U.S. Department of Interior
Bureau of Land Management
Vale District Office

Ontario to Quartz Transmission Line Project

Environmental Assessment
BLM ROW No. OR-01469
BLM EA No. OR-030-07-002

August 2007

IDAHO POWER COMPANY ONTARIO TO QUARTZ TRANSMISSION LINE PROJECT

Proposed Action:	Idaho Power Company (IPC) proposes to amend right-of-way (ROW) OR-01469 to authorize roadwork on an existing road and three new short service roads along existing 138-kV transmission lines from Huntington to Quartz. The Proposed Action will improve access to five structures and allow for future operation and maintenance activities on the new service roads.
Type of Statement:	Environmental Assessment
Lead Agency:	Bureau of Land Management, Vale District Office
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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1. PROPOSED ACTION

1.1. Purpose and Need

On May 2, 2005, Idaho Power Company (IPC) applied for an amendment to right-of-way (ROW) OR-01469 to authorize the use and maintenance of an existing road to service their existing 138 kV transmission line, as well as construct three short new service roads to access several structures along the line. This transmission line has been described as the Ontario to Huntington portion and the Huntington to Quartz portion. Also, on May 9, 2006, the Bureau of Land Management (BLM) received an application to amend OR-01469 to recognize and authorize the Ontario–Huntington portion of the transmission line. This portion of the line was built in 1928 and was originally authorized by the Federal Energy Regulatory Commission (FERC) under Project No. 921 in 1929. The FERC license had a 50-year term, which ended in 1979. That line has remained in use since 1979; however it has been on public lands since 1979 without proper authorization. The BLM has recognized the Huntington to Quartz portion of the line since 1953 under ROW OR-01469. IPC considers the segments as one line and refers to the entire line as the Ontario to Quartz line.

IPC is charged by state and federal agencies with the responsibility of providing safe and reliable electric service to their customers. Providing safe and reliable power requires an effective and timely operation and maintenance (O&M) program. IPC needs to have safe access to all structures to ensure reliable operation. The purpose of the Proposed Action is to improve access to transmission structures to ensure reliable and efficient operation of IPC's transmission system, while avoiding or minimizing effects on adjoining land uses and the environment.

1.2. Description of the Proposed Action

The Proposed Action would be to amend the current ROW OR-01469 to recognize and authorize the Ontario–Huntington portion of the transmission line under Title V of the Federal Land Policy and Management Act of 1976 as amended (43 USC 1761) and the regulations found in 43 CFR 2800. This portion of the line is approximately 6.2 miles in length, 100 feet wide, encumbering approximately 75.14 acres of public land. With the amendment the entire length of the Ontario to Quartz line would be 13.13 miles in length, 100 feet wide, encumbering 159.17 acres, more or less.

Further, the Proposed Action would amend ROW OR-01469 to allow IPC to grade a portion of an existing road and establish three new short service roads to access the existing 138 kV transmission line from Ontario to the Quartz Junction Substation (line 423). This work would improve access to five structures. The ROW grant would also authorize future O&M activities on the new service roads that would be created outside the current 100-ft ROW.

The Proposed Action extends over lands under the jurisdiction of the Vale District Office of the BLM (including the Baker and Malheur Resource Areas) and private ownership. The northern end of the project area is about 2 miles northwest of Lime, Oregon. The southern end of the

project area is 2 miles south of Farewell Bend, Oregon. The line passes through Baker and Malheur counties. Table 1 provides the legal description and work details for the areas covered by this environmental assessment (EA).

Work would occur outside and inside the current ROW at Site 1, to create a new spur road to Structure 207 (Figure 1). A 100-foot portion of the new spur would be inside the current ROW. At Site 2, also outside a current ROW, a new service road would be created to access Structures 251 to 253 (Figure 2). Finally, work would occur outside the current ROW at Site 3, to create a new spur road and to blade the existing road (Figure 3). The total length of new road inside the currently permitted ROW would be about 100 feet and outside the ROW would be approximately 1,900 feet. The work is expected to take two or three days and is targeted for fall 2007. Work would not be conducted until all necessary approvals have been received.

The total disturbance outside of the existing ROW would be approximately 1,300 feet in length and 14 feet in width for about 0.42 acres.

IPC performs O&M activities to keep the project transmission line operational and in good repair. These include routine patrols, inspections, and scheduled maintenance. Currently, a patrolman drives the service roads and conducts a ground patrol annually in the spring and fall to identify line and structure conditions in need of repair. Follow-up maintenance is typically scheduled for the same year. A detailed climbing or aerial inspection of the structures, conductors, and associated hardware and wood pole treatment takes place approximately every 10 years. Follow-up maintenance to the detailed inspection usually occurs the following fall. Vegetation treatments to keep the ROW clear are minimal because of the lack of tall shrubs and trees within the transmission line corridor. When vegetation clearing is necessary, hand crews and hand tools (e.g., chainsaw, weed whip) are primarily used. Mechanical methods may be used when hand clearing is not effective or safe for crews. An example would be the grading of a service road to a structure location or a pad for a structure. Large trees would likely be felled by hand crews and brush would be cleared with a blade. For this project, it is very unlikely that mechanical clearing would be necessary.

Typical O&M activities for the access and spur roads include vegetation management, removal of large debris (e.g., boulders, fallen trees), repair of eroded areas, and grading to restore the road bed. Brush, trees, large rocks, slash, and deadfall are removed from the roads whenever their presence can damage equipment or endanger the safety of employees. All initial road maintenance is performed by hand crews using ATVs, pickups, chainsaws, and hand tools. Trees and brush are cut off at grade to minimize damage to vehicles. Slash, deadfall, and boulders are placed at the edge of the road or down slope of the road bed, depending on site topography, to serve as a filtering windrow to prevent erosion and sedimentation. Smaller vegetation (e.g., grass) is left in the road bed unless it is too tall and hinders access. Markers denoting the structure numbers may be placed along access roads for hard-to-find structures. If grading or other earth moving activities are necessary to restore significantly eroded road beds or other damage, IPC would identify the proposed work and best management practices, and would notify the BLM prior to starting work.

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 appropriate. All existing road drainage structures would be maintained and/or repaired by IPC during O&M periods. O&M activities would be temporarily halted when wet conditions cause excessive rutting (greater than 3 inches) of roads and/or work areas.

To reduce the spread of, and possible introduction of noxious weeds, vehicles that may operate off-road during construction and O&M activities would be cleaned prior to the start of ground disturbing activities. Areas that are disturbed would be reseeded no later than the fall following the end of construction or O&M activities. The BLM would approve the seed mixture and application method proposed by IPC for site rehabilitation. Weed control actions would consider BLM guidelines for the Vale District as well as Baker and Malheur County weed management plans.

Emergency repairs to the access and spur roads and lines may occur at any time of the year.

1.2.1. Environmental Protection Measures

Proposed road work and future O&M activities have been planned to minimize the damage to the environment and to comply with the BLM's Baker Resource Management Plan (USDI 1989), Southeastern Oregon Resource Management Plan (2001), 2004 BLM grant stipulations, and other regulations and guidelines. The Plan of Development (POD), which would after approval would become part of the ROW grant, contains a detailed description of these measures, which are categorized into: approved work area and site access; road maintenance standards; vegetation management; waters of the U.S.; sensitive plants; sensitive wildlife; cultural resources; aesthetic resources; and fire hazards.

1.3. Conformance Statement

The project is located within the Southeastern Oregon Resource Management Plan (USDI 2001) and the Baker Resource Management Plan (USDI 1989) areas. The Proposed Action does not conflict with those plans.

1.4. Relationship to Statutes, Regulations or Other Plans

The subject application was made in accordance with Title V of the Federal Land Policy and Management Act of 1976 as amended (43 U.S.C. 1761) and the regulations found in 43 CFR 2800. These regulations will govern the granting of the ROW (if approved), determination of cost reimbursement, determination of the rental value, and the compliance and monitoring requirements.

Right-of-way decisions become effective upon approval by the Authorized Officer (43 CFR 2801.10 (b)).

2. ALTERNATIVES

The No-Action Alternative consists of BLM not amending the ROW grant. The Ontario–Huntington portion of the transmission line would remain unauthorized and IPC would not construct the proposed spur roads or blade the existing access road. The No-Action Alternative would not allow IPC access to conduct O&M activities.

Alternatives Considered but not Analyzed in Detail:

IPC did consider relocation of the proposed spur roads; however, the Proposed Action routes were determined to cause less impact to the environment. Therefore, relocation of the proposed roads was not considered for further analysis.

3. EXISTING ENVIRONMENT

The Ontario to Quartz line extends about 73 miles from Ontario, Oregon to Quartz Junction Substation, five miles southeast of Baker City, Oregon. Road work would occur in the central portion of the alignment, where elevations range from 2,200 to 3,400 feet and the line passes through foothill habitats. There is a patchwork of BLM rangeland and rural private land throughout the area. There are three work areas on BLM land. Some additional road blading may take place concurrently on adjacent private land.

The first work site is located between Structures 206 and 207, 300 feet west of Interstate 84 and Brownlee Reservoir at Birch Creek. The vegetation of the area is dominated by Artemisia rigida (stiff sagebrush), Artemisia tridentata (big sagebrush), Psuedoroegnaria spicata ssp. spicata (bluebunch wheatgrass), and Hesperostipa comata ssp. comata (needle and thread). The second work site is located between Structures 250 and 253, about 700 feet west of Interstate 84 and 0.8 mile south of Huntington. A mixture of native and exotic grasses and forbs dominates the vegetation of the area. The third work site is located between Structures 306 and 307, about 1 mile west of Interstate 84 and 1.7 miles northwest of Lime. The site is relatively undisturbed and the vegetation is dominated by Artemisia spinescens (bud sagebrush), Artemisia tridentata, Psuedoroegnaria spicata ssp. spicata, and Poa secunda (Sandberg bluegrass).

3.1. Special Status Plant Species

IPC conducted special status plant surveys (and incidentally noted noxious weeds) at all proposed work areas from May 25–26, 2005. General pedestrian surveys were conducted, and included a 100-ft buffer on each side of the proposed road work sites. (Appendix 1). Prior to conducting the surveys, Clair Button, BLM botanist, was consulted as to the special status species likely to occur in the area. There are two historical records of rare plant species close to the proposed work areas. Near Site 2, one occurrence of Stanleya confertiflora (Oregon princesplume) has been reported about 800 feet east of Structure 250, on the east side of the Old Oregon Trail Highway. Near Site 3, one occurrence of Pyrrocoma radiata (ray goldenweed) has been reported 800 feet west of Structure 307.

No special status plant species were observed, or have been documented, in the survey area.

3.2. Noxious Weeds

Two noxious weed species were noted during the special status plant survey. Taeniatherum caput-medusae (medusahead wildrye) and Onopordum acanthium (Scotch thistle) occur at Site 2 and Taeniatherum caput-medusae occurs at Site 1.

3.3. Sensitive Fish and Wildlife

Three types of sensitive fish and wildlife categories were considered: 1) species listed as threatened, endangered, proposed, or candidate with the U.S. Fish and Wildlife Service (FWS), 2) species listed as species of special concern with the FWS, and 3) Vale District sensitive species. The likelihood of sensitive species occurrence in the vicinity of the three road work sites was assessed using element occurrence records from the Oregon Natural Heritage Information Center (2004), from animal distribution maps (Marshall et al. 2003 for birds and Csuti et al. 1997 for the remaining animal groups), and from discussions with BLM and Oregon Department of Fish and Wildlife (ODFW) biologists. Scientific names for wildlife species are in Appendices 2 through 4.

Five federally listed, proposed, or candidate fish and wildlife species are known to occur in Malheur and Baker Counties (as provided in a FWS list, Appendices 2 and 3), but do not occur near the project area: 1) Canada lynx, 2) Lahontan cutthroat trout, 3) bull trout, 4) Columbia spotted frog, and 5) yellow-billed cuckoo.

The bald eagle does occur in the project area. A bald eagle nest, first documented in 2003, is more than 2 miles up the Birch Creek drainage from Site 1 at Structure 207. The breeding pair successfully fledged young from 2003 to 2005. The nest was vacant in 2006. When present, the adults forage in Brownlee Reservoir and likely fly over the line on a daily basis.

There are no recent records of any FWS species of concern (Appendices 2 and 3) or BLM sensitive species (Appendix 4) in the project area. However, historical element occurrence records exist for three sensitive species near, but not at, the project area. The following recorded observations are over 17 years old:

- Sage grouse have historically occupied lek sites between 1.5 and 3 miles west of project Sites 2 and 3. These leks have not been monitored for many years and are not thought to be occupied. BLM personnel have observed female sage grouse with young approximately 3 miles west-northwest of Site 2 in the summer of 2005.

- Long-billed curlews have historically occupied areas west of project Sites 1 and 2. They may be present in the general project vicinity from April to July.

- There is one record of a Swainson's hawk nesting 3.5 miles west of Site 3 in 1986. There are no suitable nesting trees immediately adjacent to the project sites.

Locations of ferruginous hawk and burrowing owl are tracked by the Oregon Natural Heritage Information Center (ONHIC); there are no recorded occurrences near the project.

FWS and BLM sensitive species mostly likely to be present at Site 1 would be species that inhabit riparian areas (Birch Creek) or sagebrush communities. This would include the bank swallow, yellow-breasted chat, Woodhouse's toad, leopard frog, sagebrush lizard, and Western ground snake. At Site 2 the habitat is largely degraded due to exotic grasses and noxious weeds. Species like the Western meadowlark and common nighthawk could possibly use the area. Sage grouse may occur in areas that support sagebrush and have adequate herbaceous cover. Site 3 has more native plant species and a nearby spring. Species like the Western toad, desert horned lizard, long-nosed leopard lizard, bat species, redband trout, or any of the species previously mentioned could be present.

3.4. Cultural Resources

Archaeological and historical surveys were conducted in the field following a review of background information. The types of archaeological and historical properties that could be encountered in the project area were established through an examination of previous surveys in the area, current literature, historical maps, and consultation with the BLM Baker and Malheur Resource Offices. Additionally, factors such as proximity to sources of permanent water, slope, aspect, elevation, and nearby available resources were considered. The Baker Field Office provided copies of reports that documented previous surveys that overlap or are near the project area, as well as photocopies of area General Land Office (GLO) plat maps dating to 1874, 1881, and 1882. No cultural resources identified in the reports occur within 1,600 feet of the Proposed Action.

No archaeological and historical resources were identified during the on-site inspections. Surveys were conducted within a 100-foot-wide survey corridor, centered on the proposed or existing road alignment. The survey corridor was surveyed by at least three transects spaced at approximately 33 feet and running parallel with the corridor.

4. ENVIRONMENTAL IMPACTS

4.1. General Resources

The project service roads do not lie within floodplains, wetlands, or riparian zones. IPC would implement appropriate construction best management practices (BMPs) during surface disturbing activities to address sediment and dust from work at site 1,300 feet upslope of Birch Creek. The BMPs would prevent the discharge of sediment to the creek. Reduced air quality due to dust could occur in very small areas at the three works sites during the two or three day work period. Limited dust would also be created whenever vehicles drive on the dirt roads at the work sites.

4.2. Botanical Resources

Approximately 0.6 acre of land would be disturbed due to road construction activities, approximately 0.42 of an acre outside the existing ROW. Vegetation would be damaged or destroyed during the creation of new roads. A very small amount of shrub-steppe habitat would be lost due to the new roads at Site 1 (300 by 14 ft) and Site 3 (300 by 14 ft). A small amount of grassland habitat would be lost due to the new road at Site 2 (1400 by 14 ft). IPC would implement environmental protection measures (NW-1 through NW-5; Section 3.3.1. of the POD) to minimize the potential for the spread of existing noxious weeds that are present at Sites 1 and 2.

No federal or state listed threatened, endangered, or sensitive plants are present at the work sites. No work would be conducted in riparian or other wetland areas.

Future O&M activities that involve ground disturbance such as road grading or pole replacement would be followed by habitat rehabilitation and weed prevention measures. Therefore, long-term impacts to botanical resources are expected to be minimal.

4.3. Wildlife Resources

The bald eagle is the only sensitive species known to occur near the project area. The Pacific States Bald Eagle Recovery Plan recommends that construction, habitat improvement, and other potentially disturbing activities should not be allowed up to 0.25 mile from nests or roosts, and that activities should be regulated within 0.5 mile where eagles have line-of-sight vision (FWS 1986). Since the bald eagle nest is located over 2 miles from the line, no adverse effects would occur due to work activities. In addition, there are no roosts nearby and the construction and O&M activities would not displace eagles foraging on Brownlee Reservoir. The project line should not pose a collision risk as bald eagles have excellent vision and collisions with transmission lines are very rare. Electrocution is not a risk with the bald eagle for lines greater than 69 kV due to conductor and groundwire spacing; project lines are 138 kV. The Proposed Action should have no effect on the bald eagle.

Unless otherwise agreed to by the authorized officer in writing, power lines shall be constructed in accordance with standards in Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006). The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are “eagle safe.” Such proof shall be provided by a raptor expert approved by the authorized officer. The BLM reserves the right to require modifications or additions to all power line structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

There is a small possibility that some sensitive wildlife species (e.g., sage grouse) inhabit the project area. However, given the short duration of the Proposed Action (2 days) and the small area of disturbance, any wildlife in the area are highly unlikely to be impacted by the proposed work. Areas that are disturbed by construction activities would be reseeded by the following fall.

During future O&M activities, wildlife may be temporarily displaced from structure work areas, but should not be noticeably affected by ground or aerial patrols and inspections. No long-term impacts are expected to occur due to future O&M activities. In the event that sensitive species are found to be present, IPC has standard protective measures to follow; as detailed in Section 3.6. of the POD.

4.4. Cultural Resources

No historic or traditional cultural resources were identified in the project area during the cultural resources investigations. Therefore, no adverse effects on traditional cultural resources are anticipated. In the event cultural resources or human remains are found within the ROW in the future, IPC would implement environmental protection measures described in Section 3.7 of the POD and comply with stipulations in the BLM ROW grant.

The ROW grant would contain the following stipulations for the protection of cultural resources:

- Any cultural and/or paleontological resource (historic or prehistoric site or object, or fossil) discovered by the holder, or any persons working on his behalf on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and mitigation, and any decision as to proper avoidance, protection or mitigation measures will be made by the authorized officer after consulting with the holder and others under Section 106 of the National Historic Preservation Act.

- Pursuant to 43 CFR 10.4(g), the holder of this authorization must immediately notify the authorized officer, by telephone, 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), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer. The BLM Authorized Officer will determine avoidance, protection or mitigation measures in consultation with the Holder, Oregon SHPO, and affected Tribes. Costs associated with the discovery, evaluation, protection or mitigation of the discovery shall be the responsibility of the holder.

- The holder shall notify the Authorized Officer at least **90** days prior to any non-emergency activities that would cause surface disturbance in the right-of-way. The Authorized Officer will determine if a cultural resource inventory, treatment or mitigation is required for the activity. The holder will be responsible for the cost of inventory, avoidance, treatment or mitigation; including any maintenance-caused damage. The Authorized Officer will determine avoidance, treatment and mitigation measures that are necessary after consulting with the holder and under Section 106 of the National Historic Preservation Act.

4.5. Cumulative Impacts

All resource values have been evaluated for cumulative impacts. It has been determined that no measurable cumulative effects would result from implementation of the Proposed Action.

5. LIST OF PREPARERS

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Table 1.
Description of location, area, and action of three work sites on the Ontario to Quartz transmission-line road-improvement project.

Site	Line Segment	Township, range, section	Approx area	Action
1	Ontario–Huntington	T15S, R45E, Sec. 9, SE1/4 SE1/4	350 by 14ft	New spur road to # 207
2	Ontario–Huntington	T14S, R45E, Sec.19, SW1/4 NE1/4	2000 by 14ft	New road to # 251-253
3a	Huntington–Quartz	T13S, R44E, Sec. 21, NW1/4 SE1/4	300 by 14ft	New spur road to # 307
3b	Huntington–Quartz	T15S, R45E, Sec. 21, NE1/4 SW1/4	650 by 14ft	Blade existing road to #307

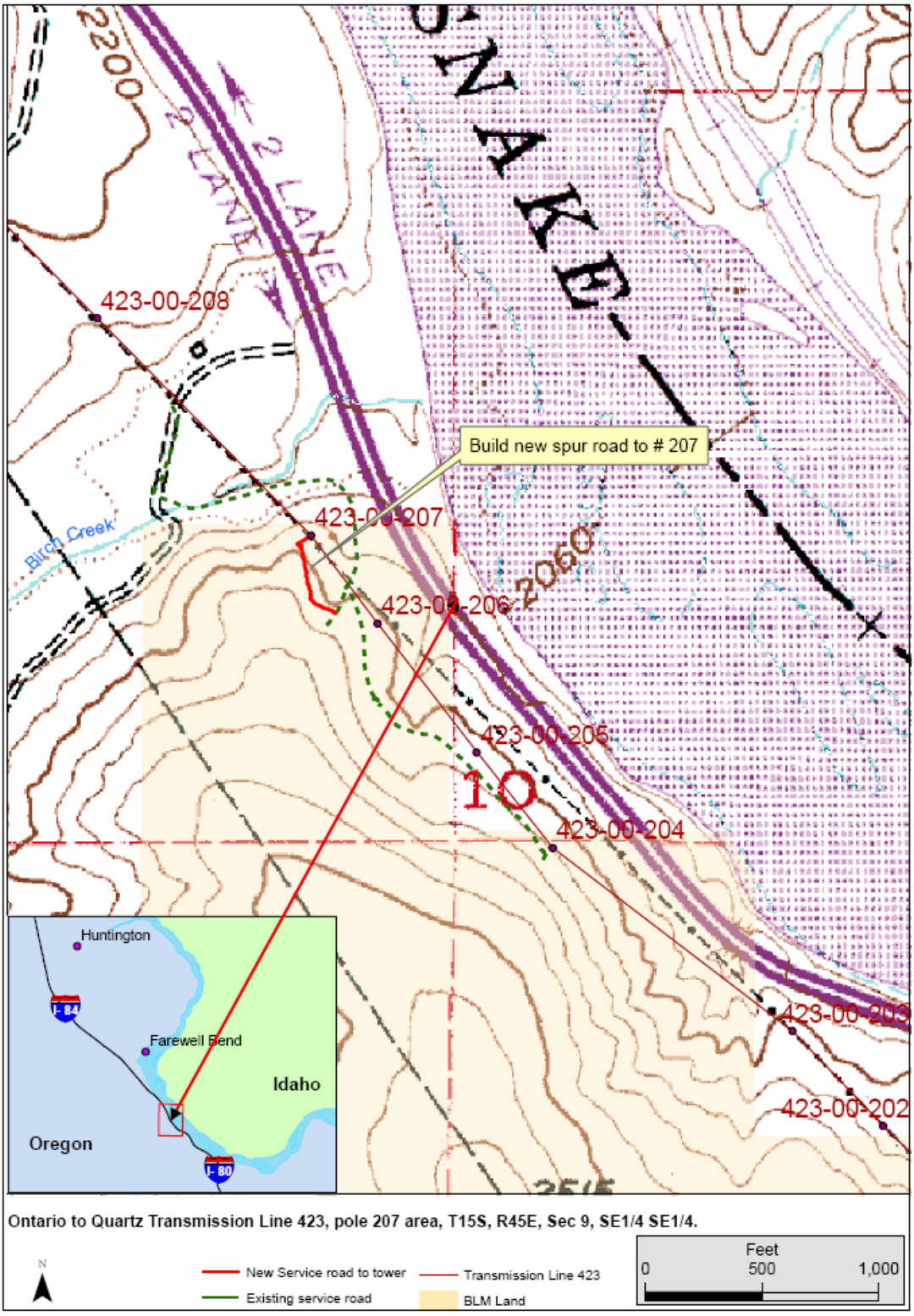

Figure 1.
Work Site 1 for the Ontario to Quartz transmission line.

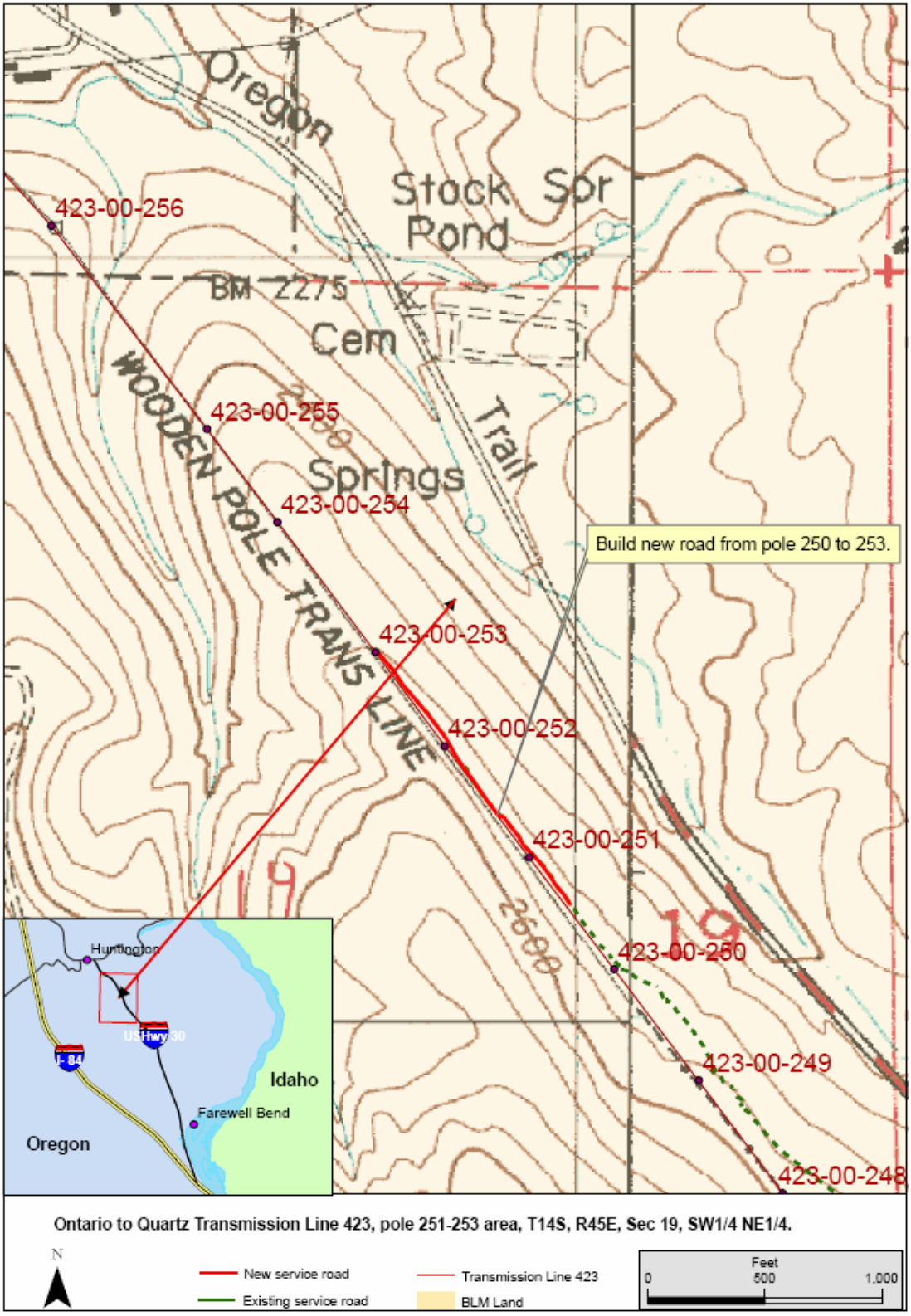

Figure 2.
Work Site 2 for the Ontario to Quartz transmission line.

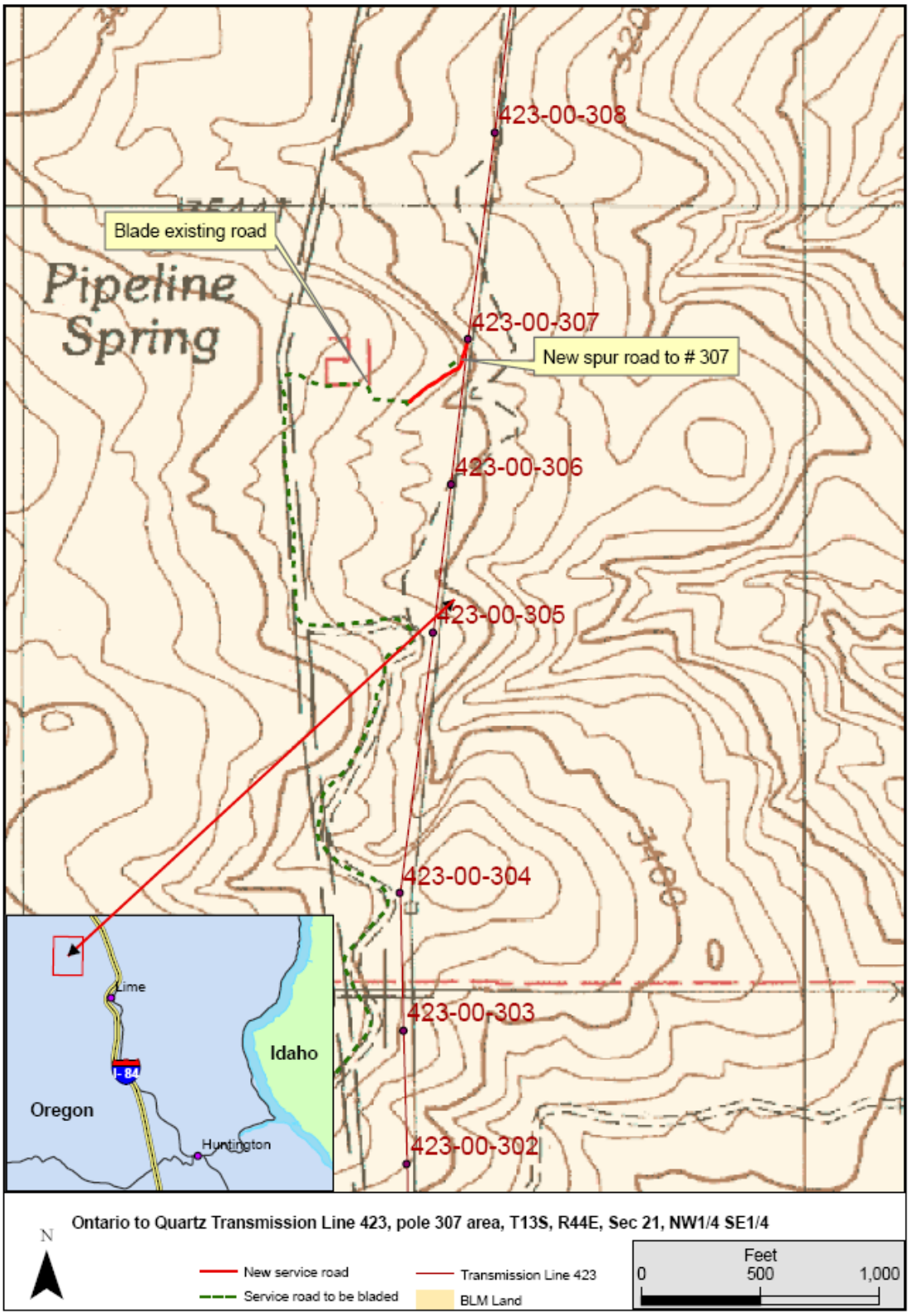

Figure 3.
Work Site 3 for the Ontario to Quartz transmission line.

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Appendix 1.
Survey for Special Status Plant Species on Public Land at Proposed Road Construction Sites on the Ontario to Quartz Junction Transmission Line

Survey for Special Status Plant Species on Public Land at Proposed Road Construction Sites on the Ontario to Quartz Junction Transmission Line

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15 September 2005

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Table of Contents

List of Tables

List of Figures

1. PURPOSE

The Purpose of this report is to document occurrences of special status plants found on Bureau of Land Management lands within the vicinity of proposed road-building and road improvements associated with Idaho Power Company's (IPC) Ontario to Quartz Junction Transmission Line maintenance, to assess potential impacts to the species or species habitat, and to make recommendations regarding the protection of such.

2. METHODS

2.1. Prefield Review

Prior to surveying the site, Marie Kerr, IPC Botanist, consulted Clair Button, BLM Botanist, to review special status plants likely to occur in the project vicinity. Mr. Button provided a comprehensive list of Baker Resource Area Special Status Plants (Table 1). In addition, Mr. Button listed the following species as sensitive or assessment species most likely to be encountered in the project vicinity: *Allium geyeri var. geyeri* (Geyer's onion), *Botrychium sp.* (moonwort species), *Carex bebbii* (Bebb's sedge), *Carex hystericina* (porcupine sedge), *Cheilanthes feei* (slender lipfern); *Cryptogramma stelleri* (fragile rockbrake), *Pellaea bridgesii* (Bridges' cliffbrake), *Pyrrocoma radiata* (ray goldenweed), and *Stanleya confertiflora* (Oregon princesplume).

IPC also consulted electronic data of Element Occurrence Records (EORs) from Oregon Natural Heritage Information Center (ORNHIC 2004) to locate known occurrences of special status plants within the project vicinity.

2.2. Field Surveys

On 25-26 May 2005, Ms. Kerr surveyed three sites slated for road construction in the project area. Site 1 (Figure 1) is a newly proposed access road to structure 206 off the existing access road. Site 2 (Figure 2) is a newly proposed access road stretching from structure 250 to structure 253. Site 3 (Figure 3) is a newly proposed access to structure 307 off the existing access road. The survey area for each site included the proposed access road plus a buffer zone of 100 feet on each side of the roadway. All species encountered and identifiable, within the survey areas on 25-26 May 2005, were recorded.

Field manuals used for species identification include Hitchcock and Cronquist (1973), Cronquist et al. (1989), Hickman (1993), Swartz and Nielsen (2000), and Atwood and Debolt (2001). Nomenclature for this report follows USDA, NRCS (2005).

3. RESULTS

3.1. Prefield Review

As of 2004, no element occurrences have been reported within 1 kilometer of Site 1. Near Site 2, one occurrence of *Pyrrocoma radiata* has been reported about 500 meters northeast of structure

253 in an old cemetery, and one occurrence of *Stanleya confertiflora* has been reported about 250 meters east of structure 250, on the east side of the Old Oregon Trail Highway. Two occurrences of *Pyrrocoma radiata* have been reported near Site 3. The lower extent of one occurrence is located approximately 250 meters west of structure 307, and the other occurrence is located about one kilometer southeast of the structure.

3.2. Field Surveys

No special status plants were located at Sites 1 3 during the May 2005 surveys.

Site 1 occurs on a west-facing, moderately steep slope and is dominated by *Artemisia rigida* (stiff sagebrush), *Artemisia tridentata* (big sagebrush), *Psuedoroegnaria spicata ssp. spicata* (bluebunch wheatgrass), and *Hesperostipa comata ssp. comata* (needle and thread). Thirty-six species were recorded at the site (Table 2), including twenty-six native species, five introduced forbs, and five introduced grasses.

Site 2 occurs along the top of a northeast-facing, steep slope and is dominated by a mix of herbaceous species. Forty-eight species were recorded at the site (Table 3), including thirty-five native species, nine introduced forbs, and four introduced grasses.

Site 3 occurs near the top of a southeast-facing, moderately steep slope and is dominated by *Artemisia spinescens* (bud sagebrush), *Artemisia tridentata*, *Psuedoroegnaria spicata ssp. spicata*, and *Poa secunda* (Sandberg bluegrass). The site is relatively undisturbed. Twenty-three species were recorded at the site (Table 4), including eighteen native species, two introduced forbs, and three introduced grasses.

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Table 1. Baker Resource Area special status plants (Oregon only).

SPECIES		STATUS CATEGORIES			OCCURRENCES				
		FED	BLM-OR	BRA	BAKER	UMAT	UNION	WALL	COMMON NAME
Achnatherum wallowaensis Maze & K.A. Robson	ACWA4		BS	S				X	Wallowa needlegrass
Allium geyeri S. Wats. var. geyeri S. Wats.	ALGEG		BA	S	X			X	Geyer's onion
Allium robinsonii Henderson	ALRO		BS	S					Robinson's onion
Allium tolmiei (Hook.) Baker ex S. Wats. var. platyphyllum (Tidestrom) Ownbey	ALTOP2		BT	D	X	X	X	X	Wallowa onion
Arabis davidsonii Greene	ARDA		BT	S	X			X	Davidson's rockcress
Asplenium trichomanes-ramosum L.	ASTR10		BA	S	X			X	brightgreen spleenwort
Astragalus atratus S. Wats. var. owyheensis (A. Nels. & J.F. Macbr.) M.E. Jones	ASATO		BT	D	X				Owyhee milkvetch
Balsamorhiza hookeri (Hook.) Nutt. var. idahoensis (Sharp) Cronq.	BAHOI		BT	S	X				Idaho balsamroot
Balsamorhiza rosea A. Nels. & J.F. Macbr.	BARO2		BT	S		X			rosy balsamroot
Bolandra oregana S. Wats.	BOOR		BT	D	X			X	northern false coolwort
Botrychium ascendens W.H. Wagner	BOAS2	SoC	BS	S				X	trianglelobe moonwort
Botrychium campestre W.H. Wagner & Farrar	BOCA5		BA	S				X	Iowa moonwort
Botrychium crenulatum W.H. Wagner	BOCR	SoC	BS	D	X		X	X	scalloped moonwort
Botrychium hesperium (Maxon & Clausen) W.H. Wagner & Lellinger	BOHE5		BT	S		X	X	X	western moonwort
Botrychium lanceolatum (Gmel.) Angstr.	BOLA		BT	S	X			X	lanceleaf grapefern
Botrychium lineare W.H. Wagner	BOLI7	C1	BS	S				X	narrowleaf grapefern
Botrychium lunaria (L.) Sw.	BOLU		BA	S				X	common moonwort
Botrychium minganense Victorin	BOMI		BT	D	X	X	X	X	Mingan moonwort
Botrychium montanum W.H. Wagner	BOMO		BA	S	X		X	X	mountain moonwort
Botrychium paradoxum W.H. Wagner	BOPA9	SoC	BS	S	X			X	peculiar moonwort
Botrychium pedunculosum W.H. Wagner	BOPE4	SoC	BS	S	X			X	stalked moonwort
Botrychium pinnatum St. John	BOPI		BT	S	X			X	northern moonwort
Bupleurum americanum Coult. & Rose	BUAM2		BA	S	X			X	American thorow wax
Calochortus longebarbatus S. Wats. var. longebarbatus S. Wats.	CALOL		BT	S		X	X		longbeard mariposa lily
Calochortus macrocarpus Dougl. var. maculosus (A. Nels. & J.F. Macbr.) A. Nels. &	CAMAM		BS	D				X	Nez Perce mariposa lily
Camissonia boothii (Dougl. ex Lehm.) Raven ssp. boothii (Dougl. ex Lehm.) Raven	CABOB		BT	D	X				Booth's suncup
Carex abrupta Mackenzie	CAAB2		BA	S				X	abruptbeak sedge
Carex atrosquama Mackenzie	CAAT8		BA	S				X	lesser blackscale sedge
Carex bebbii Olney ex Fern.	CABE2		BA	D	X		X	X	Bebb's sedge
Carex capillaris L.	CACA12		BA	S				X	hairlike sedge
Carex concinna R. Br.	CACO10		BA	S	X			X	low northern sedge
Carex cordillerana Saarela and B.A. Ford	CACO-		BA	S	X	X	X	X	Cordilleran sedge
Carex duriuscula C.A. Mey.	CADU6		BA	S	X				needleleaf sedge
Carex gynocrates Wormsk. ex Drej.	CAGY2		BA	S				X	northern bog sedge
Carex haydeniana Olney	CAHA6		BT	S				X	cloud sedge
Carex hystericina Muhl. ex Willd.	CAHY4		BA	D	X			X	bottlebrush sedge
Carex lasiocarpa Ehrh. var. americana Fern.	CALAA		BA	S	X			X	American woollyfruit sedge
Carex nardina Fries	CANA2		BA	S				X	spike sedge
Carex pelocarpa F.J. Herm.	CAPE5		BA	S				X	duskyseed sedge
Carex praeceptorium Mackenzie	CAPR4		BT	S	?	X			early sedge
Carex praticola Rydb.	CAPR7		BT	S	X		X	X	meadow sedge

Table 1 (continued).

SPECIES		STATUS CATEGORIES		OCCURRENCES					
		FED	BLM-OR	BRA	BAKER	UMAT	UNION	WALL	COMMON NAME
Carex pyrenaica Wahlenb. ssp. micropoda (C.A. Mey.) Hultén	CAPYM		BA	S				X	Pyrenean sedge
Carex retrorsa Schwein.	CARE4		BA	S		X			knotsheath sedge
Carex saxatilis L.	CASA10		BA	S	X			X	rock sedge
Carex subnigricans Stacey	CASU7		BA	S				X	nearlyblack sedge
Carex vernacula Bailey	CAVE5		BA	S	X			X	native sedge
Castilleja flava S. Wats. var. rustica (Piper) N. Holmgren	CAFLR		BT	D	X			X	country Indian paintbrush
Castilleja fraterna Greenm.	CAFR8	SoC	BS	S			X	X	fraternal Indian paintbrush
Castilleja pallescens (Gray) Greenm. var. inverta (A. Nels. & J.F. Macbr.) Edwin	CAPAI		BT	D	X				pale Indian paintbrush
Cheilanthes feei T. Moore	CHFE		BA	S				X	slender lipfern
Cryptantha propria (A. Nels. & J.F. Macbr.) Payson	CRPR3		BT	S	X				Malheur cryptantha
Cryptantha thompsonii I.M. Johnston	CRTH3		BT	S	X				Thompson's cryptantha
Cryptogramma stelleri (Gmel.) Prantl	CRST2		BA	S	X			X	fragile rockbrake
Cypripedium fasciculatum Kellogg ex S. Wats.	CYFA	SoC	BS	S	X				clustered lady's slipper
Cypripedium montanum Dougl. ex Lindl.	CYMO2		BT	D	X	X	X	X	mountain lady's slipper
Dryopteris filix-mas (L.) Schott	DRFI2		BT	S	X	X	X	X	male fern
Eleocharis bolanderi Gray	ELBO		BA	S			X	X	Bolander's spikerush
Erigeron disparipilus Cronq.	ERDI3		BA	S	X			X	white cushion fleabane
Erigeron engelmannii A. Nels. var. davisii (Cronq.) Cronq.	EREND		BA	S				X	Davis' fleabane
Eriogonum ochrocephalum S. Wats. var. calcareum (S. Stokes) M.E. Peck	EROCC		BT	D	X				whitewoolly buckwheat
Geum rossii (R. Br.) Ser. var. turbinatum (Rydb.) C.L. Hitchc.	GEROT		BA	D	X				Ross' avens
Gilia sinistra M.E. Jones ssp. sinistra M.E. Jones	GISIS		BT	S				X	Alva Day's gilia
Heliotropium curassavicum L.	HECU3		BA	S	X	X	X		salt heliotrope
Hierochloe hirta (Schrank) Borbßs ssp. arctica (J. Presl) G. Weim.	HIODA		BT	D	X	X			northern sweetgrass
Huperzia occidentalis (Clute) Kartesz & Gandhi	HUOC		BT	S				X	western clubmoss
Leptodactylon pungens (Torr.) Torr. ex Nutt.	LEPUH3	SoC	BS	S			X	X	granite prickly phlox
Lesquerella kingii S. Wats. ssp. diversifolia (Greene) Rollins & Shaw	LEKID		BT	S			X	X	King bladderpod
Lipocarpha aristulata (Coville) G. Tucker	LIAR6		BA	S		X		X	awned halfchaff sedge
Listera borealis Morong	LIBO4		BA	S	X			X	northern twayblade
Lomatium erythrocarpum Meinke & Constance	LOER2	SoC	BS	S	X				redfruit desertparsley
Lomatium rollinsii Mathias & Constance	LORO2		BT	S	X			X	Rollins' biscuitroot
Lupinus cusickii S. Wats. ssp. cusickii S. Wats.	LULEC7	SoC	BS	D	X				Cusick's lupine
Luzula orestera C.W. Sharsmith	LUOR4		BT	S		X	X		Sierra woodrush
Lycopodium annotinum L.	LYAN2		BT	S	X		X	X	stiff clubmoss
Lycopodium complanatum L.	LYCO3		BA	S			X		groundcedar
Lygodesmia juncea (Pursh) D. Don ex Hook.	LYJU		BT	S		X			rush skeletonplant
Mimulus clivicola Greenm.	MICL3		BT	S	X			X	North Idaho monkeyflower
Mimulus hymenophyllus Meinke	MIHY	SoC	BS	S				X	thinsepal monkeyflower
Mimulus jungermannioides Suksdorf	MIJU	SoC	BS	S		X			liverwort monkeyflower
Mimulus washingtonensis Gandog.	MIPA14	SoC	BT	S				X	Washington monkeyflower
Minuartia austromontana S.J. Wolf & Packer	MIAU3		BT	S				X	Columbian stitchwort
Mirabilis macfarlanei Constance & Rollins	MIMA2	LT	BS	S				X	MacFarlane's four o'clock

Table 1 (continued).

SPECIES		STATUS CATEGORIES		OCCURRENCES					
		FED	BLM-OR	BRA	BAKER	UMAT	UNION	WALL	COMMON NAME
Myriophyllum sibiricum Komarov	MYSI		BT	S				X	shortspike watermilfoil
Opuntia fragilis (Nutt.) Haw. var. fragilis (Nutt.) Haw.	OPFRF		BT	D	X				brittle pricklypear
Pediocactus simpsonii (Engelm.) Britt. & Rose var. robustior (Coult.) L. Benson	PESIR		BT	S				X	snowball cactus
Pellaea bridgesii Hook.	PEBR5		BA	S	X		X		Bridges' cliffbrake
Penstemon deustus Dougl. ex Lindl. var. variabilis (Suksdorf) Cronq.	PEDEV2		BT	D		X	X		scabland penstemon
Penstemon seorsus (A. Nels.) Keck	PESE12		BT	S	X				shortlobe penstemon
Penstemon spatulatus Pennell	PESP2		BT	D	X		X	X	Wallowa beardtongue
Phacelia minutissima Henderson	PHMI7	SoC	BS	S				X	small phacelia
Phlox multiflora A. Nels.	PHMU3		BA	S			X		flowery phlox
Physaria chambersii Rollins	PHCH2		BT	S	X				Chambers' twinpod
Platanthera obtusata (Banks ex Pursh) Lindl.	PLOB		BA	S				X	bluntleaved orchid
Pleuropogon oregonus Chase	PLOR3		BS	S			X		Oregon semaphoregrass
Poa suksdorfii (Beal) Vasey ex Piper	POSU10		BT	S			X	X	western bluegrass
Polemonium viscosum Nutt.	POVI		BT	S	X		?	X	sticky polemonium
Polygonum punctatum Ell.	POPU5		BT	S	X				dotted smartweed
Polystichum kruckebergii W.H. Wagner	POKR		BT	S	X	X		X	Kruckeberg's hollyfern
Potamogeton filiformis Pers.	POFI2		BT	S				X	fineleaf pondweed
Primula cusickiana (Gray) Gray	PRCU2		BA	S				X	Cusick's primrose
Pyrrocoma radiata Nutt.	PYRA2	SoC	BS	D	X				ray goldenweed
Ribes cereum Dougl. var. colubrinum C.L. Hitchc.	RICEC		BT	S	X			X	wax currant
Rorippa columbiae (Suksdorf ex B.L. Robins.) Suksdorf ex T.J. Howell	ROCO3	SoC	BS	S		X			Columbian yellowcress
Rubus bartonianus M.E. Peck	RUBA	SoC	BS	S				X	Barton's raspberry
Salix drummondiana Barratt ex Hook.	SADR		BT	S	X		X		Drummond's willow
Scirpus pallidus (Britt.) Fern.	SCPA8		BT	D	X			X	cloaked bulrush
Selaginella watsonii Underwood	SEWA2		BT	D	X		X		Watson's spikemoss
Senecio sphaerocephalus Greene	SESP4		BT	S				X	ballhead ragwort
Silene spaldingii S. Wats.	SISP2	LT	BS	S				X	Spalding's silene
Stanleya confertiflora (B.L. Robins.) T.J. Howell	STCO2		BS	S	X				Oregon princesplume
Suksdorfia violacea Gray	SUVI		BA	S				X	violet suksdorfia
Thalictrum alpinum L.	THALH		BA	S				X	alpine meadow-rue
Thelypodium howellii S. Wats. ssp. spectabilis (M.E. Peck) Al-Shehbaz	THHOS2	LT	BS	S	X		X		Howell's thelypody
Townsendia alpigena Piper var. alpigena Piper	TOMO		BA	S				X	Wyoming Townsend daisy
Townsendia parryi D.C. Eat.	TOPA2		BA	S				X	Parry's Townsend daisy
Trifolium douglasii House	TRDO		BS	S		X			Douglas' clover
Trifolium plumosum Dougl. ex Hook. ssp. amplifolium (J.S. Martin) J. Gillett	TRPLA		BT	S				X	bigleaf clover
Utricularia minor L.	UTMI		BA	S	X				lesser bladderwort
Verbena hastata L.	VEHA2		BT	S	X	X		X	swamp verbena
Zizia aptera (Gray) Fern.	ZIAP		BT	S				X	meadow zizia

Table 2. Species encountered during the rare plant survey conducted at Site 1 on 26 May 2005.

(**introduced species)

	Latin Binomial	***Common Name***	***Synonym***
Shrubs	*Artemisia rigida*	stiff sagebrush	
	Artemisia tridentate	big sagebrush	
	Chrysothamnus viscidiflorus	yellow rabbitbrush	
	Purshia tridentate	bitterbrush	
Forbs	*Amsinckia menziesii* var. *menziesii*	rigid fiddleneck	*Amsinckia retrorsa*
	Antenaria dimorpha	low pussy-toes	
	Astragalus purshii	wooly-pod milkvetch	
	Balsamorhiza sagittata	arrowleaf balsamroot	
	*Ceratocephala testiculata***	bur buttercup	*Ranunculus testiculatus*
	*Choriospora tenella***	blue field mustard	
	Crepis acuminate	tapertip hawksbeard	
	Cyrptantha torreyana	Torrey's cryptantha	
	Descurainia pinnata	tansy mustard	
	*Descurainia sophia***	pinnate tansy mustard	
	Draba verna	spring whitlow-grass	
	Erigeron pumilus	shaggy fleabane	
	Eriogonum ovalifolium	oval-leaved buckwheat	
	Helianthus annuus	common sunflower	
	*Holosteum umbellatum***	jagged chickweed	
	*Lepidium perfoliatum***	clasping pepperweed	
	Lomatium grayi	Gray's lomatium	
	Machaerantherea canescens	hoary aster	
	Penstemon acuminatus	sand penstemon	
	Phlox longifolia	longleaf phlox	
	Plantago patagonica	indian wheat	
	Sphaeralcea munroana	Munro's globemallow	
	*Tragopogon dubius***	yellow salsify	
Graminoides	*Bromus tectorum***	cheatgrass	
	Hesperostipa comata ssp. *comata*	needle and thread	*Stipa comata*
	*Hordeum murinum***	barley	
	Leymus cinerius	giant wildrye	*Elymus cinereus*
	*Poa bulbosa***	bulbous bluegrass	
	Poa secunda	Sandberg bluegrass	
	Pseudoroegneria spicata ssp. *spicata*	bluebunch wheatgrass	*Agropyron spicatum*
	*Taeniatherum caput-medusae***	medusahead wildrye	
	Vulpia microstachys	small fescue	*Festuca microstachys*

Table 3. Species encountered during the rare plant survey conducted at Site 2 on 25 May 2005.

(**introduced species)

	Latin Binomial	Common Name	Synonym
Shrubs	*Artemisia tridentate*	big sagebrush	
	Chrysothamnus viscidiflorus	yellow rabbitbrush	
	Ericameria nauseosa	rubber rabbitbrush	*Chrysothamnus nauseosus*
Forbs	*Achillea milefolium*	common yarrow	
	Allium acuminatum	tapertip onion	
	Amsinckia menziesii var. *menziesii*	rigid fiddleneck	*Amsinckia retrorsa*
	Antenaria dimorpha	low pussy-toes	
	Asclepias speciosa	showy milkweed	
	Astragalus purshii	wooly-pod milkvetch	
	Balsamorhiza sagittata	arrowleaf balsamroot	
	Calochortus sp.	mariposa lily	
	*Ceratocephala testiculata***	bur buttercup	*Ranunculus testiculatus*
	*Choriospora tenella***	blue field mustard	
	Crepis acuminate	tapertip hawksbeard	
	Cyrptantha torreyana	Torrey's cryptantha	
	Descurainia pinnata	tansy mustard	
	*Descurainia sophia***	pinnate tansy mustard	
	Draba verna	spring whitlow-grass	
	Erigeron pumilus	shaggy fleabane	
	*Erodium cicutarium***	stork's bill	
	Grindellia squarrosa	curlycup gumweed	
	Hackelia micrantha	blue stickseed	
	Helianthus annuus	common sunflower	
	*Holosteum umbellatum***	jagged chickweed	
	*Lepidium perfoliatum***	clasping pepperweed	
	Lomatium triternatum	nine-leaf lomatium	
	Lupinus leucophyllus	silky lupine	
	Machaerantherea canescens	hoary aster	
	Madia glomerata	cluster tarweed	
	*Melilotus officinalis***	yellow sweet-clover	
	*Onopordum acanthium***	Scotch thistle	
	Penstemon acuminatus	sand penstemon	
	Phlox longifolia	longleaf phlox	
	Plantago patagonica	indian wheat	
	Sisymbrium altissimum	Jim Hill mustard	
	Sphaeralcea munroana	Munro's globemallow	
	*Tragopogon dubius***	yellow salsify	
Graminoides	*Bromus tectorum***	cheatgrass	
	Elymus elymoides ssp. *elymoides*	bottlebrush squirreltail	*Sitanion hystrix*
	Festuca sp.	fescue	
	Hesperostipa comata ssp. *comata*	needle and thread	*Stipa comata*
	Hordeum jubatum	foxtail barley	

*Hordeum murinum***	mouse barley	
Leymus cinerius	giant wildrye	*Elymus cinerius*
*Poa bulbosa***	bulbous bluegrass	
Poa secunda	Sandberg bluegrass	
Pseudoroegneria spicata ssp. *spicata*	bluebunch wheatgrass	*Agropyron spicatum*
*Taeniatherum caput-medusae***	medusahead wildrye	

Table 4. Species encountered during the rare plant survey conducted at Site 3 on 25 May 2005.

(**introduced species)

	Latin Binomial	Common Name	Synonym
Shrubs	*Artemisia spinescens*	bud sagebrush	
	Artemisia tridentate	big sagebrush	
	Chrysothamnus viscidiflorus	yellow rabbitbrush	
	Purshia tridentate	bitterbrush	
Forbs	*Alyssum desertorum***	desert alyssum	
	Amsinckia menziesii var. *menziesii*	rigid fiddleneck	*Amsinckia retrorsa*
	Astragalus lentiginosus	freckled milkvetch	
	Balsamorhiza sagittata	arrowleaf balsamroot	
	Blepharipappus scaber	blepharipappus	
	Triteleia grandiflora var. *grandiflora*	large-flowered triteleia	*Brodiaea douglasii*
	Collomia grandiflora	large-flowered collomia	
	Crepis acuminate	tapertip hawksbeard	
	*Lepidium perfoliatum***	clasping pepperweed	
	Lithospermum ruderale	Columbia puccoon	
	Lupinus arbustus	longspur lupine	
	Perideridia bolanderi	Bolander's yampah	
	Phacelia hastate	silverleaf phacelia	
	Phacelia linearis	threadleaf phacelia	
Graminoides	*Pseudoroegneria spicata* ssp. *spicata*	bluebunch wheatgrass	*Agropyron spicatum*
	*Bromus tectorum***	cheatgrass	
	*Hordeum murinum***	mouse barley	
	*Poa bulbosa***	bulbous bluegrass	
	Poa secunda	Sandberg bluegrass	

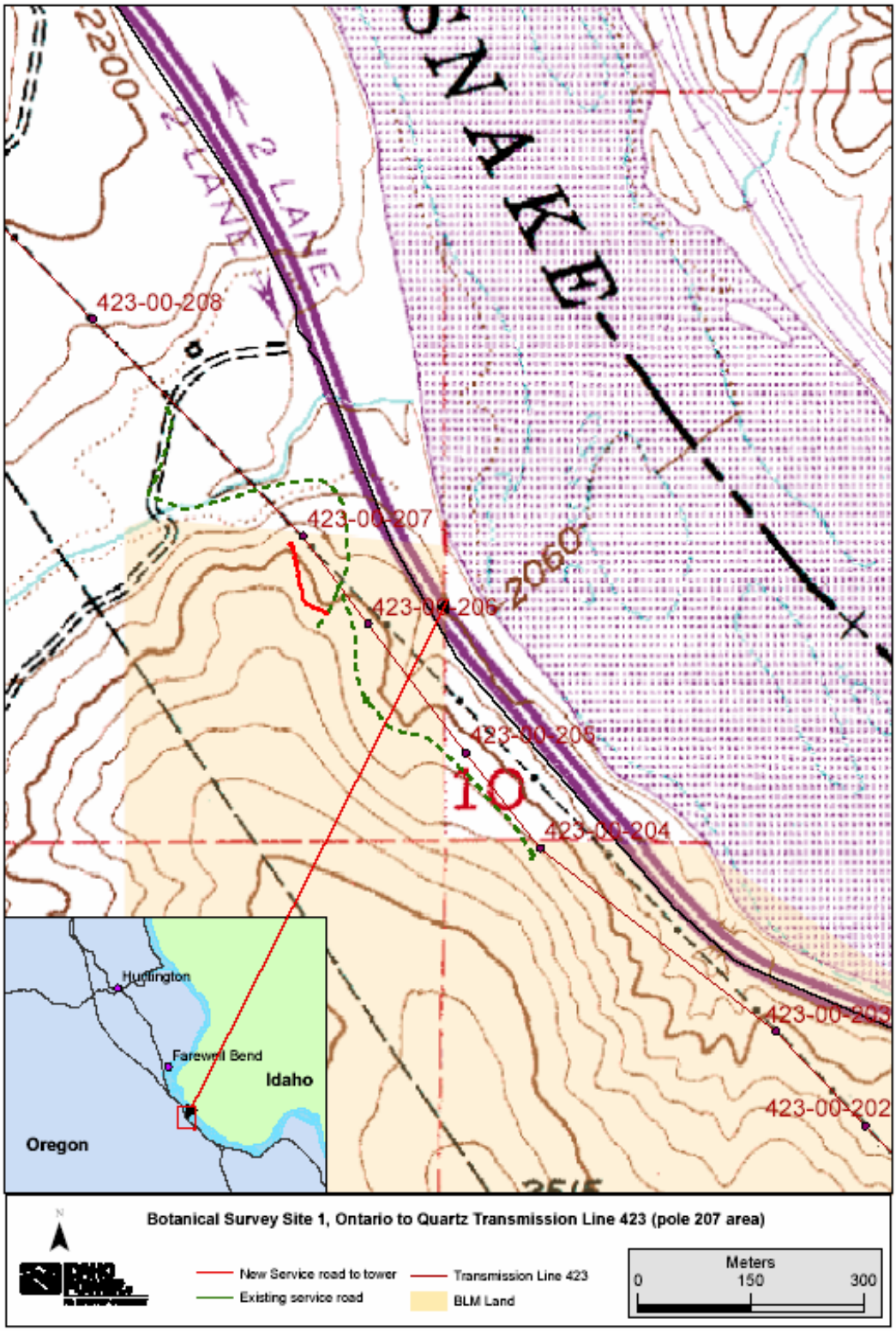

Figure 1. Site 1, surveyed 26 May 2005.

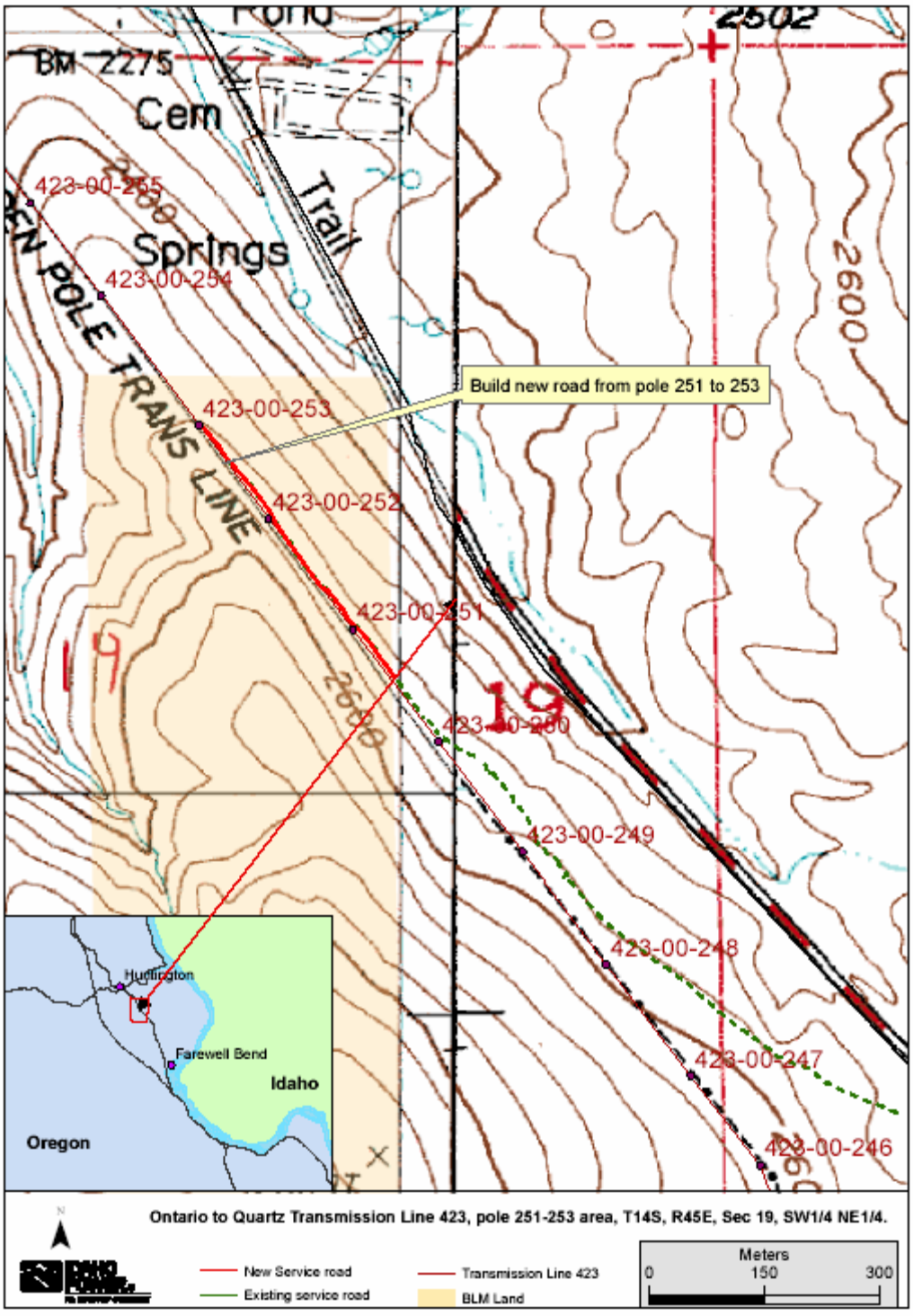

Figure 2. Site 2, surveyed 25 May 2005.

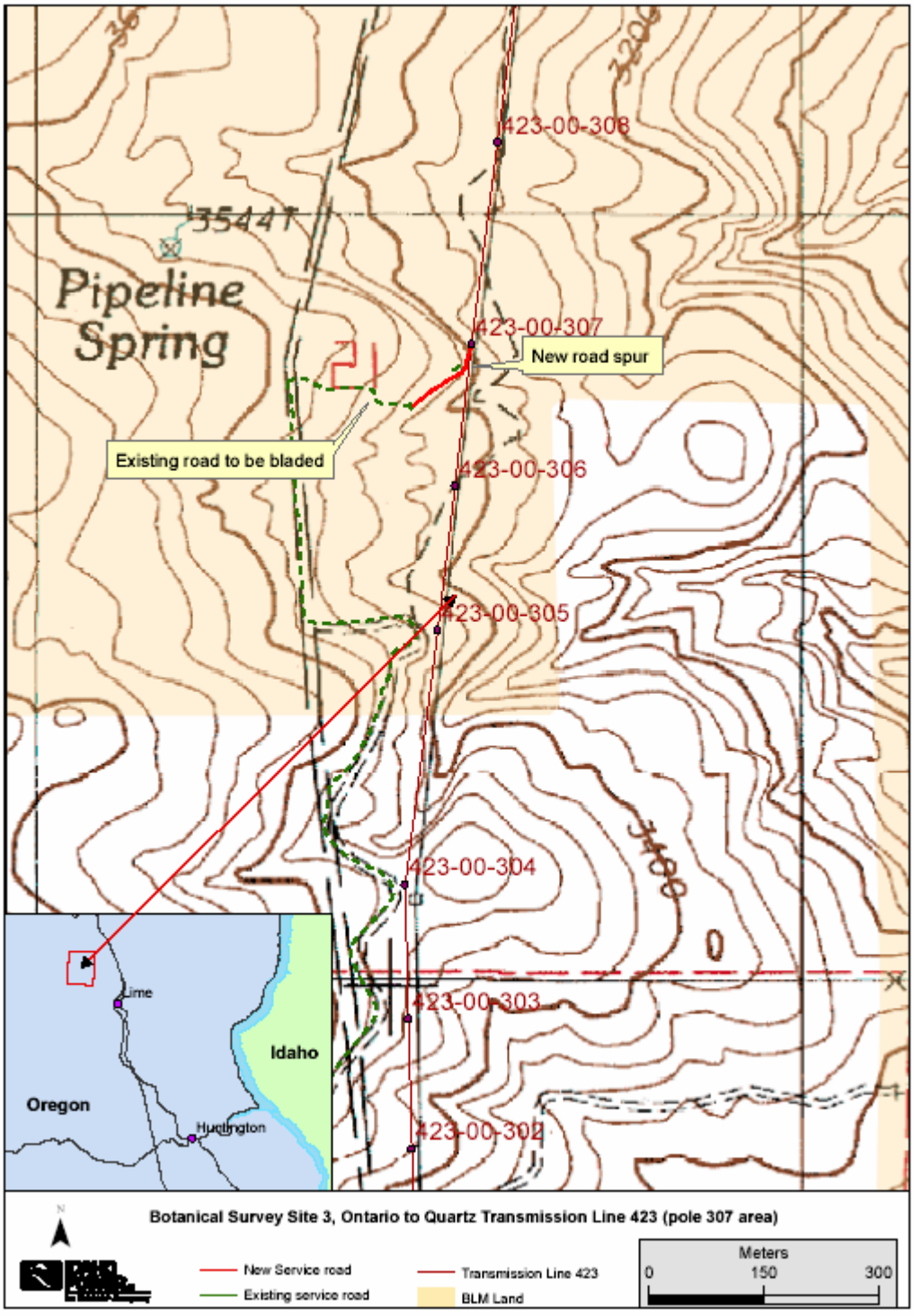

Figure 3. Site 3, surveyed 25 May 2005.

Appendix 2.
Federally Listed and Proposed Endangered and Threatened Species, Candidate Species, and Species of Concern That May Occur in Baker County (September 15, 2005)

THREATENED SPECIES[1]/	
MAMMALS	
Canada lynx[2]/	*Lynx canadensis*
BIRDS	
Bald eagle[3]/	*Haliaeetus leucocephalus*
FISH	
Bull trout (Columbia River population)[4]/	*Salvelinus confluentus*
PLANTS	
Howell's spectacular thelypody[5]/	*Thelypodium howellii ssp. Spectabilis*
PROPOSED SPECIES	
None	
CANDIDATE SPECIES[6]/	
BIRDS	
Yellow-billed cuckoo[7]/	*Coccyzus americanus*
AMPHIBIANS AND REPTILES	
Columbia spotted frog	*Rana luteiventris*
SPECIES OF CONCERN[9]/	
MAMMALS	
Pygmy rabbit	*Brachylagus idahoensis*
Pale western big-eared bat	*Corynorhinus townsendii pallescens*
California wolverine	*Gulo gulo luteus*
Silver-haired bat	*Lasionycteris noctivagans*
Fisher8/	*Martes pennanti*
Small-footed myotis (bat)	*Myotis ciliolabrum*
Long-eared myotis (bat)	*Myotis evotis*
Fringed myotis (bat)	*Myotis thysanodes*
Long-legged myotis (bat)	*Myotis volans*
Yuma myotis (bat)	*Myotis yumanensis*
California bighorn sheep	*Ovis canadensis californiana*
Preble's shrew	*Sorex preblei*
BIRDS	
Northern goshawk	*Accipiter gentilis*
Western burrowing owl	*Athene cunicularia hypugea*
Ferruginous hawk	*Buteo regalis*
Greater sage grouse	*Centrocercus urophasianus*

SPECIES OF CONCERN[9]/ (continued)	
Olive-sided flycatcher	*Contopus cooperi*
Willow flycatcher	*Empidonax trailli adastus*
Yellow-breasted chat	*Icteria virens*
Lewis' woodpecker	*Melanerpes lewis*
Mountain quail	*Oreortyx pictus*
White-headed woodpecker	*Picoides albolarvatus*
AMPHIBIANS AND REPTILES	
Tailed frog	*Ascaphus truei*
FISH	
Interior redband trout	*Oncorhynchus mykiss gibbsi*
PLANTS	
Wallowa ricegrass	*Achnatherum wallowaensis*
BM western subecoregions	
Upward-lobed moonwort	*Botrychium ascendens*
Crenulate grape-fern	*Botrychium crenulatum*
Mountain grape-fern	*Botrychium montanum*
Twin-spike moonwort	*Botrychium paradoxum*
Cronquist's stickseed	*Hackelia cronquistii*
Red-fruited desert-parsley	*Lomatium erythrocarpum*
Snake River goldenweed	*Pyrrocoma radiata*
Biennial stanleya	*Stanleya confertiflora*

1/ U. S. Department of Interior, Fish and Wildlife Service, October 31, 2000, Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12
2/ Federal Register Vol. 65, No. 58, Mar 24, 2000, Final Rule—Canada lynx
3/ Federal Register Vol. 60, No. 133, July 12, 1995, Final Rule—Bald Eagle
4/ Federal Register Vol. 63, No. 111, June 10, 1998, Final Rule—Columbia River and Klamath River Bull Trout
5/ Federal Register Vol. 64. No. 101, May 26, 1999, Final Rule—Thelypodium howellii ssp. spectabilis
6/ Federal Register Vol. 69, No. 86, May 4, 2004, Notice of Review—Candidate or Proposed Animals and Plants
7/ Federal Register Vol. 66, No.143, July 25, 2001, 12-Month Finding for a Petition To List the Yellow-billed Cuckoo
8/ Federal Register Vol. 69, No.68, April 8, 2004, 12-Month Finding for a Petition to List the West Coast Distinct Population Segment of the Fisher
9/ Species of Concern—Taxa whose conservation status is of concern to the Service (many previously known as Category 2 candidates), but for which further information is still needed.

Appendix 3.
Federally Listed and Proposed Endangered and Threatened Species, Candidate Species, and Species of Concern That May Occur in Malheur County (September 15, 2005)

THREATENED SPECIES[1]/	
MAMMALS	
Canada lynx[2]/	*Lynx canadensis*
BIRDS	
Bald eagle[3]/	*Haliaeetus leucocephalus*
FISH	
Lahontan cutthroat trout	*Oncorhynchus clarki henshawi*
Bull trout (Columbia Basin pop)[4]/	*Salvelinus confluentus*
PLANTS	
Howell's spectacular thelypody[5]/	*Thelypodium howellii ssp. spectabilis*
PROPOSED SPECIES	
None	
CANDIDATE SPECIES[6]/	
BIRDS	
Yellow-billed cuckoo[7]/	*Coccyzus americanus*
Amphibians and Reptiles	
Columbia spotted frog	*Rana luteiventris*
SPECIES OF CONCERN[8]/	
MAMMALS	
Pygmy rabbit	*Brachylagus idahoensis*
Pale western big-eared bat	*Corynorhinus townsendii pallescens*
Silver-haired bat	*Lasionycteris noctivagans*
Small-footed myotis (bat)	*Myotis ciliolabrum*
Long-eared myotis (bat)	*Myotis evotis*
Fringed myotis (bat)	*Myotis thysanodes*
Long-legged myotis (bat)	*Myotis volans*
Yuma myotis (bat)	*Myotis yumanensis*
Preble's shrew	*Sorex preblei*
BIRDS	
Northern goshawk	*Accipiter gentilis*
Western burrowing owl	*Athene cunicularia hypugea*
Ferruginous hawk	*Buteo regalis*
Greater sage-grouse	*Centrocercus urophasianus*
Black tern	*Chlidonias niger*
Olive-sided flycatcher	*Contopus cooperi borealis*
Willow flycatcher	*Empidonax trailli adastus*
Yellow-breasted chat	*Icteria virens*
Lewis' woodpecker	*Melanerpes lewis*

SPECIES OF CONCERN[8]/ (continued)	
Mountain quail	*Oreortyx pictus*
White-faced ibis	*Plegadis chihi*
FISH	
Interior redband trout	*Oncorhynchus mykiss gibbsi*
PLANTS	
Malheur Valley fiddleneck	*Amsinckia carinata*
Mulford's milk-vetch	*Astragalus mulfordiae*
Slender wild cabbage	*Caulanthus major var. nevadensis*
Barren valley collomia	*Collomia renacta*
Greeley's cymopterus	*Cymopterus acaulis var. greeleyorum*
Golden buckwheat	*Eriogonum chrysops*
Cronquist's stickseed	*Haceklia cronquistii*
Three Forks stickseed	*Hackelia ophiobia*
Cooper's goldflower	*Hymenoxys lemmonii*
Grimy ivesia	*Ivesia rhypara var. rhypara*
Davis' pepper cress	*Lepidium davisii*
Smooth stickleaf	*Mentzelia mollis*
Packard's stickleaf	*Mentzelia packardiae*
Mackenzie's phacelia	*Phacelia lutea var. mackenzieorum*
Profuse-flowered pogogyne	*Pogogyne floribunda*
Snake River goldenweed	*Pyrrocoma radiata*
Ertter's ragwort	*Senecio ertterae*
Biennial stanleya	*Stanleya confertiflora*
Owyhee clover	*Trifolium owyheense*

1/ U. S. Department of Interior, Fish and Wildlife Service, October 31, 2000, Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12
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4/ Federal Register Vol. 63, No. 111, June 10, 1998, Final Rule—Columbia River and Klamath River BullTrout
5/ Federal Register Vol. 64. No.101, May 26, 1999, Final Rule—Thelypodium howellii ssp. spectabilis
6/ Federal Register Vol. 69, No. 86, May 4, 2004, Notice of Review—Candidate or Proposed Animals and Plants
7/ Federal Register Vol. 66, No. 143, July 25, 2001, 12-Month Finding for a Petition To List the Yellow-billed Cuckoo
8/ Species of Concern—Taxa whose conservation status is of concern to the Service (many previously known as Category 2 candidates), but for which further information is still needed.

Appendix 4.
BLM Vale District Sensitive Wildlife Species, for the Owyhee Uplands Province, That May Occur in the Vicinity of the Proposed Work Sites of the Ontario to Quartz Transmission Line

Type	Common Name	ONHP[a]	BLM[b]	ODFW[c]	Scientific Name
Birds	Bald eagle	4	FT	ST	*Haliaeetus leucocephalus*
	Western burrowing owl	4	BT		*Athene cunicularia hypugaea*
	Swainson's hawk	4	BT	V	*Buteo swainsoni*
	Ferruginous hawk	4	BS	CR	*Buteo regalis*
	Greater sage-grouse	2	BS	V	*Centrocercus urophasianus*
	Long-billed curlew	4	BT	V	*Numenius americanus*
	Bank swallow	4	BT	U	*Riparia riparia*
	Common nighthawk	4	BT		*Chordeiles minor*
	Western meadowlark	4	BT		*Sturnella neglecta*
	Yellow-breasted chat	4	BT		*Icteria virens*
Amphibians	Northern leopard frog	2	BS	CR	*Rana pipiens*
	Woodhouse's toad	2	BA	P	*Bufo woodhousii*
	Western toad	4	BT	V	*Bufo boreas*
Reptiles	Desert horned lizard	4	BT	V	*Phrynosoma platyrhinos*
	Longnose leopard lizard	4	BT	U	*Gambelia wislizenii*
	Northern sagebrush lizard	4	BT		*Sceloporus graciosus g.*
	Western ground snake	4	BT	P	*Sonora semiannulata*
Mammals	Long-eared myotis	4	BT	U	*Myotis evotis*
	Long-legged myotis	4	BT	U	*Myotis volans*
	California myotis	4	BT		*Myotis californicus*
	Silver-haired bat	4	BT	U	*Lasionycteris noctivagans*
	Western small-footed myotis	4	BT	U	*Myotis ciliolabrum*
	Yuma myotis	4	BT		*Myotis yumanensis*

a ONHP codes: 2 = threatened with extirpation, 3 = more info needed, 4 = of concern but not currently threatened.
b BLM codes: FT= federal threatened, BS = bureau sensitive, BA = bureau assessment, BT= bureau tracking.
c ODFW codes: ST = state threatened, CR = critical, V = vulnerable, P = peripheral/naturally rare, U = undetermined.

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