed area to begin the restoration and final stabilization process.

Water would be used to operate the LGPP with the majority used as cooling media for condensing steam back into water. Water would be treated through a clarifier system and stored in a tank prior to use in the plant. One of the primary uses of the water is in the closed-loop steam cycle. The water would be treated through a second process to create the pure, demineralized water necessary for the steam cycle. Once treated and stored, the process water would flow through a boiler which converts it to steam. From the boiler, steam flows to a steam turbine to generate power. Once the steam is used for power generation, it flows to a condenser which converts the steam back into water, and the cycle starts again.

The second primary use of the water would be for cooling purposes. This second process takes water from the storage tank into a cooling tower basin. From the cooling tower, cool water is pumped into the condenser tubes which have the steam flowing around them. As the steam in the first use is converted to water, the cooling water is warmed. This warm water is pumped back to the top of the cooling tower. In the cooling tower, the warm water trickles across media and is broken up. Fans are used to draft air through the water to cool it prior to falling into the basin and pump through the cycle again. A significant amount of the water is lost to evaporation.

Each of these uses of water requires a blowdown stream to maintain water chemistry within the system. The blowdown is then processed through a treatment stream including reverse osmosis, filter presses, and other treatment equipment to send the treated blowdown back into the primary storage tank. The waste stream generated from blowdown treatment is then sent to on-site evaporation ponds for final disposal.

In June 2009, Idaho Power applied for a new groundwater right on the site to be used for cooling, industrial, and commercial (potable) purposes. The quantity applied for was 2.0 cfs and / or 700 acre feet per year. An existing water right (65-23312) is currently appropriated to this property for commercial and residential use, established from a planned development previously proposed for the site. Idaho Power does not plan to file for proof of beneficial use on the existing water right and would let this water right expire. by means of evaporation.

On September 11, 2009, Idaho Power applied for a new surface water right from the Snake River to be used for cooling and industrial purposes at the project site. The quantity applied for was 4.73 cfs and / or 2,230 acre feet per year. The water would be pumped and delivered to the site via underground pipe.

## 1.5.4. Operation and Maintenance (O&M) Activities and Emergency Situations

Idaho Power would perform O&M activities to keep transmission lines operational and in good repair. These activities would either be planned (such as routine patrols, inspections, scheduled maintenance, and scheduled emergency maintenance) or unplanned (such as emergency maintenance in cases where public safety and property are threatened). Other than routine inspections, the level of maintenance anticipated would be relatively low.

A patrolman using a pickup or all-terrain vehicle would conduct a ground patrol twice a year, once in the spring and once in the fall, and would identify line and structure conditions in need of repair. Follow-up maintenance on problems would then typically be scheduled for the fall (October through November), but it would also depend upon if the line needs to be taken out of service to conduct maintenance and when the line could be taken out of service. A detailed climbing or aerial inspection of the structures, conductors, and associated hardware would take place approximately once every 10 years. During a climbing inspection, structural hardware would be checked and tightened. Climbing inspections could take place from April through October. Follow-up maintenance to the detailed inspection usually would occur the following fall.

Vegetation management to maintain the required clearances within the ROW would be minimal because of the lack of tall shrubs or trees. Idaho Power may clear vegetation within a 10-foot radius of each structure as a measure to reduce possible damage from fires. Following vegetation clearing, licensed applicators would apply herbicides to minimize vegetation regrowth. On BLM managed lands, Idaho Power would coordinate these activities with the BLM to ensure that sensitive plant and wildlife resources are not negatively impacted.

Maintenance activities would also be conducted on roads. Maintenance activities could include grading, repair of eroded areas, and installation of water bars and dips to control erosion and storm water runoff. Roads would not be improved beyond what is necessary to ensure safe access and operation of equipment.

Emergency situations would be those conditions that may result in imminent or direct threats to public safety or threaten or impair Idaho Power's ability to provide power to its customers. The following examples include actual and potential emergency situations:

- Failure of conductor splices;
- Lightning strike or wildfire resulting in smoke causing flashover between the conductors;
- Damage to structures from high winds, ice, or other weather-related conditions;
- Line or system outages or fire hazards caused by trees falling into conductors;
- Breaking or imminent failure of cross-arms or insulators, which could or does cause conductor failures; and
- Vandalism to structures or conductors from shooting or other destructive activities.

Typically, the same measures Idaho Power would implement during routine, planned maintenance activities would also be implemented in emergency situations.

There would also be periodic visual inspections of the water route (twice a year at the most). Maintenance would be conducted as needed and repairs would occur if pipe failure occurs. Pigging may also be conducted (once every 5-10 years) if build up occurs. The pump house maintenance would depend on the type of intake Idaho Power selects. If the traditional in-stream intake is used, the accumulation of algae would be an ongoing maintenance requirement.

Maintenance would be minimal if Idaho Power selects a well field option. Regardless of which option is selected, there would be periodic inspections of the pumps and controls in the pump house building.

### **1.5.5. Environmental Protection Measures**

The following environmental protection measures have been designed to avoid or reduce the impacts of the Proposed Action and would be implemented by Idaho Power. These measures are in addition to the standard ROW stipulations that would be required by the BLM if they issue ROW grants.

#### General Measures:

- All construction and future O&M activities authorized by the BLM would occur within Idaho Power's temporary and permanent ROW
- All waste products and food garbage from construction sites would be deposited in a covered waste receptacle and removed daily. Garbage would be hauled to a suitable disposal facility.
- Ground disturbance is limited to that necessary to safely and efficiently install and maintain the proposed facilities.
- Existing improvements (e.g., fence, gate) would be repaired or replaced to their condition prior to disturbance if they are damaged or destroyed by construction and O&M activities, as agreed to by the parties involved.
- If blasting is necessary, appropriate safety guidelines would be followed, as required by state and federal regulations relating to blasting operations.
- Fire protection measures would be followed, as required by state and federal regulations, to prevent wildfires.
- No paint or permanent discoloring agents would be applied to rocks to indicate limits of survey or construction activity.
- All stakes and flagging would be removed from the construction area and recycled or disposed in a state-approved landfill.

#### Roads:

- Appropriate traffic control measures, where necessary, would be used to ensure public safety during construction. Prior notice would be given for any extended delays or road closures.
- Overland travel, where feasible, would be used to minimize ground disturbance. Large rocks and vegetation may be moved within these areas to allow vehicle access.
- Any damage to roads that may occur during construction, operation, or maintenance activities would be repaired as soon as possible following completion of the activity.
- All existing roads would be left as close to their existing condition as possible without creating environmental degradation (e.g., erosion or rutting from poor water drainage) or unsafe conditions. Where appropriate, roads would be maintained to have crossroad drainage in order to minimize the amount of channeling or ditches needed. Water bars would be installed at all alignment changes (curves), significant grade changes, and as requested by the Authorized Officer.
- All existing road drainage structures would be maintained by Idaho Power during construction and O&M activities.
- If necessary, best management practices to address dust from service roads and other areas of ground disturbance, within the construction limits would be implemented. This may include the use of water, vehicle speed limits, gravel, or a combination of these or similar control measures may be used.

### Noxious Weed Control:

- The responsible party would clean all equipment that may operate off-road or disturb the ground before beginning construction and O&M activities within the project area. This process would clean tracks and other parts of the equipment that could trap soil and debris and would reduce the potential for introduction or spread of undesirable exotic vegetation. Cleaning would occur at an Idaho Power operation center, commercial car wash, or similar facility. Vehicles traveling only on established roads would not be required to be cleaned.
- Idaho Power would prepare a revegetation plan in consultation with the BLM when necessary. The plan would specify appropriate revegetation timing, techniques, and seed mixes. Adherence to this plan would also help limit the spread and establishment of noxious weeds. Certified, noxious-weed-free seed must be used on all areas to be restored. Other construction material, such as fill, shall also be free of noxious weed seed.

### Cultural Resources:

Any cultural and/or paleontological resource (historic or prehistoric site or object or fossil[s]) discovered by Idaho Power, or its designated contractor, within the project's area of potential effect would immediately be reported to the Authorized Officer. If new, historic, cultural, or paleontological resources are discovered during construction, potentially destructive work within 300 feet of the find would be halted. Pursuant to 43 CFR 10.4(g), the holder of the authorization must notify the Authorized Officer, by telephone and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), activities in the vicinity of the discovery must be stopped and protected for 30 days or until notified to proceed by the Authorized Officer. Idaho Power's construction inspector would immediately implement the following measures:

1. Flagging would be erected to prohibit potentially destructive activities.
2. Idaho Power's archaeologist and the BLM archaeologist would make a preliminary assessment of the newly discovered resource.
3. If the archaeologists determine that the discovery represents a potential new site or an undocumented feature of a documented site, the processes identified by the BLM would be followed.
4. Construction would not resume in the identified area until cleared by the Authorized Officer.

Environmental protection measures for cultural resources would include the following:

- Prior to construction, all supervisory personnel would be instructed on the protection of cultural resources including: (a) federal and state laws; (b) the importance of these resources; (c) the purpose and necessity of protecting them; and (d) methods for protecting sensitive resources.
- Overland travel would be restricted near known sites. Where a road intersects a site, the road sides would be posted to indicate that no off-road activity may occur. Marking would be coordinated with the BLM and done by personnel appointed by Idaho Power. After construction or the O&M activity is complete or no longer poses a threat to the cultural resources, the stakes would be removed to protect the site's significance and location from unwanted attention.
- Contractors would be provided with maps showing avoidance areas; these would include established work zones as well as ROW areas where overland travel should be avoided.
- All human interments would be treated with the respect accorded them by state and federal laws applying to human remains. If the discoveries are unanticipated, state law does not distinguish between historic or prehistoric burials as far as what steps are required for

initial notification or disinterment. If human remains are discovered on BLM lands during construction or future O&M activities, Idaho Power would stop all work in the immediate area to protect the integrity of the find and notify the county sheriff and BLM as soon as possible. In addition, the location of the find would be flagged or fenced off to protect it from further impacts. The BLM would determine what mitigation is necessary and, once the mitigation is complete, work could resume in the area.

#### Sensitive Species:

- Prior to construction, all supervisory personnel would be instructed on the protection of natural resources, including sensitive species and habitats. This would include: (a) federal and state laws; (b) the importance of these resources; (c) the purpose and necessity of protecting them; and (d) methods for protecting sensitive resources.
- Sensitive species that occur within, or adjacent to, the ROW and work areas would be marked on the ground, where practical, to ensure that the species are avoided. If species are discovered during the work, Idaho Power would establish a spatial buffer zone and immediately contact the BLM. The Authorized Officer may evaluate the adequacy of the buffer on a case-by-case basis. Unless Idaho Power is informed otherwise, work outside of the buffer area would continue. If Idaho Power needs to conduct work within the buffer area, Idaho Power would work with the BLM to develop a solution that is acceptable to both parties and would allow Idaho Power to complete the necessary work in a timely manner and/or within the scheduled outage window, if applicable. Once the project has been completed, or no longer poses a threat to the species, the marking (stakes) would promptly be removed to protect the site's significance and location from unwanted attention.
- For sensitive resource issues where marking is not appropriate, work in designated areas would be modified or curtailed during critical periods. The Authorized Officer, in advance of construction or maintenance, would approve sensitive areas and time frames. Emergency repair situations are excluded from this restriction.
- If sensitive wildlife species are killed or injured due to construction or O&M activities, the local Idaho Department of Fish and Game (IDFG) conservation officer, Authorized Officer, and U.S. Fish and Wildlife Service (USFWS) would be notified.
- The Construction Manager must ensure all construction workers are knowledgeable of the legal harvest seasons, methods of take, and bag limits for upland game birds, ground squirrels, and cottontail rabbits. All on-site personnel would be made aware of sensitive species that could potentially occur in the area and applicable federal and state regulations. This includes protections for birds of prey, the Migratory Bird Treaty Act, Endangered Species Act, and others.
- New structures would be built in accordance with raptor-safe standards specified in APLIC (2006) and Idaho Power's raptor protection policy.
- Idaho Power would follow the Cascade RMP restrictions (no major construction activities from March 15 through June 30) for the ACEC for construction activities occurring on BLM managed lands.
- Overall construction impacts to reptiles and amphibians are expected to be very low. However, if a large snake hibernaculum is unearthed during construction, activity should be temporarily halted to allow the snakes to disperse to other cover.
- If inactive raptor nests are discovered within the ROW, Idaho Power would obtain the appropriate permit or approval to remove those nests prior to construction. In the unlikely event that nests with eggs or young are discovered, Idaho Power would consult with the IDFG and the U.S. Fish and Wildlife Service (USFWS) to decide on the proper action.

## 1.6. Preliminary Issues

BLM resource and reality specialists identified archeological and cultural resources, and special status wildlife and plant species – in particular the long-billed curlew and existing ACEC and slickspot peppergrass – as preliminary issues that would need to be addressed. Idaho Power also hosted public open houses (April 2, July 1, and August 6, 2009) related to obtaining conditional use permits from Payette and Canyon County. The majority of issues raised at the open houses related to location of the proposed 138 kV line route on private property. Alternative line routes, as described below, were developed in response to public feedback and changes were presented to the public at subsequent open houses. Few concerns were raised about the proposed 230 kV line and water line. Most people were interested in how the lines would support the LGPP and what they would look like rather than where they would go and/or any resource impacts. Some members of the public did raise concerns about the use of surface and ground water for plant operations. The following information summarizes the preliminary issues:

### Archaeological and Historical Resources

Historic and prehistoric cultural resources could occur in the project area. Modification of existing lines and structures, construction in the existing and proposed ROW, and operation and maintenance of the lines — particularly those activities involving ground disturbance — could potentially impact the integrity of cultural resources. In addition, traditional cultural properties, if identified by Native American tribes as occurring in the study area, could be at risk.

### Special Status Wildlife Species

The Proposed Action could directly or indirectly impact BLM sensitive species. BLM sensitive species that were observed in the study area include the golden eagle, Swainson's hawk, and long-billed curlew. As previously discussed, Idaho Power would follow the Cascade RMP requirement to avoid construction activities in the ACEC from March 15 through June 30 and would implement their Avian Protection Policy to minimize potential impacts to raptors from long-term operation of the transmission lines.

### Special Status Plant Species

Slickspot peppergrass has been previously documented in the study area and was observed at a known occurrence in the study area, but outside of the survey area, during field surveys. Potential habitat was identified along the proposed transmission and water line ROWs, but no plants were observed within the survey area during the 2009 field surveys. Construction and O&M activities could result in direct or indirect mortality of element occurrences and impacts to habitat. The originally proposed route for the 138 kV line was moved to avoid direct impacts to known slickspot peppergrass occurrences and to minimize possible indirect impacts to known occurrences. Where possible, Idaho Power also moved individual structure locations within the proposed 230 kV and 138 kV ROWs to minimize impacts to potential habitat. Additionally, Idaho Power would implement best management practices to avoid or reduce potential indirect impacts (e.g., minimize grading; clean vehicles to minimize the spread or introduction of noxious weeds) to habitat.

### Ground Water

Some members of the public raised concerns about ground water; some were concerned about the plant using and potentially depleting ground water in the area and others were concerned about

impacts to water quality as a result of discharging cooling water once it has been used in the plant. Idaho Power applied for and has been granted a new water right with less flow and volume than the current water right appropriated. The current water right (which was not being used) will be left to expire and groundwater use will be less with the proposed project than with the water rights allocated for the previously proposed development.

Idaho Power had looked at the option of using injection wells to discharge used cooling water. Based on concerns about, and potential impacts to, ground water quality, Idaho Power determined that an on-site evaporation pond would be constructed and used. This would result in no discharge and no potential impacts to ground water quality.

## 1.7. Preliminary Alternative Development

Based on conversations with the BLM and NEPA requirements, the No-action alternative was developed. This alternative would not authorize any of the proposed ROWs on BLM administered public lands. This does not mean that the LGPP would not be built; rather, line routes that do not cross BLM managed lands would be used. The water line could be routed east along SW 3rd Ave., south on Butte Road, east on SW 4th Ave., and south along US Hwy 30 to the LGPP. The 230 kV transmission line could take a similar route and tap the existing Ontario-Caldwell transmission line near Elmore Road, continue north to SW 3rd Ave., east to US Hwy 30 and south to the LGPP. The 138 kV line could be routed from the plant, north on US Hwy 30, then east, and then south back along US Hwy 30 to the existing Caldwell-Willis line (Figure 10). While these routes are feasible, they are not very practicable due to significantly more miles of construction and a related increase in costs.

### 138 kV Transmission Line Route Alternatives and Selection

Two public meetings were held to help determine the line route. The first was held on July 6, 2009 for Payette County residents. A map of the beginning and ending points were given to those attending and they were asked to help determine the line route. The Planning and Zoning Commission from Payette County, as well as most of the attendees agreed that the line should be placed on public (BLM) land first, then along established road ROW. Public input from the Payette meeting suggested that Idaho Power not utilize Oasis Road to cross I-84 to get to Old Hwy 30. Most agreed that Old Hwy 30 would be the preferred route going south after staying on BLM managed lands. Routes north of Oasis Road were reviewed and a right-of-way agent began meeting with the area land owners. The proposed route was determined primarily by the willingness of private land owners to grant easements. Alternative routes are discussed in more detail below and are shown on Figure 10.

**Alternate 1** – The route followed the west side of I-84 for about 2 miles south of the generation plant, then turned south to Oasis Road. This route was discouraged by local residents because of the concern of adding lines along Oasis Road, proposed developments along the route, and a large dead end pole at the corner of Oasis Road and Sand Hollow Road (Old Hwy 30).

**Alternate 2** – On August 1, 2009, a second open house was held for the Canyon County homeowners and land owners in the Oasis Road area. A line route that would stay on BLM and private land south of Oasis Road and turn east to Old Hwy 30 on Homer Road was discussed at this open house. Participants agreed that Old Hwy 30 would be the best route south but did not want it going across private land south of Oasis Road and the Sand Hollow Exit.

**Alternate 3** – A route that followed the west side of I-84 for approximately 2 miles, then went east across I-84 about 1½ miles, turned southeast to Tunnel Road, south on Tunnel Road to Sand Hollow Rd, south on Sand Hollow Road to Willis and Old Highway 30. This route was not utilized because of the concerns about proximity to the existing gas pipe line, additional 4 miles of distribution construction, public concerns, and higher cost estimates.

## 1.8. Decision to be Made

The BLM will decide if the ROWs would be authorized and will have the discretion to stipulate the ROW authorizations with conditions that minimize or mitigate resource conflicts.

## 1.9. Public Input Needed

Comments are specifically requested on the proposed action, preliminary issues, and alternatives. Comments made on this proposal would be most helpful if they are received by April 16, 2010 and are directly relevant to the Proposed Action and study area. The BLM will not reject public feedback outside established public involvement timeframes; however, these comments may be considered secondary to comments received in a timely manner and may only be assessed to determine if they identify concerns that would substantially alter the assumptions, proposal, design, or analysis presented in the EA. Comments sent electronically should be sent to [effie\\_schultsmeier@blm.gov](mailto:effie_schultsmeier@blm.gov) with the title of this project in the subject line. Please identify whether you are submitting comments as an individual or as the designated spokesperson on behalf of an organization. Issues that are outside the scope of the proposal will not be addressed at this planning level.

The primary contact for questions and comments for this analysis is Effie Schultsmeier (208-384-3357), Realty Specialist, Four Rivers Field Office, Boise District BLM, 3948 Development Ave, Boise, ID 83705.

## 1.10. Literature Cited

Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA.

Candidate Conservation Agreement (CCA). 2003. Candidate Conservation Agreement for Slickspot Peppergrass (*Lepidium papilliferum*), October 24, 2003. 194 p.

Idaho Department of Environmental Quality (IDEQ) and Oregon Department of Environmental Quality (ODEQ). July 2004. Snake River – Hells Canyon Total Maximum Daily Load (TMDL).

IDFG 2009a. Idaho Fish and Wildlife Information System (IFWIS). Wildlife, fish, and plant observations. Accessed on June 29, 2009.

IDFG (Idaho Department of Fish and Game). 2009b. Idaho Bird Inventory and Survey (IBIS) 2008 Annual Report, Nongame and Endangered Wildlife Program, Idaho Department of Fish and Game, Boise, ID. Available at [http://fishandgame.idaho.gov/cms/wildlife/nongame/birds/IBIS\\_2008report.pdf](http://fishandgame.idaho.gov/cms/wildlife/nongame/birds/IBIS_2008report.pdf).

Idaho Power Company. 2009. Integrated Resource Plan. Available at <http://www.idahopower.com/AboutUs/PlanningForFuture/irp/2009/default.cfm>

Idaho Power Company. 2006. Integrated Resource Plan. Available at [http://www.idahopower.com/pdfs/AboutUs/PlanningForFuture/irp/2006/2006\\_IRP.pdf](http://www.idahopower.com/pdfs/AboutUs/PlanningForFuture/irp/2006/2006_IRP.pdf)

Idaho Power Company. 2004. Integrated Resource Plan. Available at [http://www.idahopower.com/pdfs/EnergyEfficiency/IRP\\_public\\_draft\\_20040708.pdf](http://www.idahopower.com/pdfs/EnergyEfficiency/IRP_public_draft_20040708.pdf)

Jones, S.L., T.R. Stanley, S.K. Skagen, and R.L. Redmond. 2003. Long-Billed Curlew (*Numenius americanus*) Rangewide Survey and Monitoring Guidelines. Division of Nongame Migratory Birds, Region 6, U.S. Fish and Wildlife Service. Denver, CO.

Liljeblad, Sven S. 1957. Indian Peoples in Idaho. Pocatello, ID. Idaho Museum of Natural History, Museum Library. Unpublished manuscript. Pocatello.

U.S. Department of Agriculture, Natural Resource Conservation Service (USDA NRCS). 1972. Soil Survey of Canyon Area, Idaho.

U.S. Department of the Interior, Bureau of Land Management (BLM). October 16, 2009a. Oil and gas potential of the Four Rivers Field Office Idaho. 10 pgs.

U.S. Department of the Interior, Bureau of Land Management (BLM). 2009b. Range Allotments of Idaho (GIS shapefile). BLM Idaho State Offices, Engineering and Geographic Sciences, Boise, Idaho. Last updated May 15, 2009. Available at: <http://www.insideidaho.org/>

U.S. Department of the Interior, Bureau of Land Management, Boise District Office, Four Rivers Field Office (BLM). 2008a. Analysis of the Management Situation for the Four Rivers Field Office Resource management Plan and Environmental Impact Statement.

U.S. Department of the Interior, Bureau of Land Management (BLM). 2008b. Search of BLM Plat map and homestead claim server. Electronic document, <http://www.glorerecords.blm.gov>, accessed August 2008.

U.S. Department of the Interior, Bureau of Land Management (BLM). 1987. Cascade Proposed Resource Management Plan and Final Environmental Impact Statement. U.S. Department of the Interior, Bureau of Land Management Boise District, Idaho. August 1987.

U.S. Environmental Protection Agency (EPA). 2009. EPA Green Book – Designation of Areas for Air Quality Planning Purposes (40 CFR 81.313), available at <http://www.epa.gov/air/oaqps/greenbk/40cfr81.html>.

## **1.11. Figures**

Figure 1. Vicinity Map

Figure 2. Project Features, Land Ownership, and Use

Figure 3. Water Resources

Figure 4. Waters of the U.S.

Figure 5. Slickspot Peppergrass Management Area

Figure 6. Long-billed Curlew Habitat Area of Critical Environmental Concern

Figure 7. Transportation Facilities

Figure 8. Structures for the 138kV Transmission Line

Figure 9. Structures for the 230kV Transmission Line

Figure 10. Alternate 138kV Transmission and Water Line Routes



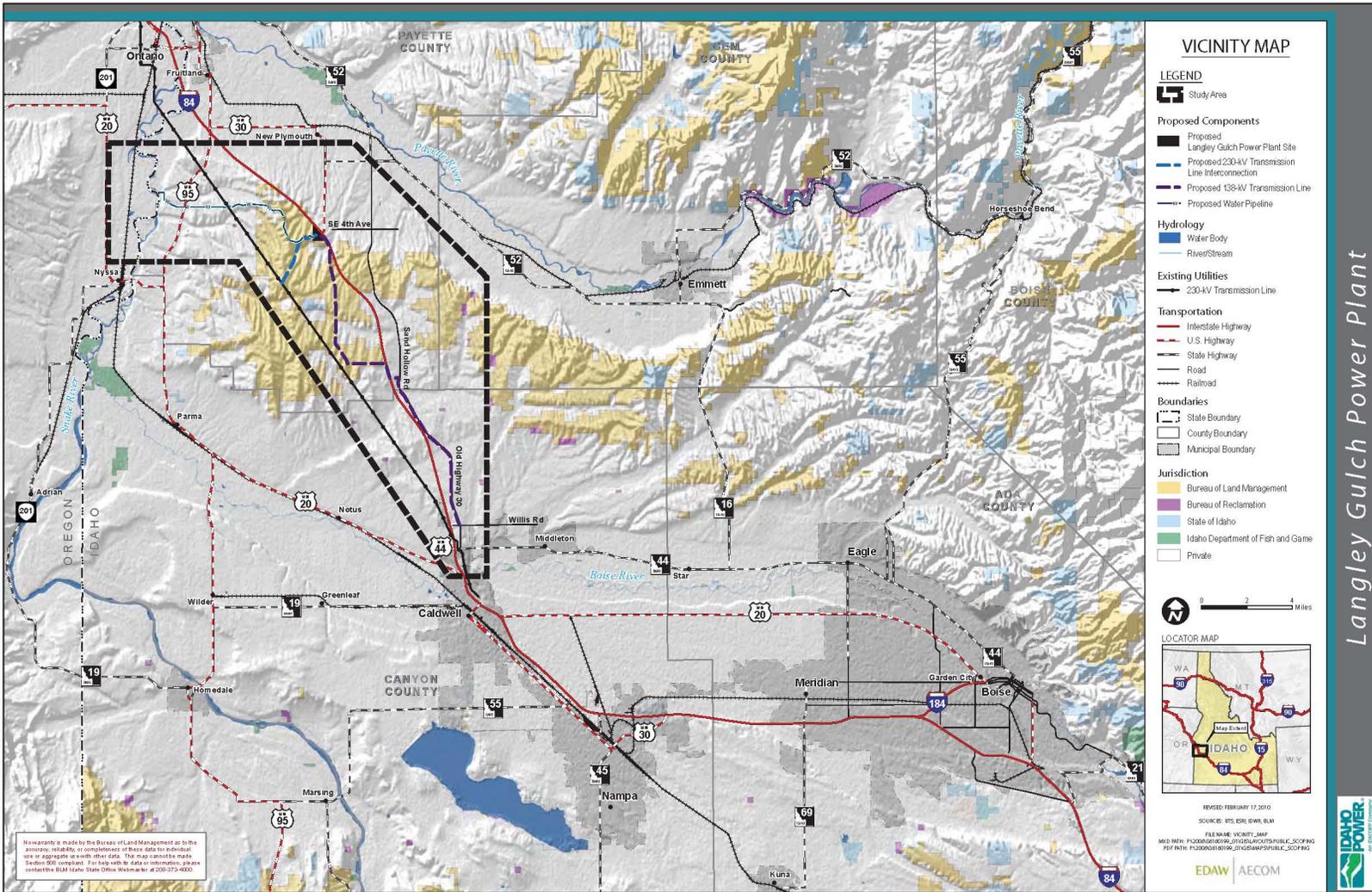


Figure 1 - Vicinity Map

Figure 1.1. Vicinity Map



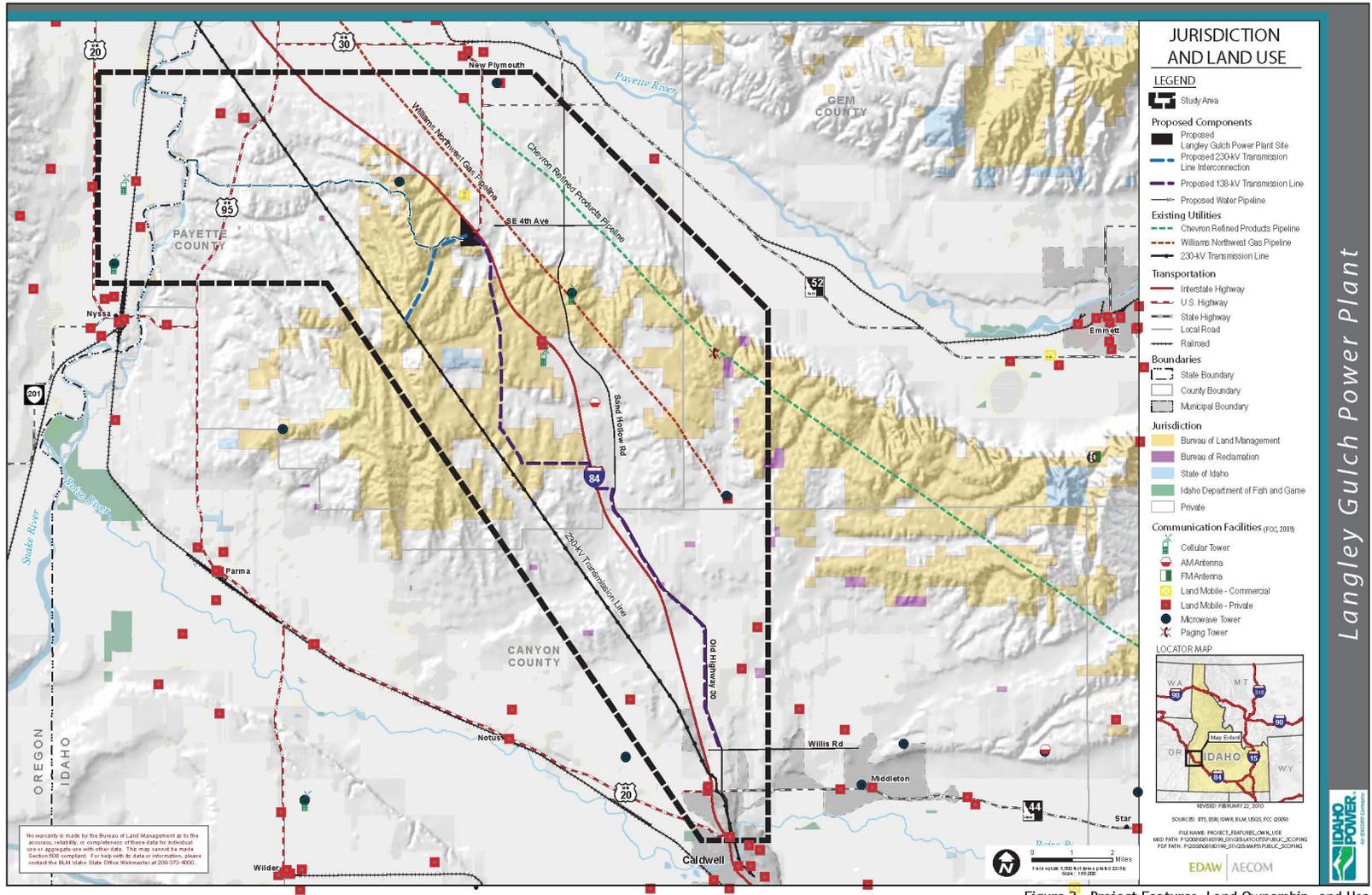


Figure 1.2. Project Features, Land Ownership, and Use

Figure 2 - Project Features, Land Ownership, and Use



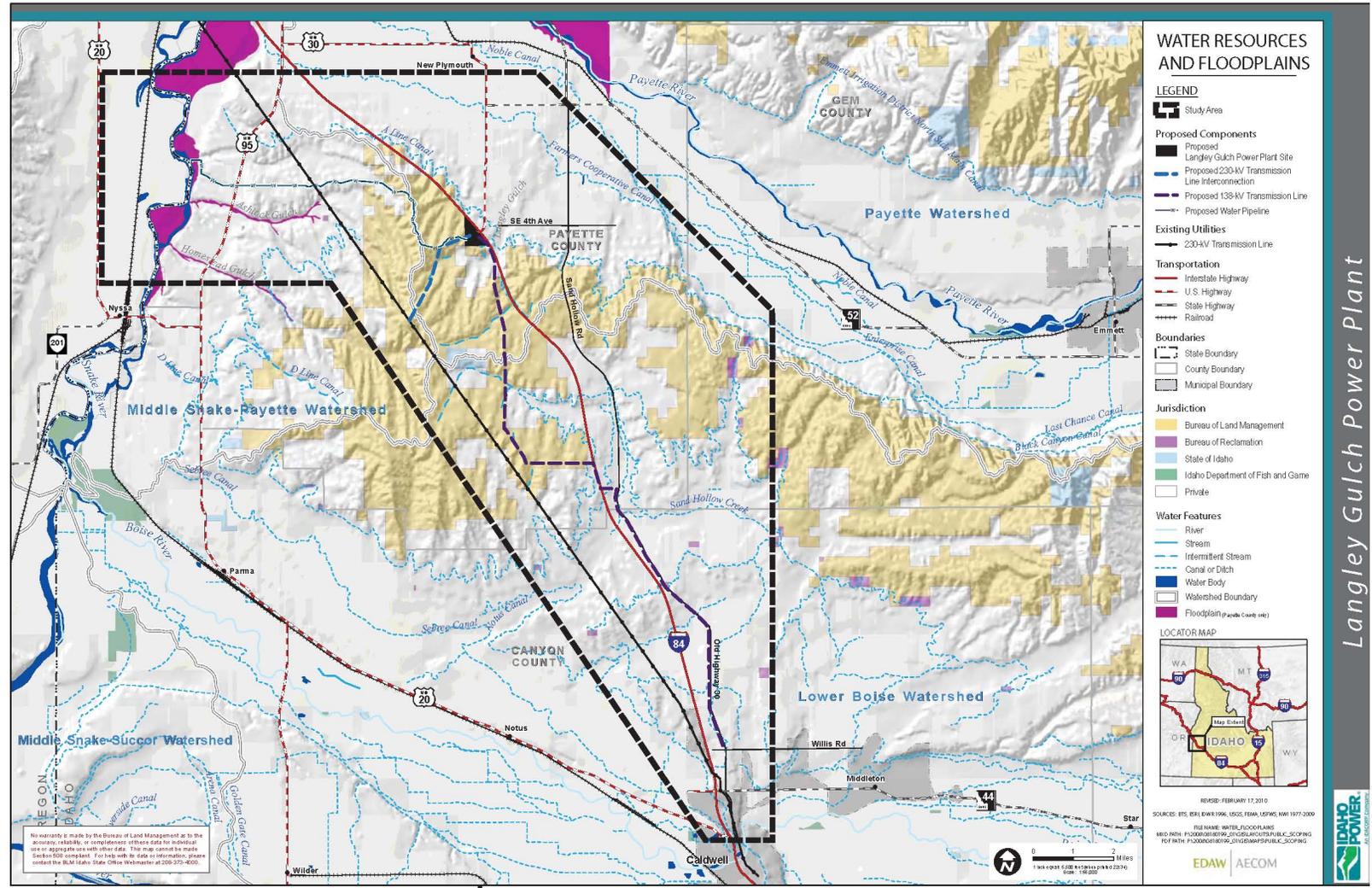


Figure 3 - Water Resources

Figure 1.3. Water Resources



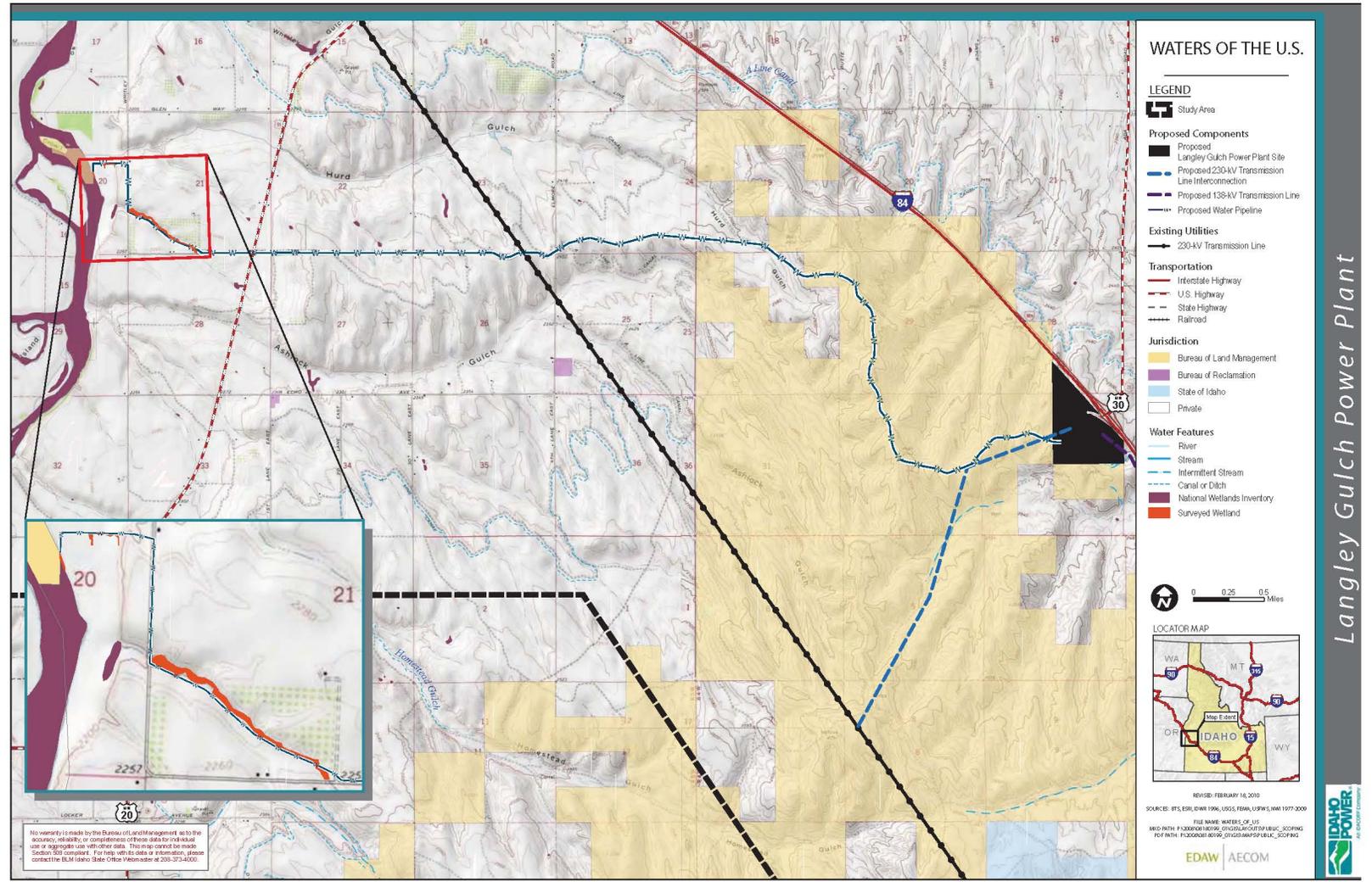


Figure 4 - Waters of the U.S.

Figure 1.4. Waters of the U.S.



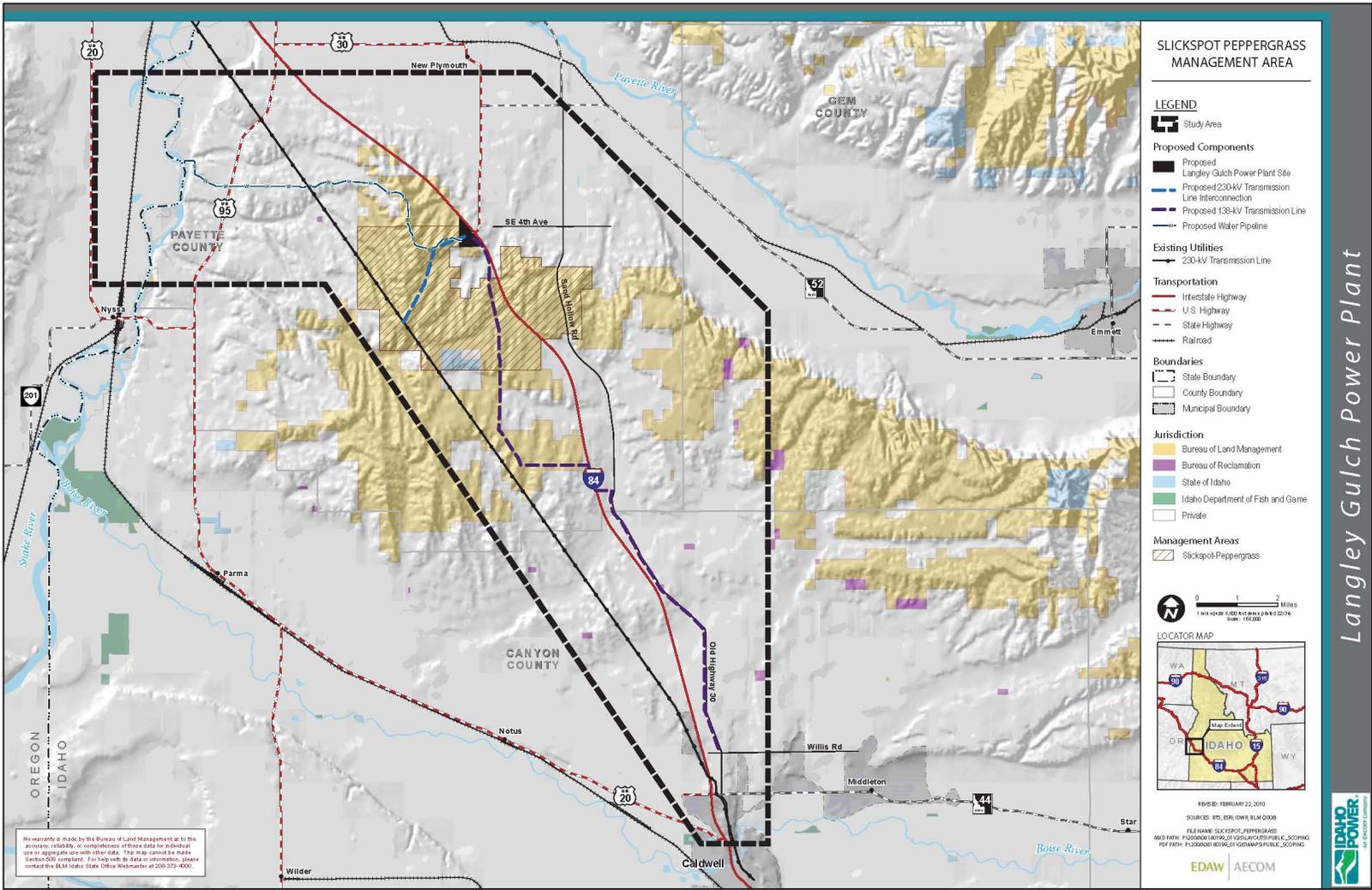


Figure 5 - Slickspot Peppergrass Management Area

Figure 1.5. Slickspot Peppergrass Management Area



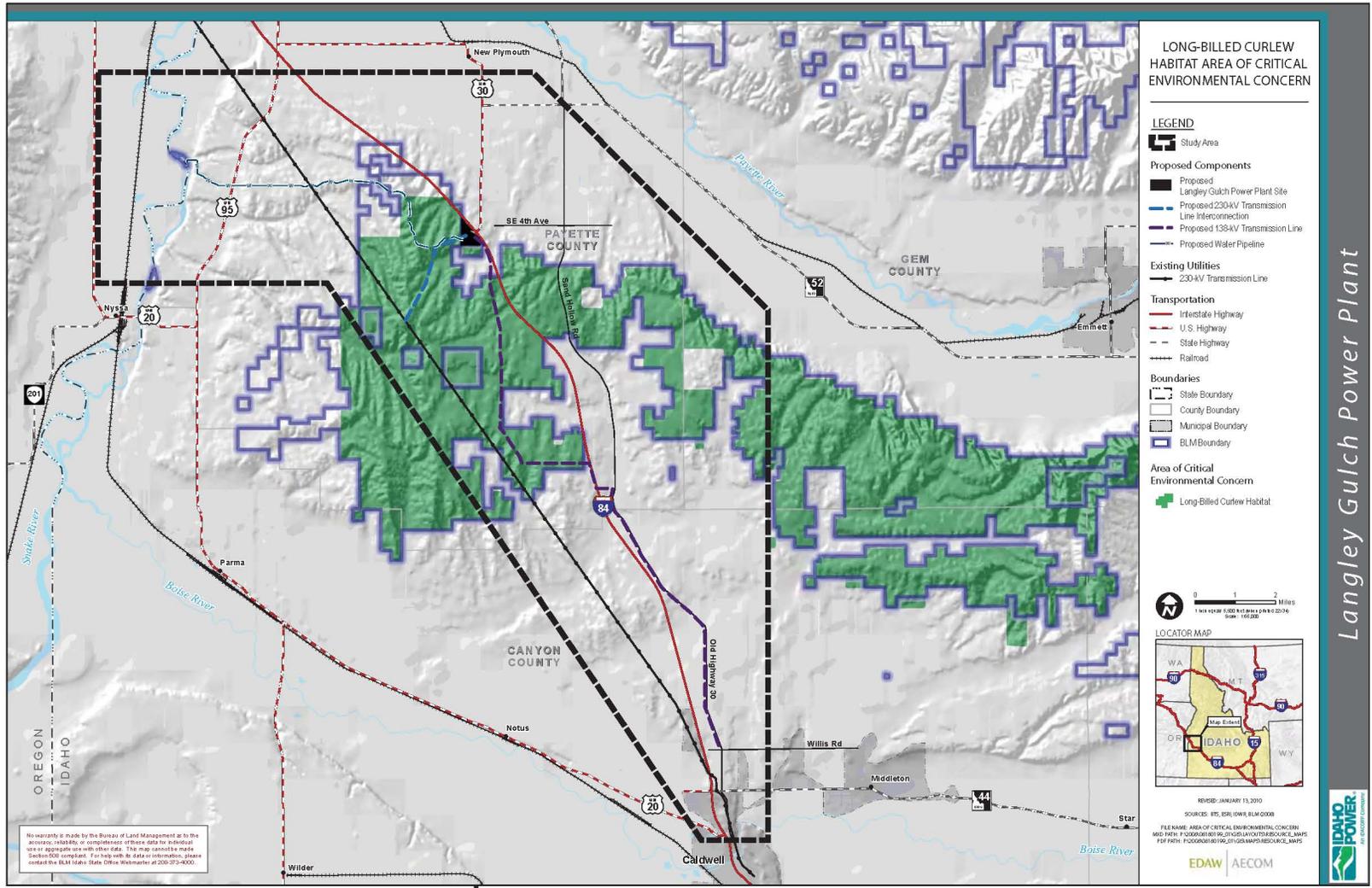


Figure 6 - Long-billed Curlew Habitat Area of Critical Environmental Concern

Figure 1.6. Long-billed Curlew Habitat Area of Critical Environmental Concern



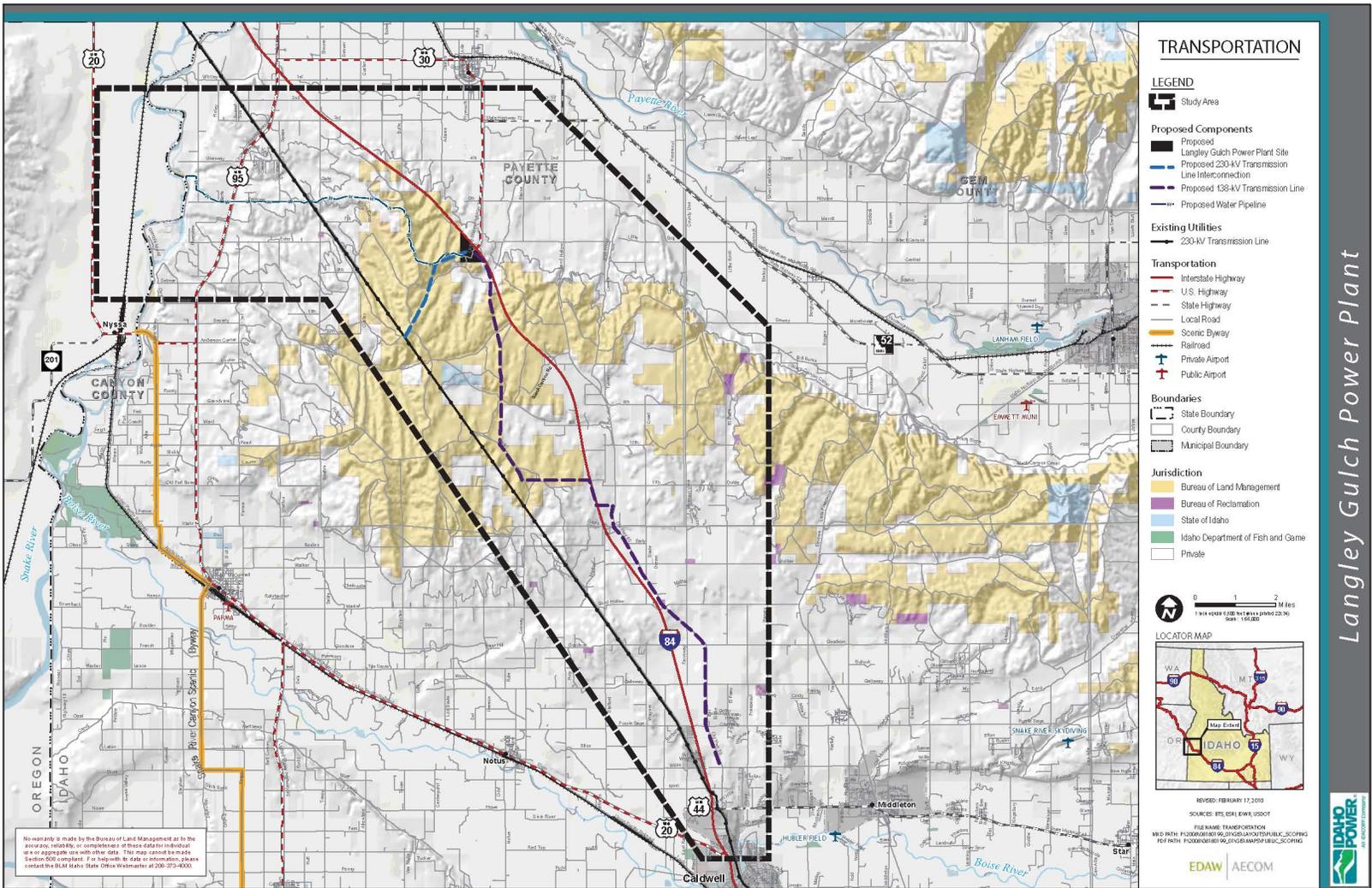


Figure 7 - Transportation Facilities

Figure 1.7. Transportation Facilities



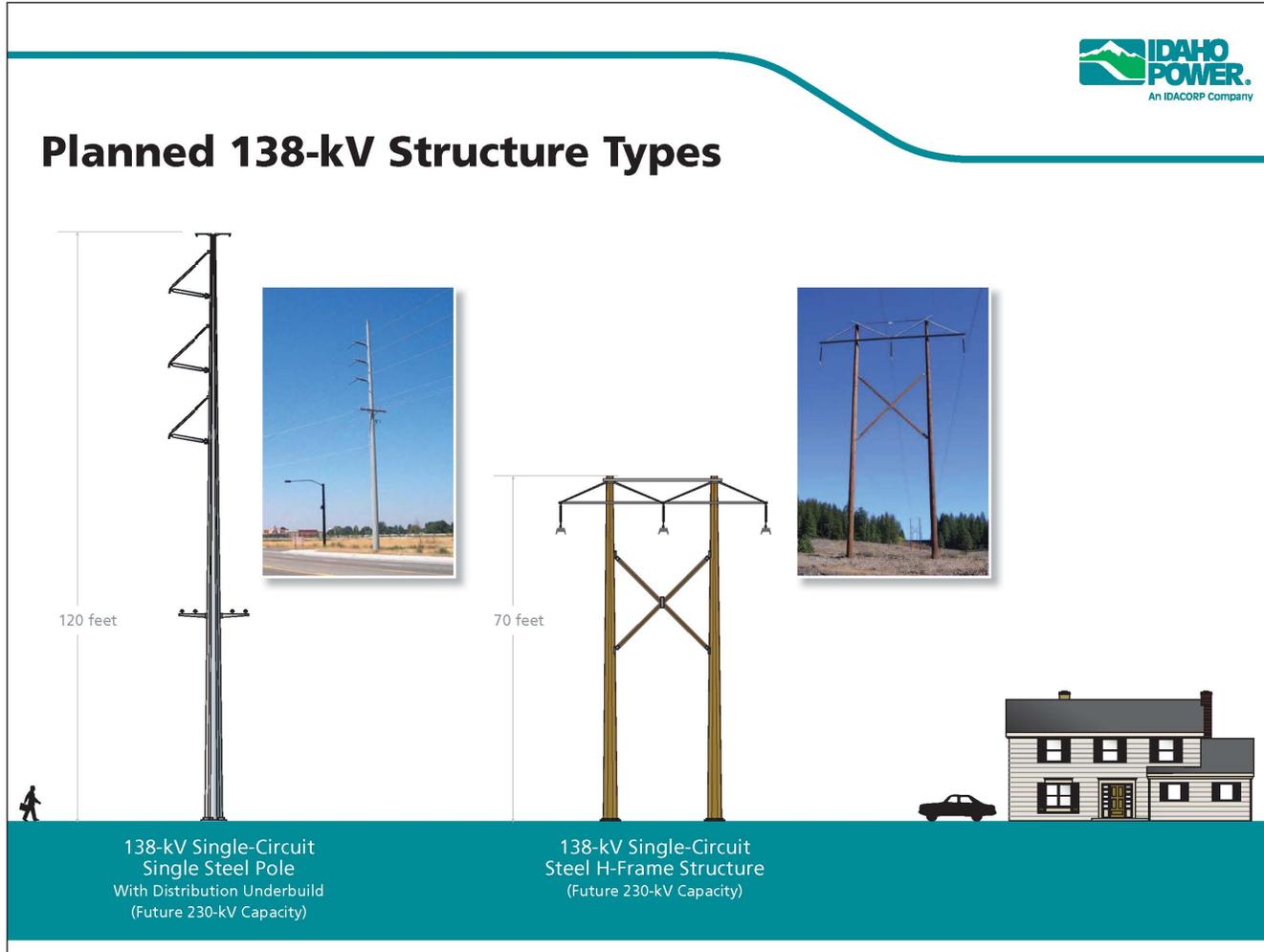


Figure 8 - Structures for the 138kV Transmission Line

Figure 1.8. Structures for the 138kV Transmission Line



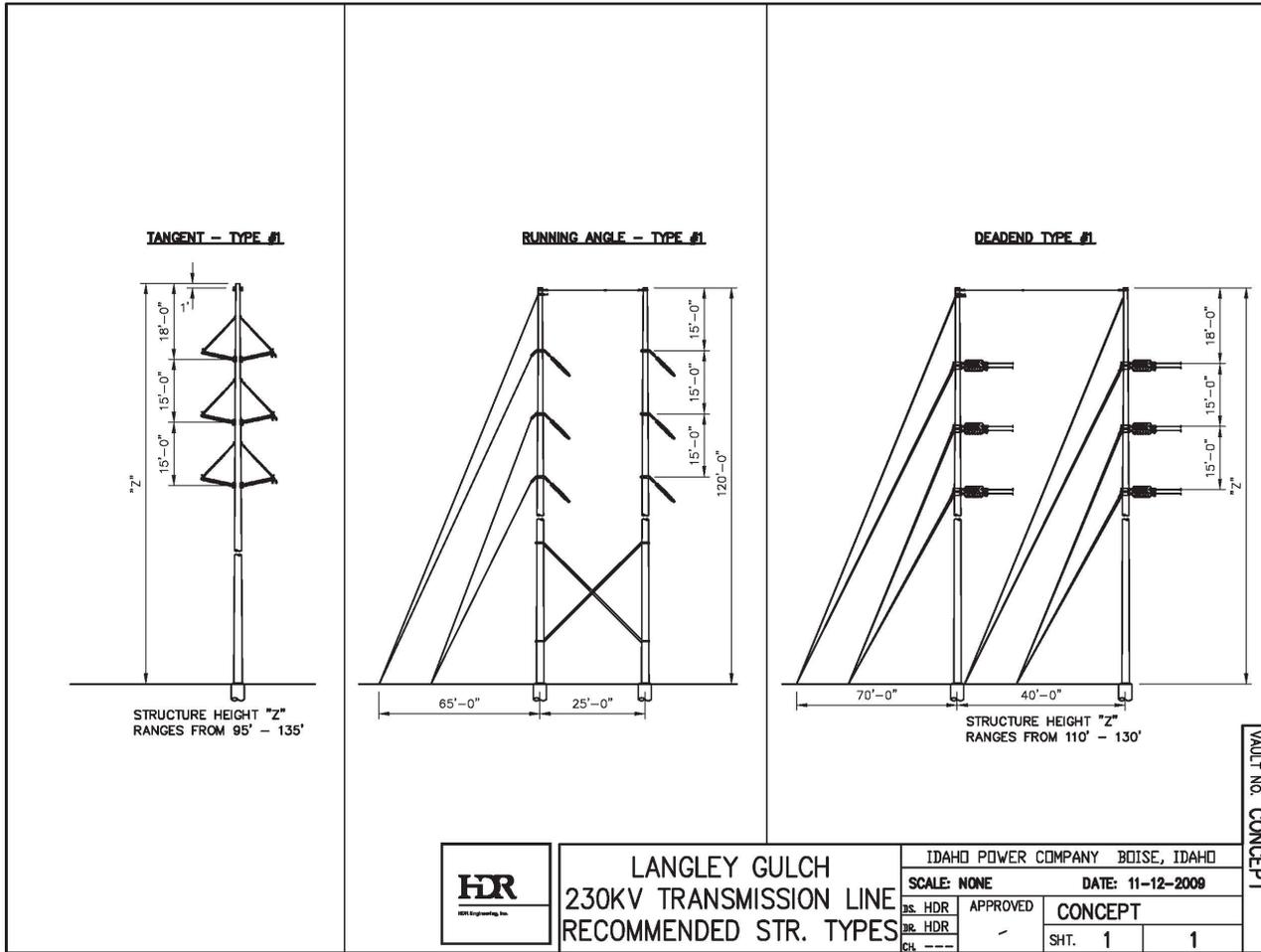


Figure 9 - Structures for the 230kV Transmission Line

Figure 1.9. Structures for the 230kV Transmission Line



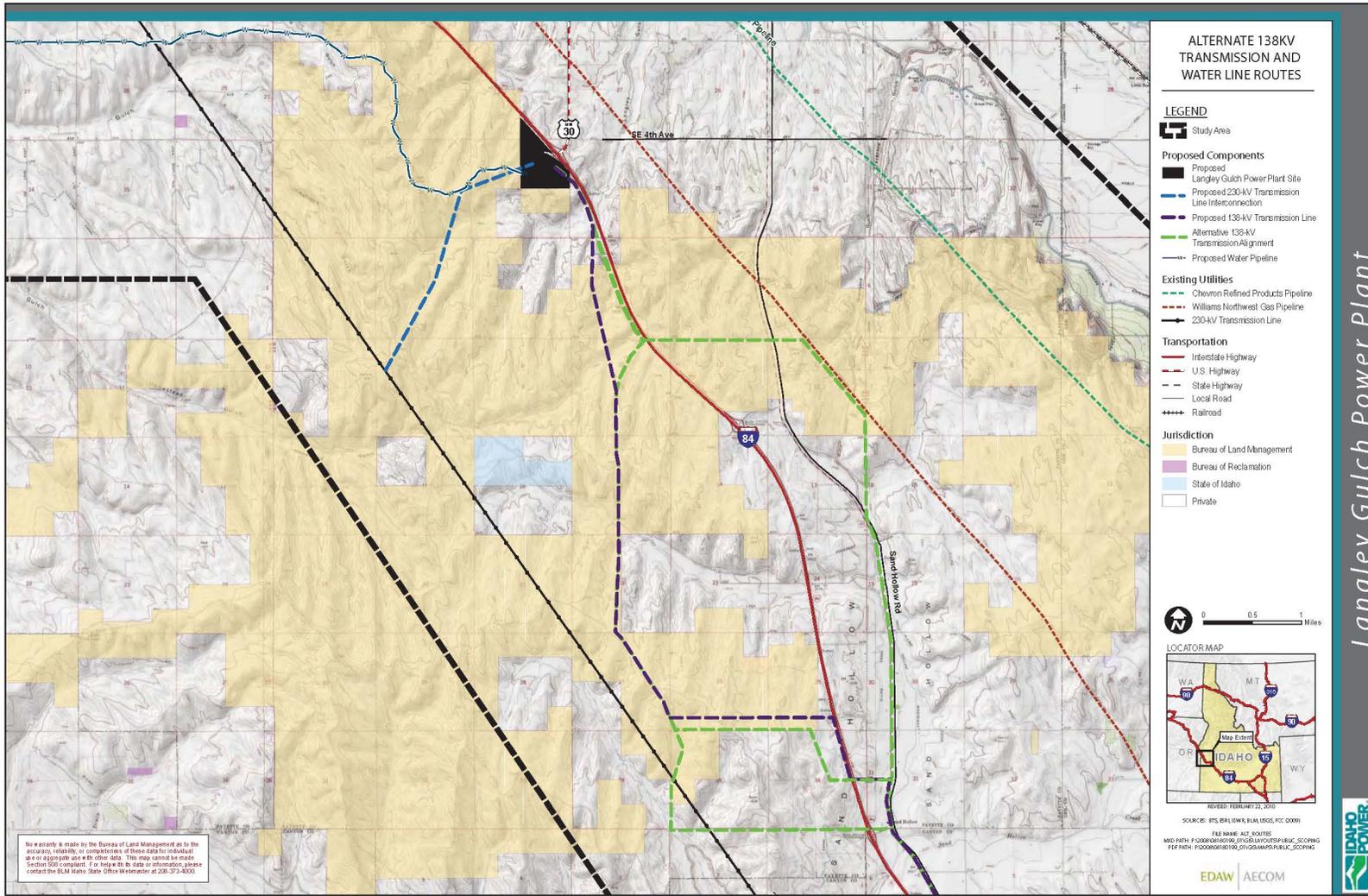


Figure 10 - Alternate Transmission and Water line Routes

Figure 1.10. Alternate 138kV Transmission and Water Line Routes