



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

PUBLIC AFFAIRS

February 9, 2009

In reply refer to: DK-7

Mr. Robert E. Kavanaugh, Sr.

RE: FOIA #09-017

Dear Mr. Kavanaugh:

This is the final response to your request for information that you made to the Bonneville Power Administration (BPA), under the Freedom of Information Act (FOIA), 5 U.S.C. 552.

You requested the following:

1. All records at BPA that substantiate that WDFW is taking "appropriate" steps to protect ESA species with regard to Pilot Grazing Project/Asotin/Blue Mtn. WMA, and
2. All records showing BPA has a Sec. 7 consultation with USFWS and WDFW.

Response:

BPA has provided in their entirety, responsive pages 1 thru 32, 35, 38, and 42 thru 90. Pages 33, 34, 36, 37, 39, 40 and 41 have been released with information withheld either in part or in their entirety as non-responsive or under Exemption 5, 5 U.S.C. 552(b)(5) of the FOIA.

Exemption 5 protects from mandatory disclosure "inter-agency or intra-agency memorandums or letters that would not be available by law to a part other than an agency in litigation with the agency..."

Exemption 5 incorporates the deliberative process privilege which protects advice, recommendations, and opinions that are part of the process by which agency decisions and policies are formulated. The quality of agency decisions would be adversely affected if frank and independent recommendations were inhibited by the knowledge that the content of such recommendations might be made public. For this reason, discretionary disclosure of the deliberative portions of these documents is not being made.

Exemption 5 also protects attorney-client information, which is communications between attorney and client that relate to a legal matter for which the client has sought professional advice. The privilege usually protects a client's disclosure to any attorney but also extends to an attorney's opinion based on those disclosures, and to communications between attorneys that reflect client-supplied information. Release of information exchanged between attorneys and clients would result in less open discussion between them, and attorneys would not be able to adequately advise and represent their clients. Sound legal advice and advocacy serves the public interest and such advice and advocacy depends upon attorneys being fully informed by their clients and being able to communicate with them. For these reasons, discretionary disclosure of the attorney-client privilege information is not being made. Disclosure would be harmful to the integrity of governmental decision-making processes and could stifle future communications between clients and attorneys.

If you are dissatisfied with this determination, you may make an appeal within thirty (30) days of receipt of this letter to Director, Office of Hearings and Department of Energy, 1000 Independence Avenue SW, Washington, DC 20585. The envelope and the letter must be clearly marked "Freedom of Information Act Appeal." There is no charge for this request.

I appreciate the opportunity to assist you with this matter.

Sincerely,


Christina J. Brannon
Freedom of Information Act/Privacy Act Officer

Enclosure(s): Responsive Documents

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**Rare Plant Survey
Smoothing Iron and Rockpile Units
Chief Joseph and Asotin Creek Wildlife Areas**

September 27, 2005

Debra Salstrom and Richard Easterly
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Bellingham, WA 98229
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Potential Species

Rare plant species with the potential to occur in the Smoothing Creek and Rockpile units of the Asotin Wildlife Area are listed in Table 1. That list was distilled from lists of rare species known to occur in the Blue Mountain and Columbia Plateau physiographic provinces, and from Asotin and neighboring counties.¹ Most of these species are identifiable during only portions of the field season due to differing phenologies; thus, a survey for all potential rare species would include visits in early spring, late spring and summer. Due to limited funding, the summer group was prioritized for survey during the 2005 field season because the species identifiable in summer include those with federal status, the highest conservation priority, the greatest potential to occur in the study area, and in habitats most susceptible to damage from livestock grazing. The Smoothing Iron Unit was the first priority, with the Rockpile Unit surveyed as remaining time allowed.

Survey Methodology

Surveys of the site were done on August 7-11 and September 13-15, 2005. The initial August survey was stopped when the site was closed by the School Fire. The early survey included reconnaissance of the site and looking at species and habitat of *Silene spaldingii* (Spalding's catchfly, Federally Status: Threatened), primarily on upper canyon slopes. The September survey was similarly focused.

During the inventories, all species encountered were collected and later identified to the degree possible, given their phenologies and the presence of distinguishing characteristics.

Products

- ◆ Documentation of all rare plant occurrences found during the survey, including
 - Population and site information recorded on Washington Natural Heritage Program occurrence forms.
 - Digital map of rare plant occurrences.
- ◆ Map of routes surveyed.

¹ From the list maintained by the Washington Natural Heritage Program:
<http://www.dnr.wa.gov/nhp/refdesk/plants.html>

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- ◆ List of all identifiable species encountered during the survey.
- ◆ Report summarizing the project, including recommendations for additional surveys based on habitat types and site conditions noted during the survey.

RESULTS

Silene spaldingii was not found during this survey, although seemingly suitable habitat was present on the site and was surveyed.

The following rare species were found in the study area at the below-mentioned sites. The occurrence site descriptions are summarized below and occurrence maps are presented as Figures 1-4, and are submitted digitally with this report. Rare plant occurrence forms are attached to this report as Appendix 1.

Calochortus macrocarpus* var. *maculosa

(Sagebrush mariposa lily; WNHP² State Status: Endangered)

Smoothing Iron Unit

Widely scattered patches of 3-25 plants near rim rock in three distinct areas. Identified based on capsule morphology; identification should be verified when the plants are in flower. There is potential for more plants to occur in similar habitat in unsurveyed portions of the study area.

Oenothera caespitosa* ssp. *marginata

(Tufted evening primrose; WNHP State Status: Threatened)

Rockpile Unit

Hundreds of plants found widely scattered and in patches on the south-facing slope of the Rockpile Creek drainage. Rock outcrops and cliffs in the area likely shielded the plants from trampling by livestock. Its palatability to livestock is unknown. There is potential for more plants to occur in similar habitats elsewhere in the area.

Areas searched are depicted in Figures 4-7. A list of species encountered and identified is presented in Table 2.

RECOMMENDATIONS FOR FUTURE WORK

Unfortunately, some of the species that would have been identifiable during the shortened August survey were not identifiable during the September work. These include *Lupinus sericeus* var. *asotinensis* (Asotin silky lupine), which had senesced beyond the point of positive identification. This taxon appeared to be widespread on the site, especially on the shoulders and tops of ridges that had not been converted to agriculture, as well as small patches within similar conditions and in the lee of spur ridges. In addition, *Ribes cereum* var. *colubrinum* (Indian current, WNHP Endangered) and *R. oxycanthoides* ssp. *irriguum* (Idaho gooseberry, WNHP Sensitive) may have been present, but were not positively identifiable during the survey.

² WNHP: Washington Natural Heritage Program
Rare Plant Survey, 2005
Chief Joseph and Asotin Creek Wildlife Areas
SEE Botanical Consulting

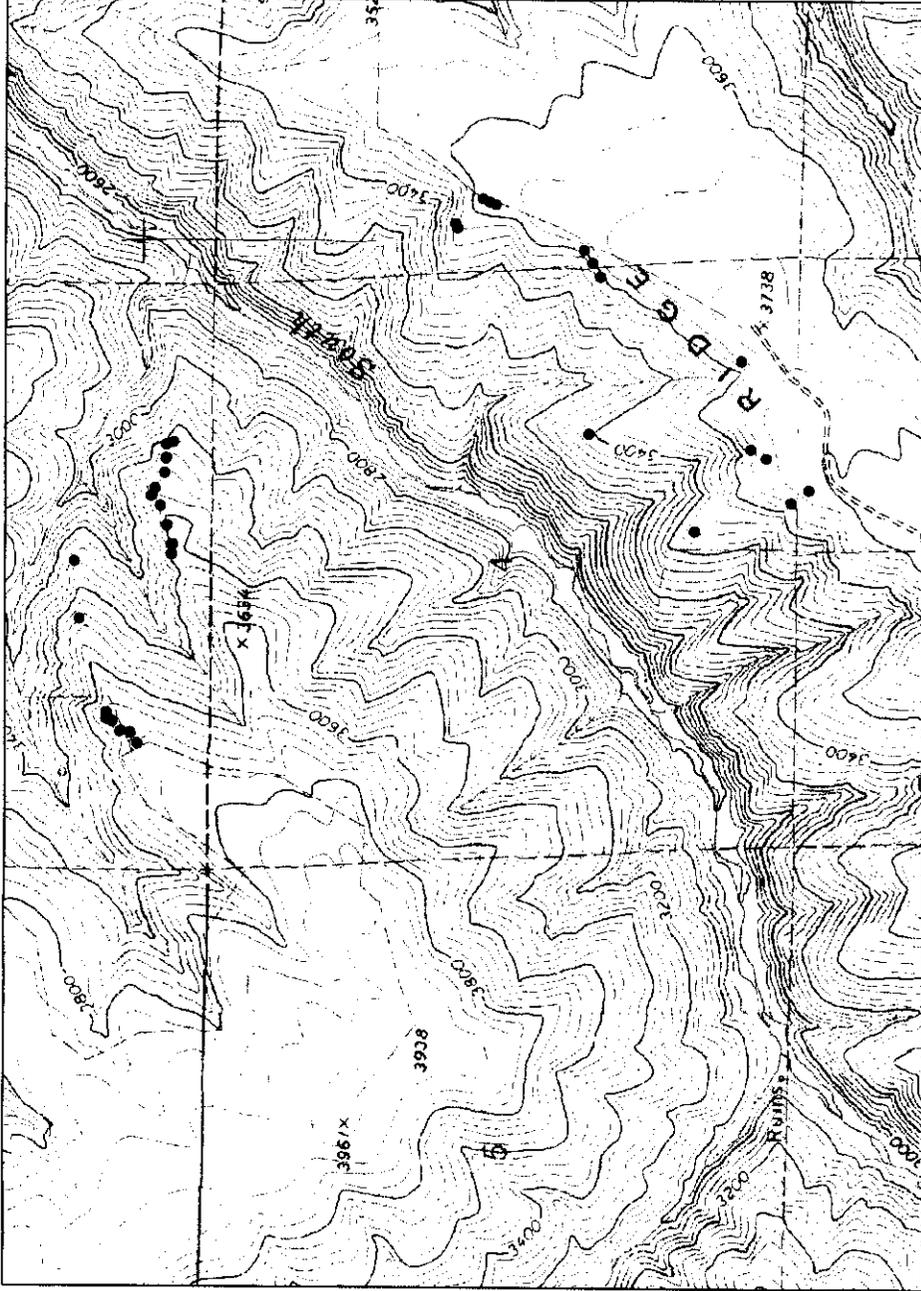


Figure 1. Calochortus macrocarpus var. maculosus (part).

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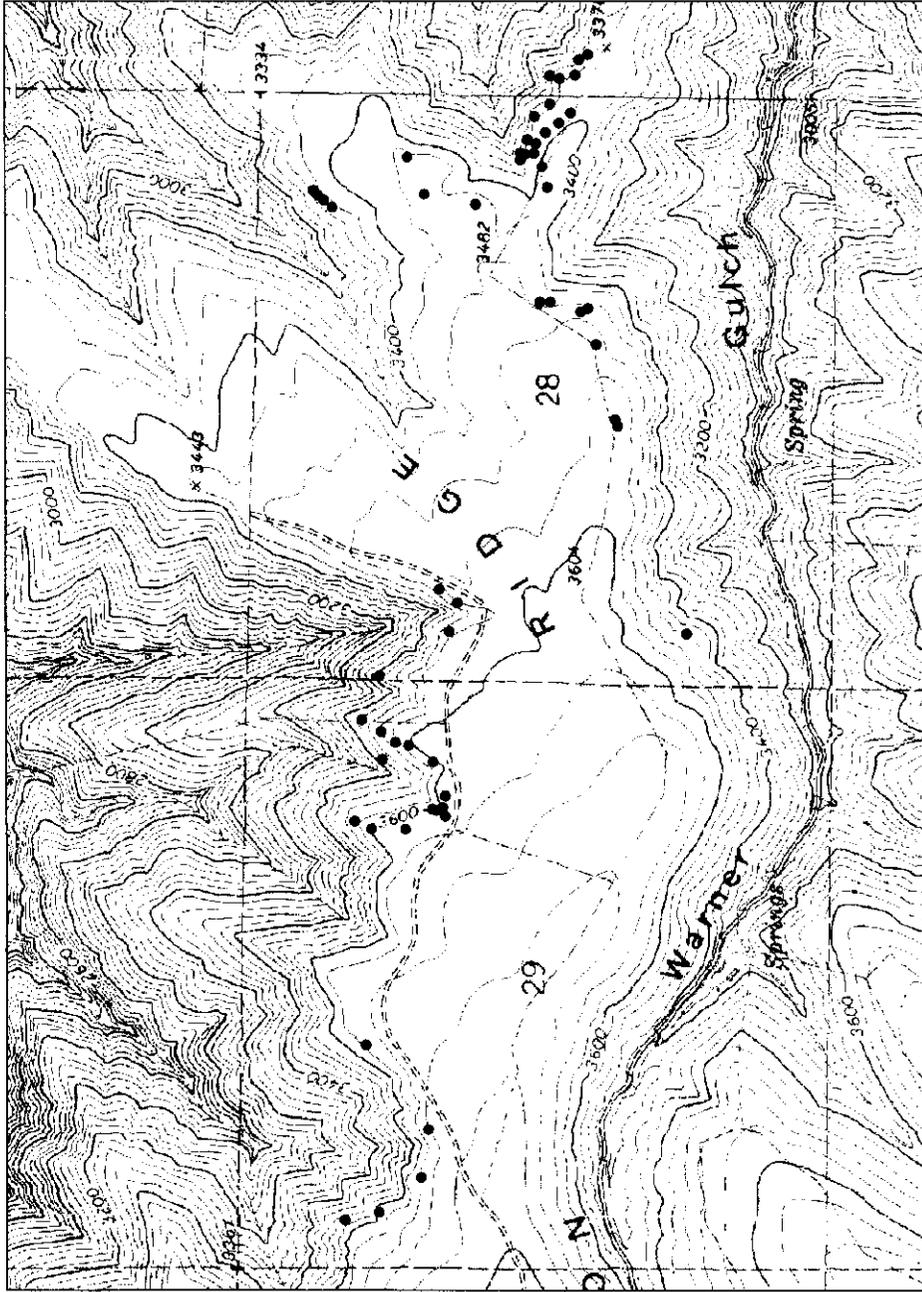


Figure 2. *Calochortus macrocarpus* var. *maculosus* (part).

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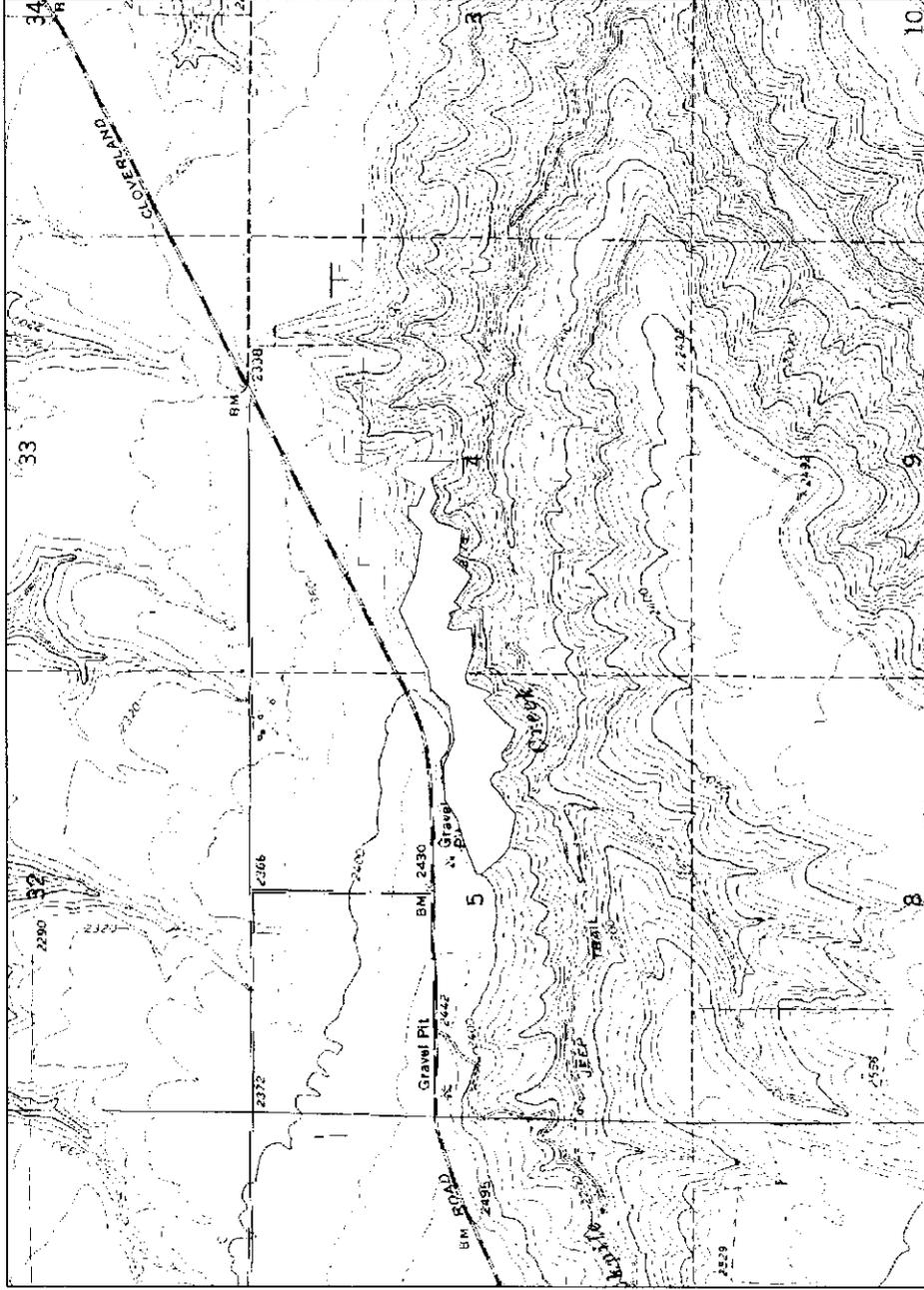


Figure 3. *Oenothera caespitosa* ssp. *marginata*

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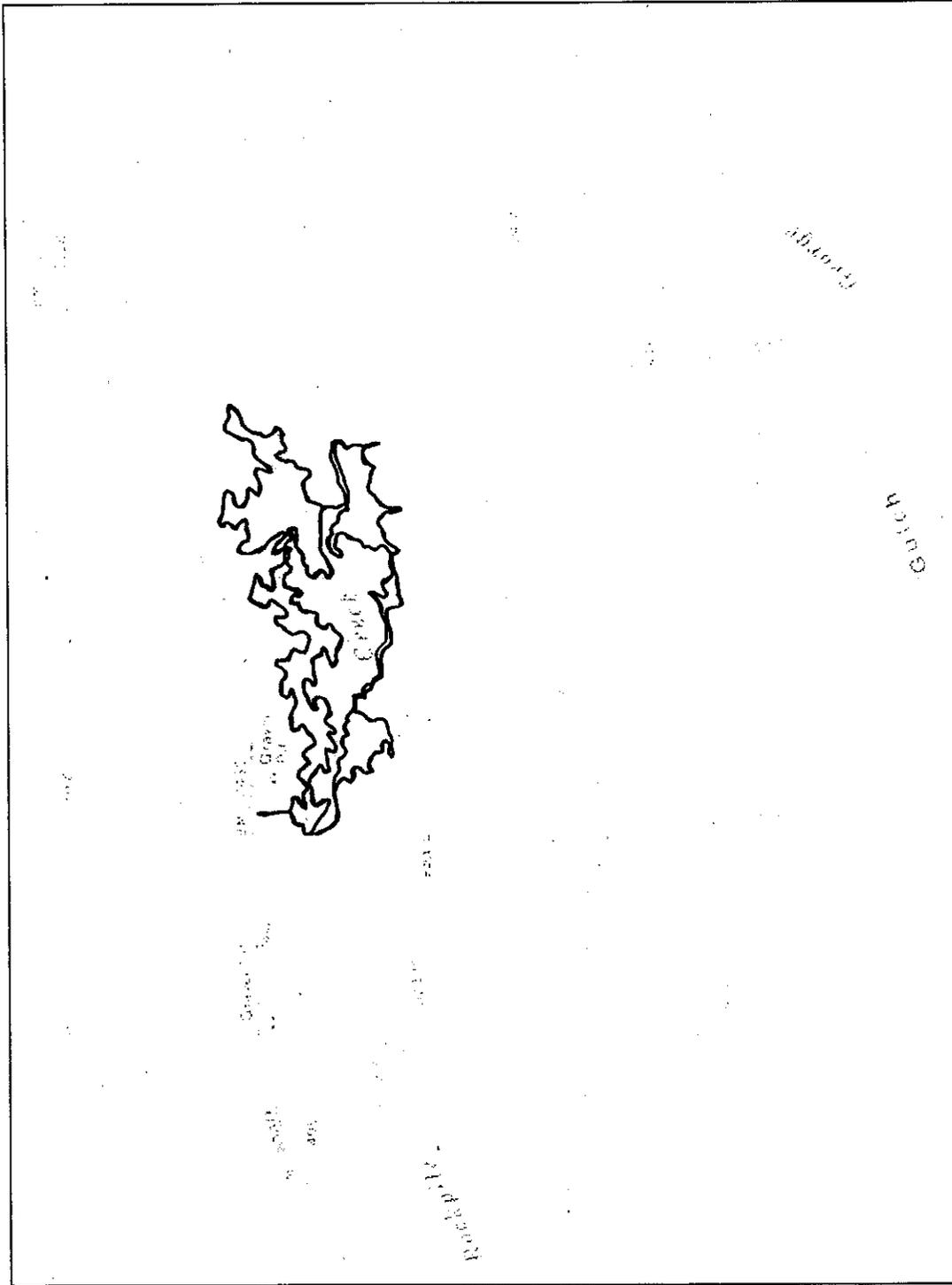


Figure 4. Areas surveyed.

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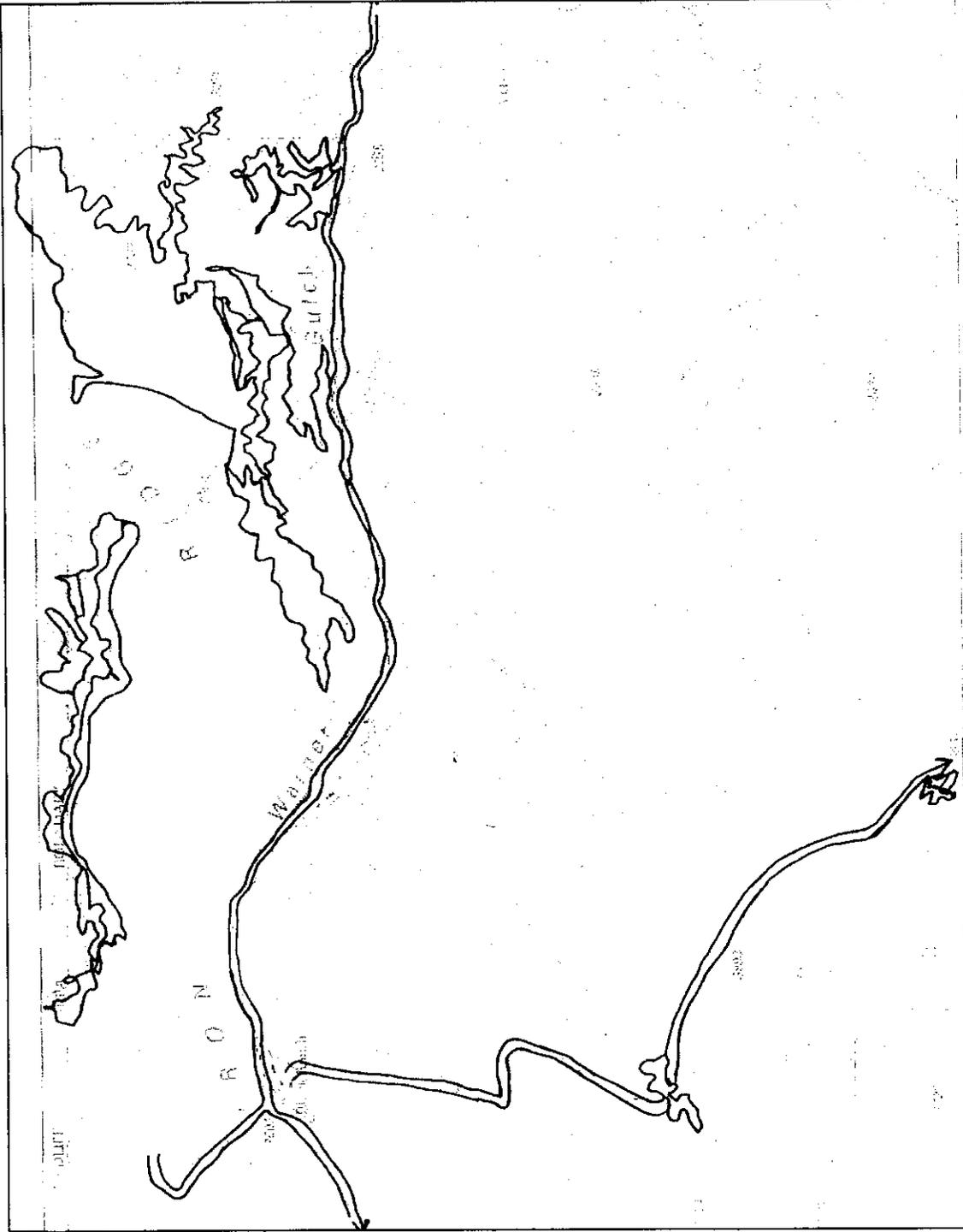


Figure 5. Areas surveyed.

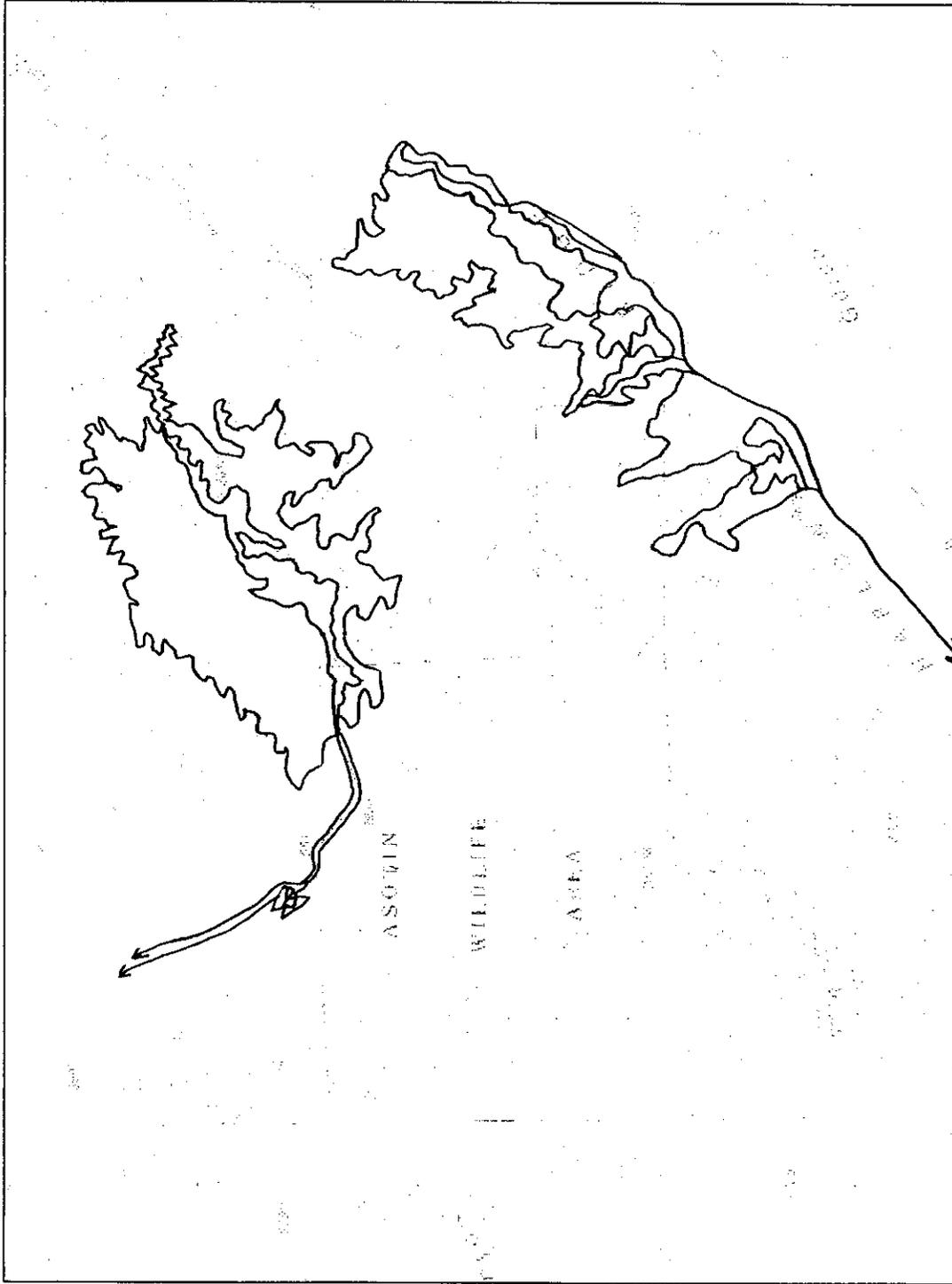


Figure 6. Areas surveyed.

Table 1. Rare vascular plant species with the potential to occur on the Smoothing Iron and Rockpile units, Asotin Wildlife Area. The list

Rare species known from Asotin County.				
Species	Common Name	State Status	Federal Status	Historic Record
<u>Arabis crucisetosa</u>	Cross-haired Rockcress	T		
<u>Asclepias cryptoceras ssp. davisii</u>	Davis' Milkweed	T		H
<u>Astragalus arthurii</u>	Arthur's Milk-vetch	S		
<u>Astragalus cusickii var. cusickii</u>	Cusick's Milk-vetch	S		
<u>Astragalus riparius</u>	Piper's Milk-vetch	E		
<u>Bolandra oregana</u>	Bolandra	S		
<u>Calochortus macrocarpus var. maculosus</u>	Sagebrush Mariposa-lily	E		
<u>Calochortus nitidus</u>	Broad-fruit Mariposa	E	SC	
<u>Cheilanthes feei</u>	Fee's Lip-fern	T		
<u>Crepis bakeri ssp. idahoensis</u>	Idaho Hawksbeard	R1		
<u>Cryptantha rostellata</u>	Beaked Cryptantha	T		
<u>Hackelia hispida var. hispida</u>	Rough Stickseed	T		
<u>Lipocarpha aristulata</u>	Awned Halfchaff Sedge	T		H
<u>Lomatium cusickii</u>	Cusick's Desert-parsley	X		H
<u>Lomatium rollinsii</u>	Rollins' Desert-parsley	T		
<u>Lomatium serpentinum</u>	Snake Canyon Desert-parsley	S		
<u>Lupinus cusickii</u>	Prairie Lupine	R2	SC	H
<u>Lupinus sabinii</u>	Sabin's Lupine	E		H
<u>Lupinus sericeus var. asotinensis</u>	Asotin Silky Lupine	R1		
<u>Mimulus patulus</u>	Stalk-leaved Monkeyflower	T		H
<u>Oenothera caespitosa ssp. marginata</u>	Tufted Evening-primrose	T		
<u>Petrophyton caespitosum var. caespitosum</u>	Rocky Mountain Rockmat	T		
<u>Ribes cereum var. colubrinum</u>	Indian Currant	E		
<u>Ribes oxycanthoides ssp. irriguum</u>	Idaho Gooseberry	S		
<u>Rubus nigerrimus</u>	Northwest Raspberry	E	SC	
<u>Silene spaldingii</u>	Spalding's Silene	T	LT	
Rare species known from adjacent Physiographic Provinces with potential to occur in the study area.				
<u>Allium campanulatum</u>	Sierra Onion	T		
<u>Allium dictyon SC</u>	Blue Mountain Onion	T		
<u>Ammannia robusta</u>	Grand Redstem	T		
<u>Antennaria parvifolia</u>	Nuttall's Pussy-toes	S		
<u>Arabis crucisetosa</u>	Cross-haired Rockcress	T		
<u>Aster jessicae</u>	Jessica's aster	E	SC	
<u>Carex comosa</u>	Bristly Sedge	S		
<u>Carex flava</u>	Yellow Sedge	S		
<u>Cuscuta denticulata</u>	Desert Dodder	T		
<u>Cryptantha spiculifera</u>	Snake River	S		
<u>Githopsis specularioides</u>	Common Blue-cup	S		
<u>Hackelia diffusa var. diffusa</u>	Diffuse Stickseed			

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<u>Hypericum majus</u>	Canadian St. John's-wort	S		
<u>Lomatium serpentinum</u>	Snake Canyon Desert-parsley	S		
<u>Mimulus pulsiferae</u>	Pulsifer's Monkey-flower	S		
<u>Mimulus suksdorfii</u>	Suksdorf's Monkey-flower	S		
<u>Physaria didymocarpa var. didymocarpa</u>	Common Twinpod	S		
<u>Spiranthes porrifolia</u>	Western Ladies-tresses	S		
<u>Thelypodium sagittatum ssp. sagittatum</u>	Arrow Thelypody	S		
<u>Trifolium douglasii</u>	Douglas' Clover	E		
<u>Trifolium plumosum var. plumosum</u>	Plumed Clover	T		

Description of Codes

Historic Record: H indicates most recent sighting in the county is before 1977.

State Status: State Status of plant species is determined by the Washington Natural Heritage Program. Factors considered include abundance, occurrence patterns, vulnerability, threats, existing protection, and taxonomic distinctness.

Values include:

E = Endangered. In danger of becoming extinct or extirpated from Washington.

T = Threatened. Likely to become Endangered in Washington.

S = Sensitive. Vulnerable or declining and could become Endangered or Threatened in the state.

X = Possibly extinct or Extirpated from Washington.

R1 = Review group 1. Of potential concern but needs more field work to assign another rank.

R2 = Review group 2. Of potential concern but with unresolved taxonomic questions.

Federal Status: Federal Status under the U.S. Endangered Species Act(USESAs) as published in the Federal Register:

LE = Listed Endangered. In danger of extinction.

LT = Listed Threatened. Likely to become endangered.

PE = Proposed Endangered.

PT = Proposed Threatened.

C = Candidate species. Sufficient information exists to support listing as Endangered or Threatened.

SC = Species of Concern. An unofficial status, the species appears to be in jeopardy, but insufficient information to support listing.

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Table 2. Species encountered during the rare plant inventory. An asterisk, (*), indicates non-native taxon.

<i>Acer glabrum douglasii</i>	Douglas maple	Aceraceae
<i>Achillea millefolium</i>	Yarrow	Asteraceae
<i>Agastache urticifolia</i>	Nettle-leaf horse-mint	Lamiaceae
<i>Agoseris heterophylla</i>	Annual agoseris	Asteraceae
<i>Agropyron dasytachyum</i>	Thick-spike wheatgrass	Poaceae
<i>Agropyron intermedia*</i>	Intermediate wheatgrass	Poaceae
<i>Alyssum alyssoides*</i>	Pale alyssum	Brassicaceae
<i>Amelanchier alnifolia</i>	Serviceberry	Rosaceae
<i>Amsinkia</i> spp.	Fiddleneck	Boraginaceae
<i>Antennaria</i> spp.	Pussy-toes	Asteraceae
<i>Apocynum</i> sp.	Dogbane	Apocynaceae
<i>Arabis</i> spp.	Rockcross	Brassicaceae
<i>Arenaria congesta</i>	Dense-flowered sandwort	Caryophyllaceae
<i>Artemisia ludoviciana</i>	Western mugwort	Asteraceae
<i>Artemisia rigida</i>	Stiff sagebrush	Asteraceae
<i>Artemisia</i> spp.	Sagebrush	Asteraceae
<i>Artemisia tridentata</i>	Big sagebrush	Asteraceae
<i>Artemisia tripartita</i>	Three-tip sagebrush	Asteraceae
<i>Asclepias fascicularis</i>	Mexican milkweed	Asclepiadaceae
<i>Astragalus reventus</i>	Blue Mtn. milk-vetch	Fabaceae
<i>Astragalus</i> sp.	Milk-vetch	Fabaceae
<i>Balsamorhiza</i> spp.	Balsamroot	Asteraceae
<i>Balsamorhiza sagittata</i>	Arrow-leaf balsamroot	Asteraceae
<i>Blepharipappus scaber</i>	Blepharipappus	Asteraceae
<i>Brodiaea douglasii</i>	Douglas' brodiaea	Liliaceae
<i>Bromus brizaeformis*</i>	Rattlesnake grass	Poaceae
<i>Bromus inermis*</i>	Smooth brome	Poaceae
<i>Bromus secalinus*</i>	Chess	Poaceae
<i>Bromus tectorum*</i>	Cheat grass	Poaceae
<i>Calochortus macrocarpus maculosa</i>	Sagebrush lily	Liliaceae
<i>Camelina microcarpa*</i>	Hairy false-flax	Brassicaceae
<i>Carex</i> spp.	sedge	Cyperaceae
<i>Castilleja</i> spp.	Paintbrush	Scrophulariaceae
<i>Chrysothamnus nauseosus</i>	Gray rabbit-brush	Asteraceae
<i>Cirsium arvense</i>	Canadian thistle	Asteraceae
<i>Cirsium brevifolium</i>	Palouse thistle	Asteraceae
<i>Cirsium</i> spp.	Thistle	Asteraceae
<i>Clarkia pulchella</i>	Ragged robin	Onagraceae
<i>Clematis ligusticifolia</i>	Virgin's bower	Ranunculaceae
<i>Collomia grandiflora</i>	Large-flowered collomia	Polemoniaceae
<i>Collomia linearis</i>	Narrow-leaf collomia	Polemoniaceae
<i>Cornus stolonifera</i>	Red-osier dogwood	Cornaceae
<i>Crataegus douglasii</i>	Black hawthorn	Rosaceae
<i>Crepis</i> sp.	Hawksbeard	Asteraceae
<i>Cynoglossum officianale*</i>	Common hound's-tongue	Boraginaceae
<i>Danthonia</i> sp.	Oatgrass	Poaceae
<i>Dianthus armeria</i>	Deptford pink	Caryophyllaceae
<i>Dipsacus sylvestris*</i>	Gypsy-combs	Dipsacaceae
<i>Epilobium paniculatum</i>	Tall annual willow-herb	Onagraceae
<i>Epilobium</i> spp.	Willow-herb	Onagraceae

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<i>Equisetum</i> spp.	Horsetail	Equisetaceae
<i>Erigeron pumilus</i> var. <i>euintermidius</i>	Shaggy fleabane	Asteraceae
<i>Eriogonum heracleoides</i>	Parsnip-flowered buckwheat	Polygonaceae
<i>Eriogonum umbellatum</i>	Sulfur buckwheat	Polygonaceae
<i>Erodium cicutarium</i> *	Filaree	Geraniaceae
<i>Euphorbia glyptosperma</i>	Corrugate-seeded spurge	Euphorbiaceae
<i>Festuca idahoensis</i>	Idaho fescue	Poaceae
<i>Filago arvensis</i> *	Field filago	Asteraceae
<i>Galium</i> sp.	Bedstraw	Rubiaceae
<i>Gaura parviflora</i>	Small-flowered gaura	Onagraceae
<i>Geum triflorum</i>	Prairie smoke	Rosaceae
<i>Gnaphalium</i> sp.	Cudweed	Asteraceae
<i>Grindelia nana</i>	Low gumweed	Asteraceae
<i>Grindelia squarrosa</i> v. <i>quaisiperennis</i>	Curly-gup gumweed	Asteraceae
<i>Heuchera cylindrica</i>	Lava alumroot	Saxifragaceae
<i>Hieraceum cynoglossoides</i>	Hound's-tongue hawkweed	Asteraceae
<i>Holodiscus discolor</i>	Ocean spray	Rosaceae
<i>Hordeum geniculatum</i> *	Seaside barley	Poaceae
<i>Hypericum perforatum</i> *	Klamath weed	Hypericaceae
<i>Juncus</i> spp.	Rush	Juncaceae
<i>Koeleria cristata</i>	Prairie junegrass	Poaceae
<i>Lactuca serriola</i> *	Prickly lettuce	Asteraceae
<i>Lepidium perfoliatum</i> *	Clasping peppergrass	Brassicaceae
<i>Lithospermum ruderale</i>	Columbia puccoon	Boraginaceae
<i>Lomatium macrocarpum</i>	Large-fruited Lomatium	Apiaceae
<i>Lomatium</i> spp.	Lomatium	Apiaceae
<i>Lomatium triternatum</i>	Nine-leaf Lomatium	Apiaceae
<i>Lupinus</i> cf. <i>sericeous</i> var. <i>asotin</i>	Silky lupine	Fabaceae
<i>Lupinus</i> spp.	Lupine	Fabaceae
<i>Luzula campestris</i>	Field woodrush	Juncaceae
<i>Machaeranthera canescens</i>	Hoary aster	Asteraceae
<i>Madia gracilis</i>	Common tarweed	Asteraceae
<i>Medicago</i> sp.*	Medic	Fabaceae
<i>Mentha arvensis</i>	Field mint	Lamiaceae
<i>Mimulus guttatus</i>	Common monkey-flower	Scrophulariaceae
<i>Nepeta cataria</i> *	Catnip	Lamiaceae
<i>Oenothera caespitosa marginata</i>	Tufted evening-primrose	Onagraceae
<i>Onopordum acanthium</i> *	Scot's thistle	Asteraceae
<i>Opuntia polyacantha</i>	Prickly pear	Cactaceae
<i>Orobanche</i> sp.	broomrape	Orobanchaceae
<i>Panicum capillare</i>	Witchgrass	Poaceae
<i>Penstemon</i> spp.	Penstemon	Scrophulariaceae
<i>Perideridea gairdneri</i>	Yampah	Apiaceae
<i>Phacelia heterophylla</i>	Varileaf phacelia	Hydrophyllaceae
<i>Phacelia</i> sp.	Phacelia	Hydrophyllaceae
<i>Philadelphus lewisii</i>	Mock-orange	Hydrangeaceae
<i>Phleum pratensis</i>	Timothy	Poaceae
<i>Phlox</i> spp.	Phlox	Polemoniaceae
<i>Physocarpus malvaceous</i>	Mallow ninebark	Rosaceae
<i>Pinus ponderosa</i>	Ponderosa pine	Pinaceae
<i>Plantago patagonica</i>	Candleweed	Plantaginaceae
<i>Poa palustris</i>	Fowl bluegrass	Poaceae

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<i>Polygonum</i> spp.	Knotweed	Polygonaceae
<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	Black cottonwood	Salicaceae
<i>Populus tremuloides</i>	Quacking aspen	Salicaceae
<i>Potentilla gracilis</i>	Graceful cinquefoil	Rosaceae
<i>Pseudoroegneria spicata</i>	Bluebunch wheatgrass	Poaceae
<i>Pseudotsuga menziesii</i>	Douglas fir	Pinaceae
<i>Rhus glabra</i>	Sumac	Anacardiaceae
<i>Rhus radicans</i>	Poison ivy	Anacardiaceae
<i>Ribes</i> spp.	Current	Grossulariaceae
<i>Robinia pseudoacacia</i> *	Black locust	Fabaceae
<i>Rosa nutkana</i> var. <i>hispida</i>	Nootka rose	Rosaceae
<i>Rosa woodsii</i>	Wood's rose	Rosaceae
<i>Rumex patientia</i>	Patience dock	Polygonaceae
<i>Salix</i> spp.	Willow	Salicaceae
<i>Scirpus microcarpus</i>	Small-flowered bulrush	Cyperaceae
<i>Scirpus</i> sp.	Bulrush	Cyperaceae
<i>Scutellaria</i> sp.	Skullcap	Lamiaceae
<i>Selaginella wallacei</i>	Wallace's selaginella	Selaginellaceae
<i>Senecio</i> spp.	Groundsel	Asteraceae
<i>Silene oregana</i>	Oregon silene	Caryophyllaceae
<i>Solidago missouriensis</i>	Missouri goldenrod	Asteraceae
<i>Solidago</i> spp.	Goldenrod	Asteraceae
<i>Spiraea betulifolia</i> var. <i>lucida</i>	Birch-leaved spirea	Rosaceae
<i>Sporobolus cryptandrus</i>	Sand dropseed	Poaceae
<i>Stephanomeria</i> sp.	Wirelettuce	Asteraceae
<i>Symphoricarpos albus</i>	Common snowberry	Caprifoliaceae
<i>Thelypodium laciniatum</i>	Thick-leaved thelepody	Brassicaceae
<i>Thlapsi arvense</i> *	Fanweed	brassicaceae
<i>Tragopogon dubius</i> *	Oysterplant	Asteraceae
<i>Triodonis perfoliata</i>	Venus' looking-glass	Campanulaceae
<i>Urtica dioica</i>	Stinging nettle	Urticaceae
<i>Verbascum blattaria</i> *	Moth mullen	Scrophulariaceae
<i>Verbascum thlapsis</i> *	Mullen	Scrophulariaceae
<i>Verbena breacteata</i>	Bracted vervain	Verbanaceae
<i>Woodsia oregana</i>	Oregon woodsia	Polypodiaceae
<i>Wyethia amplexicaulis</i>	Morthern mule's ears	Asteraceae
<i>Zigadenus venenosus</i>	Meadow death camas	Liliaceae

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Appendix 1. Rare plant sighting forms
Calochortus macrocarpus var. *maculosa*
Smoothing Iron
Oenothera caespitosa ssp. *marginata*
Rockpile Unit

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Rare Plant Sighting Form

Taxon Name *Calochortus macrocarpus* var. *maculosus*

EO #

Are you confident of the identification? **Reasonably Explain: The taxon was identified from its capsule, i.e., all other floral characteristics were senescent. The specimens fit the description of the capsule perfectly, and it was not likely to be other species described in 'Flora of the PNW', Hitchcock and Cronquist. However, because other characters were not present, a revisit should be made for definitive identification.**

Survey Site Name: **Smoothing Iron Unit**

Surveyor's Name/Phone/Email:

Debra Salstrom and Richard Easterly/(360)481-1786/SEEbotanical@comcast.net

Survey Date: **2005-09-8, 10, 11, 13** (yr-mo-day) County: **Asotin**

Quad Name: **Harlow Ridge**

Township: **9 N** Range: **44E** Section(s): **29 W2 of NW4**

29 E2 of NE4

28 N2 of SW4

28 E2 or NE4

28 SW4 of NW4

28 N2 of SE4

27 NW4 of SW4

33 S2 of SW4

33 SW4 of SE4

Township: **8 N** Range: **44E** Section(s): **3 SWofNW, NWofSW**

4 SE

9 NWofNE

Please answer the following:

1. I used GPS to map the population: **Yes** (complete #1 & #3)

Coordinates are in electronic file on diskette

Description of what coordinates represent: **Several point locations indicating the extent of occurrence located along surveyed route. Points that are close to each other frequently had additional plants observed within the immediate area. Additional patches of plants likely in similar habitat that was not surveyed.**

GPS accuracy: Uncorrected **Corrected to <5m**

GPS datum: **NAD 1983**

GPS coordinates: **(File attached)**

2. I used a topographic map to map the population:

yes (complete #2) **no** (provide detailed directions & description above, and skip to #3)

I am confident I have accurately located and mapped the population at map scale: **yes** (skip to #3)

no, but I am confident the population is within the general area indicated on the map as follows:

On the same map, use a highlighter to identify the outer boundary of the area where the population could be, given the uncertainties about your exact location.

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3. I used the following features on the map to identify my location (stream, shoreline, bridge, road, cliff, etc.): **Topography, aspect**

To the best of my knowledge, I mapped the entire extent of this population

no unknown If no or unknown, explain **The taxon occurred sporadically throughout the area; while it appeared to be strongly associated with site characteristics (see below), a few plants were found outside the typical habitat. Not all potential habitat in the area was surveyed.**

Is a revisit needed? **yes** - if yes, why?: **Identification should be confirmed when the plants are in flower.**

Ownership (if known): **WDFW**

Population Size (# of individuals or ramets) or estimate: **Patches of 3-25+ plants. Patches of plants, mostly occurring along and slightly above rimrock of the canyon and side-canyon. On convex to planter on upper side-ridge.**

Plant Association (include author, citation, or classification, e.g. Daubenmire): ***Festuca idahoensis/Symphoricarpos albus* (Daubenmire 1970)**

Associated Species (include % cover by layer and by individual species for dominants in each layer):

Lichen/moss layer: **(0-3)**

Herb layer: **50-90% total layer cover. *Pseudoroegneria spicata* (3-30), *Festuca idahoensis* (10-50), *Poa* spp. (10), *Bromus brizaeformis*, *Poa bulbosa*, unknown forbs (cf. *Stellaria* sp., Cruciferae), *Perideridia gairdneri*, *Achillea millefolium*, *Festuca* spp., *Lupinus* sp., *Brodiaea* sp., *Bromus inermis*, *Astragalus* sp. (0-3), *Koeleria cristatum*, *Camelina* sp., *Bromus brizaeformis*, *Phlox* sp.**

Shrub layer(s): ***Symphoricarpos albus* (0-30)**

Tree layer:

General Description (include description of landscape, surrounding plant communities, land forms, land use, etc.): **The taxon occurs mostly along and slightly above the rimrock break, along rim of main and side ridges.**

Minimum elevation (ft.): **3300**

Maximum elevation (ft.): **3780**

Size (acres):

Aspect: **NNW to E to SSE**

Slope: **0 – 30+ degrees**

Photo taken? **yes**

Management Comments (exotics, roads, shape/size, position in landscape, hydrology, adjacent land use, cumulative effects, etc.):

Protection Comments (legal actions/steps/strategies needed to secure protection for the site):

This genus is thought to be sensitive to livestock (WNHP, http://www.dnr.wa.gov/nhp/refdesk/plan/priorities_plants.pdf) and the site should not be grazed.

Additional Comments (discrepancies, general observations, etc.):

Rare Plant Survey, 2005

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Chief Joseph and Asotin Creek Wildlife Areas

SEE Botanical Consulting

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Rare Plant Sighting Form

Taxon Name *Oenothera caespitosa ssp. marginata*

EO #

Are you confident of the identification? **yes** no Explain:

Survey Site Name: **Stringtown**

Surveyor's Name/Phone/Email:

Debra Salstrom and Richard Easterly (360) 264-5644; SEEbotanical@comcast.net

Survey Date: **2005-08-08** (yr-mo-day) County: **Asotin**

Quad Name: **Rockpile Creek**

Township: **9 N** Range: **45E** Section(s): **4 S2 of NW4**
5 S2 of NE4
5 N2 of SE4

Please answer the following:

1. I used GPS to map the population: No (skip to #2) **Yes** (complete #1 & #3)

Coordinates are in electronic file on diskette.

Description of what coordinates represent: Point locations of plant patches.

GPS accuracy: Uncorrected Corrected to <5m

GPS datum: **_NAD_1983**

GPS coordinates: **(File attached)**

2. I used a topographic map to map the population:

yes (complete #2) no (provide detailed directions & description above, and skip to #3)

I am confident I have accurately located and mapped the population at map scale: **yes** (skip to #3)

no, but I am confident the population is within the general area indicated on the map as follows:

On the same map, use a highlighter to identify the outer boundary of the area where the population could be, given the uncertainties about your exact location.

3. I used the following features on the map to identify my location (stream, shoreline, bridge, road, cliff, etc.): **Topography, aspect.**

To the best of my knowledge, I mapped the entire extent of this population

yes no **unknown** If no or unknown, explain: **There is additional habitat to the east and elsewhere on the unit.**

Is a revisit needed? **no** yes - if yes, why?:

Ownership (if known): **WaDFW**

Population Size (# of individuals or ramets) or estimate: **1000+**

Population (EO) Data (include population vigor, microhabitat, phenology, etc)

Population is vigorous, with lots of small (young) plants present. Occurs as patches and individual plants over the mapped area. Diverse age/size structure. Mostly in fruit, with a few flowers still present. Many of the patches are located in sites that may have been protected from excessive livestock impacts by the abundant rock outcrops on the slope.

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Plant Association (include author, citation, or classification, e.g. Daubenmire):

Associated Species (include % cover by layer and by individual species for dominants in each layer):

Lichen/moss layer: **Mostly absent.**

Herb layer: **(10% total)**. *Pseudoroegneria spicata*, *Achillea millefolium*, *Lomatium* sp., *Plantago patagonica*, *Camelina*, *Erodium cicutariia*, *Stephanomeria*, *Sporobolus cryptandrus*, *Penstemon* sp., *Lactuca serriola*, *Sisymbrium altissimum*.

Shrub layer(s): *Chrysothamnus nauseosus* **1%**

Tree layer:

General Description (include description of landscape, surrounding plant communities, land forms, land use, etc.):

Upper 2/3 of steep south-facing slope of canyon. Basalt outcrops, including cliffs, that limited use and impact by cattle. Some talus on the lower slope.

***Bromus tectorum* is abundant in areas, along with several large patches of Scot's thistle, but good structure of native plants.**

Minimum elevation (ft.): **2100** Maximum elevation (ft.): **2400**
Size (acres): Aspect: **SE-SW** Slope: **15-35 degrees**

Photo taken? **yes**

Management Comments (exotics, roads, shape/size, position in landscape, hydrology, adjacent land use, cumulative effects, etc.):

Assess the occurrences of Scott's thistle on the hillside; avoid further spread and treat if necessary.

Protection Comments (legal actions/steps/strategies needed to secure protection for the site):

Additional Comments (discrepancies, general observations, etc.):

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BLUE MOUNTAINS WILDLIFE AREA COMPLEX 2007 MANAGEMENT PLAN UPDATE Washington Department of Fish and Wildlife

Land Management Summary

This is an update to the 2006 Blue Mountains Wildlife Area Complex Wildlife Area Management Plan that provides management direction for Blue Mountains Wildlife Area Complex including the Chief Joseph Wildlife Area, Asotin Creek Wildlife Area, Grouse Flats Wildlife Area, and WT Wooten Wildlife Area. Total size of the complex as of this writing is 63,585 acres located in Asotin, Garfield, and Columbia Counties (web link:

http://wdfw.wa.gov/lands/wildlife_areas/management_plans/pdfs/draft_blue_mountain_plan.pdf).

This plan identifies needs and guides activities on the area based on the Washington Department of Fish and Wildlife (WDFW) Mission of “*Sound Stewardship of Fish and Wildlife*” and its underlying statewide goals and objectives as they apply to local conditions.

Plans are updated annually as habitat and species conditions change, as new regulations and scientific knowledge develop, as public issues and concerns evolve, and as administration of wildlife areas change. This management plan update also includes 2006 accomplishments, new issues, new land management strategies and performance measures for 2007.

Updates/Changes

On the Asotin Creek Wildlife, 80 acres of DNR land was transferred to WDFW ownership in 2006.

Assistant Wildlife Area Manager Shana Winegeart has relocated to the W.T. Wooten Wildlife Area with the retirement of Gary Stendal. David Woodall was hired as a Wildlife Biologist on the Wildlife Area to fulfill duties on the east end of the Wildlife Area complex.

A portion of the Asotin Creek Wildlife Area receives funding from Bonneville Power Administration (BPA). Funding level from BPA was reduced from \$171,000 to \$151,00 for the 2006/07-operation year. Sharecrop revenue increased in 2006 with the addition of the C2S farms revenue from farming operations on WDFW land on Meyer’s Ridge.

Fire was the largest factor influencing the wildlife area in 2005-2006. The School Fire burned 52,000 acres in August 2005, and consumed over 13,000 acres of the 16,000-acre Wooten Wildlife Area (WLA). A subsequent salvage logging project funded several habitat improvement projects, such as addition of woody debris to improve fish habitat in the Tucannon River and Cummings Creek, obliteration of two road crossings on Cummings Creek, removal of an undersized culvert blocking fish passage, and purchase of seedlings for the 2008 reforestation effort.

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Revenue generated from salvage logging was also used to purchase a half-section of land inside the wildlife area boundaries owned by Bennett Lumber. The Umatilla Tribe donated \$15,000 toward habitat restoration, which was used to purchase 10,000 trees and shrubs. Supplemental fire funds were used in 2006 to aerially spray yellow starthistle on the uplands, hire offender labor crews to hand pull noxious weeds in riparian areas, purchase native grass seed to control weeds in campgrounds and disturbed areas, and purchase a four-wheeler for weed spraying. In 2006 wildlife area staff successfully applied for two Rocky Mountain Elk Foundation (RMEF) grants to control weeds. One grant (\$18,500) will be applied in July 2007 to hand pull noxious weeds along the Tucannon River. The other grant, (\$97,000) is a cooperative effort between WDFW, US Forest Service, and Foundation for North American Wild Sheep. This grant will be applied in spring/summer 2007 to aerially map and spray weeds in critical elk habitat, spray roadside weeds, hand pull weeds in campgrounds, and hire a horseback contractor to spray weeds in upland draws.

A second burn occurred in August 2006, when the Columbia Complex fire consumed over 109,000 acres of private, State and Federal lands. Approximately 150 acres on the W. T. Wooten Wildlife Area burned, including the two southernmost campgrounds. The creeping ground fire did little damage to mature trees, although a small logging project will be initiated in summer 2007 to fell any burned trees along the Tucannon road that may pose a safety hazard. Dayton NRCS staff offered 15-20,000 pine seedlings to the Wooten WLA to mitigate habitat damage from the Columbia fire. A contractor will be hired to plant these seedlings in 2007.

New Issues

Weatherly Segment Elk Fence: Private property changed ownership on land bordering the Weatherly Segment on the Asotin Creek Wildlife Area in the Dry Gulch area. The new owner has a legal easement to cross WDFW property and the elk fence in order to access his private property. Future plans by the new owner include permanent, year-round residence on his new property. Increased traffic on the dry gulch road as well as the new owners desire that WDFW remove the elk fence gates and install cattle guards (at WDFW expense) will increase disturbance for elk and diminish the integrity of the elk fence. One possible solution may be to move the elk fence along dry gulch road away from its current location on the property line to avoid crossing access roads.

Mediterranean Sage: Asotin County Weed Board staff and Wildlife Area staff have discovered additional infestations of Mediterranean Sage on Meyer's Ridge on the Asotin Creek Wildlife Area. In prior years, hand-pulling adult plants, application of herbicide from horse pack applicators and application from ATV sprayers has been used to control small infestations along Meyer's Ridge road. Mediterranean Sage is classified as a Class A weed in Washington State making control/eradication legally mandatory for WDFW. The infestation area is approximately 200 acres in size and is scheduled for an aerial treatment in Spring 2007 after wildlife area staff burns old plant residue and tumbleweeds, which are covering up med sage rosettes in the infestation area. Funding for control efforts in 2006 comes from a successful grant application to the Washington State Weed Board and Wildlife Program funds. Total estimated price of the project is \$15,400 of which \$6,400 is coming from the State Weed Board.

Pilot Grazing on Smoothing Iron Ridge: Implementation of the second phase of pilot grazing on Smoothing Iron Ridge is underway for 2007. Wildlife Area staff are actively working on water site solutions which will substitute cattle utilizing water in the South fork of Asotin Creek. Additional water troughs for existing springs have been purchased and installation will proceed once cultural

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resource surveys are completed. Additional plans for water included installation of storage tanks for use during warm weather and tapping into the water supply line, which runs from Cooper Canyon to the buildings in Warner Gulch. Planned monitoring includes vegetation surveys, photo points, weed surveys, breeding bird transects, and fence exclosures for making comparisons. Two exclosure sites are planned for 2007 with each site having a one-acre exclosure built of 8' hog wire to exclude all ungulates and a second site along side the hog wire built of 4 strand barbed wire designed to exclude only domestic livestock. Volunteers from the Rocky Mountain Elk Foundation are scheduled to build the exclosures in May 07. Other logistical obstacles to overcome include installation of a cattleguard near the Warner Gulch buildings, perimeter fence maintenance, and a fence in the South fork of Asotin Creek to exclude livestock from the riparian area.

Pilot Grazing on the Shumaker Unit: Implementation of this third phase of the pilot grazing project is scheduled to start in 2008. Breeding bird surveys, vegetation surveys and weed surveys are in the planning stages and will be implemented in 2007.

Elk fence: The School Fire burned nearly 15 miles of fence used to keep elk off private farm ground. WDFW engineering staff began repairs in fall 2005, and a private fencing contractor was hired in 2006 to continue repairs east of the Mountain Road. Reconstruction will continue as funds allow, and a lawsuit has been initiated to try and recoup some of the funds necessary to complete the fence. Loss of the elk fence has led to elk depredation on private ground and trespass grazing by neighboring livestock on the wildlife area. Trespass livestock remain a problem, although depredation complaints were kept to a minimum with the hiring of personnel to haze elk out of crop fields.

Major Stewardship Accomplishments

Pilot Grazing Program Implementation: Beginning in April 2006, the pilot grazing program was implemented in the Pintler Creek Unit of the Asotin Creek Wildlife Area. Wildlife Area staff spent a lot of time preparing the site in 2006. Preparations included clearing rock and debris from old roads and trails in the unit, rehabilitation of a spring including installation of new troughs and construction of two exclosures. Monitoring activities included vegetation surveys, breeding bird transects, photo point, and weed mapping. The main goal of the monitoring transects is to document wildlife reaction to controlled livestock grazing. Operator Tom Hendrickson ran 250 cows for 6 weeks ending May 31st. Grazing will continue in Pintler Creek in 2007 commencing on April 1st.

Building Removal: Several unsafe structures (including the former manager's residence) were demolished on the Chief Joseph Wildlife Area. Several of the buildings were falling down and the residence was deteriorating rapidly. Two additional residences on the Asotin Creek Wildlife Area are scheduled for demolition once historical issues are resolved by WDFW engineering.

Guzzler Installation: Volunteers from RMEF installed 5 new guzzler units on the Smoothing Iron unit including installation of livestock exclusion fences for each unit. Volunteers also repaired an existing unit on the North Ridge originally installed in the early 70's. WDFW staff installed another 5 units on the George Creek unit bringing the total to 10 new units on the wildlife area.

Foodplots: Wildlife Area staff established a new 5-acre alfalfa foodplot on the Chief Joseph Wildlife Area and reseeded several spring wheat food plots along Joseph Creek and Asotin Creek.

The alfalfa plot was irrigated throughout the summer in 2006 and was heavily used by elk. Re-seeding of spring wheat food plots will be ongoing in 2007. The food plots serve a secondary role as a method of cleaning weeds from the fields in preparation for future seeding to either perennial clover or native grass cover.

Salvage Logging: WDFW implemented a 30 million board-feet (MMBF) salvage logging and restoration project on 2,500 acres burned in the School Fire. The salvage was designed to generate revenue for reforestation and habitat improvement projects. Logging began January 12th, 2006 and ended August 3rd 2006.

Salvage Logging Sale Prescription: 100% helicopter log to minimize ground disturbance, double the required Forest Practices riparian management zones (RMZ), retain a minimum 5 wildlife trees/acre (although over 50 trees/acre were left in some areas), fell some trees parallel to the slope and leave limbs on the ground to control erosion, and remove hazard trees from roadways and recreation areas.

In addition to prescribed work, the salvage-logging project made it possible to accomplish many habitat improvement projects. Logging revenue funded WDFW's purchase of a half-section of land located inside the WLA boundary owned by Bennett Lumber, and financed a contract to grow over a half-million seedlings that will be planted in 2008. Logging contractors removed a culvert that was a fish passage barrier, and added drainage ditches and base rock to .5 mile of road between Deer and Watson Lakes. They also felled large trees in riparian areas to create woody debris for fish habitat, obliterated .5 mile of road containing 2 fords on Cummings Creek, and then replanted the abandoned roadway with trees. The logging project enabled WLA staff to offer over 40 public firewood permits to reduce roadside fuels, provide cull logs to local Natural Resource Conservation Service (NRCS) offices implementing habitat improvement projects on private lands, and convert three helicopter landing pads into public campgrounds.

School Fire Restoration: WLA staff conducted numerous emergency restoration projects to minimize wildfire impacts to fish, wildlife, and their habitats. In cooperation with NRCS, WDFW conducted aerial grass seeding on 1,000 acres of the most intensely burned drainages to reduce erosion on ESA fish-bearing streams. With a generous \$15,000 gift by the Umatilla Tribe, WDFW staff and numerous public participants donated 1,000 hours of volunteer labor over a six week period to plant 10,000 trees and shrubs in Cummings Creek and along the Tucannon River. WLA staff successfully applied for a Rocky Mountain Elk Foundation grant to assist in post-fire weed control, and grant money was used to hire a crew from Orofino Corrections to hand pull weeds in riparian areas. Supplemental fire funds were used to implement aerial herbicide spraying on 1,793 acres of yellow starthistle, fund a crew to hand pull knapweed in riparian areas, and purchase native grass seed for application on helicopter landing pads, roads, and campgrounds. A second grant has been secured, in cooperation with US Forest Service and Foundation for North American Wild Sheep, to control noxious weeds on critical big game habitat burned in the fire.

Campground Improvements: WDFW allocated \$250,000 to improve fish and wildlife habitat by closing campgrounds located in riparian areas. The project establishes a buffer of riparian vegetation along rivers or wetlands, and two campgrounds (#2 and #7) that fell in that buffer zone have been closed. To maintain the same number of acres open to public camping, three new campgrounds have been created, and existing campgrounds #1 and #4 have been expanded. Work

began in December 2006 and will continue into summer 2007. Crew is blading and gravelling roads and campsites, and will install fire rings and picnic tables in the spring. Native grass is being seeded on disturbed ground to control weeds, and trees and shrubs will be planted to offer shade and privacy between sites. Backcountry Horsemen will install hitching rails and tie lines in two campgrounds, and a day-use parking area will be established at the mouth of Cummings Creek to keep pedestrians and horses off the road.

Status Report of 2006 Performance Measures

Key Performance measures are identified each year to monitor progress and identify any issues that might interfere with planned activities. This information will be used to delete, add or alter priority strategies for 2007.

2006 Performance Measure	Status of Performance Measure	Explanation of Progress/2007 Related Activity/Comments
Assess and maintain 33 miles of boundary stock fence including 5 miles of woven wire fence	Completed for 2006	Ongoing for 2007, increase to 100 miles
Irrigate foodplots and shrubs on Wooten and Chief Joseph WLAs – Twice annually	Completed for 2006	Irrigation continued all summer during 2006 and is planned for 2007
Assess and maintain elk fence on Wooten and Asotin Creek WLAs	Completed on Asotin Creek WLA. Wooten side still fire damaged from School Fire and in the process of being rebuilt	WDFW plans on replacing burned fence (9 miles) in 2007 in Wooten WLA
Initiate and setup at least one new grazing agreement	Pilot grazing program initiated spring 2006 with Tom Hendrickson as the operator in Pintler Creek	One operator selected for Pintler Creek and one selected for Smoothing Iron pilot projects.
Grazing evaluations, at least two annually	Intensive monitoring initiated in Pintler Creek and Smoothing Iron	Monitoring ongoing in Pintler and initiated on Smoothing Iron Ridge. Monitoring also scheduled to begin in Shumaker.
Grouse Flats Ag lease Maintain & monitor	Completed	Ongoing for 2007
Asotin Creek Ag leases Maintain & monitor	Completed	Ongoing for 2007
Wooten yellow starthistle project	Aerially sprayed 1,794 acres of yellow-starthistle using fire supplemental funds	An RMEF grant has been secured to continue weed control work in 2007
Annual foodplots on	Completed – Also planted 6 acres of	Ongoing for 2007

Chief Joseph WLA (2)	alfalfa	
Big-game foodplots, Maintain/establish four	2 on Asotin creek WLA and one on Wooten WLA. A 30-acre sourdough site was fertilized fall 2006. Cook Ridge site needs mowing/possible reseeding. Ables ridge site may need reseeding	Forage plot planned for Weatherly in 2007
Treat 500 acres of weed outbreaks	Completed. Total acres treated on the complex in 2006 – 2,223.00	Ongoing for 2007
Two Cooperative Weed Control projects per year	Completed. Med Sage project with Asotin County Weed Board and Elk foundation project to control knapweed on Wooten WLA	Continued Med Sage projects planned and additional projects on the Wooten WLA
Continue support of Mountain Quail project	Provided vehicle and equipment for tech and house for living quarters	Project ended fall of 2006
Sharp-tailed grouse research on Asotin Creek WLA	Little work done	Will spend more time on this activity in 2007
Complete endangered plant surveys on BPA funded lands	Completed by a contractor in 2005	
Maintain 8 plant and take lakes on the Wooten WLA	Completed	Ongoing for 2007
Maintain dike on spring lake	Not completed	Pursue funding for 2007
Evaluate 5 guzzlers annually	Several looked at. One unit on Smoothing iron ridge cleaned and re-constructed by RMEF volunteers	Ongoing for 2007
Evaluate two old agricultural fields per year for restoration	Campbell field on Asotin Creek WLA – Grant applied for with IAC funds to rehabilitate this field. Also evaluated several small fields along Joseph Creek	Continue to look for grant funding and implement work for conversion into native habitat as funding develops
Monitor amphibians, establish 10 monitoring sites	No work completed on amphibian monitoring sites in 2006.	Implement this activity in 2007
Monitor Breeding bird sites implemented in 2004	Two sites evaluated in 2006 on the original sites established in 2004. Several more sites established in 2006 for monitoring the pilot grazing project in Pintler Creek and Smoothing Iron.	Continue monitoring sites created in 2006 and establish more sites at Shumaker in 2007.
Begin establishment of bird survey transects	Not completed	Attempt establishment in 2007

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Limit trail access to non-motorized traffic except Green Gulch trail on Chief Joseph WLA	Completed in 2006	Ongoing for 2007
Big Game winter closure gates, Asotin WLA	Completed in 2006	Ongoing for 2007
Maintain mineral enhancement sites.	Completed in 2006	Ongoing for 2007. Use sharecrop funding to purchase more mineral blocks
Evaluate campgrounds and consider establishment of designated campgrounds	Wooten campground project implemented in 2006. Considering 1 site along Rogersburg Road on Chief Joseph WLA	Ongoing for 2007
Monitor and maintain established campgrounds	Completed in 2006	Ongoing for 2007
Maintain water rights and install flow meters on irrigation pumps	Water rights maintained in 2006. Flow meters not installed. 2 pumps on Wooten and 5 pumps on Chief Joseph.	Work towards installation of flow meters on irrigation pumps in 2007 as funding becomes available
Install 5 informational Kiosks	2 kiosks installed on Asotin Creek WLA and 2 kiosks installed on Wooten WLA in a cooperative project with USFS.	Install kiosk on Chief Joseph WLA in 2007

New Strategies

The wildlife area plan identifies many strategies or activities to address the agencies strategic plan goals and objectives, why the area was purchased, habitat conditions, species present, and public issues and concerns. The following updated strategies have been added to respond to previously unaddressed or new issues or changes on the wildlife area. New strategies may also be in response to adaptive management as staff evaluate the impacts of past management activities.

Issues identified in italics were provided by the Citizen’s Advisory Group. These public comments are captured at the end of the document. Although underlined strategies have no current funding source, identifying these needs is the first step in securing additional funds.

Agency Objective: Protect, restore and enhance fish and wildlife populations and their habitats.

Objective: Improve or maintain Big Game Populations

1. Continue implementation of pilot grazing program on Pintler Creek, Smoothing Iron Ridge, and Shumaker
2. Annually revisit 33 photo-monitoring sites to assess post-fire and post-logging habitat recovery.

Agency Objective: Minimize adverse interactions between humans and wildlife.

Objective: Implement strategies to Reduce Elk Damage on Private Lands

1. Seek funding to complete repairs to 14 miles of burned elk fence on Wooten Wildlife Area.

Agency Objective: Ensure WDFW activities, programs, facilities, and lands are consistent with local, state, federal regulations that protect and recover fish, wildlife, and their habitats.

Objective: Manage noxious weeds in a manner consistent with local, state, and federal regulations.

1. Eradicate Mediterranean Sage from the Asotin Creek Wildlife Area.

Agency Objective: Provide sound operational management of WDFW lands facilities and access sites.

Objective: Maintain or remove Facilities, Outbuildings and Structures

1. Demolish two residences on the Asotin Creek Wildlife Area.

Objective: Maintain Roads and Trails as Necessary to Perform Management Functions.

1. Pursue funding and support to bury the power line that runs from the Tucannon Hatchery up to Camp Wooten.

Objective: Repair fire damaged boundary stock fences.

1. Repair burned boundary fence on newly acquired Bennett Lumber parcel to allow continuance of Russell grazing lease.

2007 Performance Measures

- Assess and maintain 33 miles of boundary stock fence including 5 miles of woven hog wire fence on the Chief Joseph Wildlife Area designed to exclude domestic sheep annually.
- Irrigate foodplots and shrubs at Chief Joseph and Wooten Wildlife Areas at least twice annually.
- Assess and maintain 21 miles of elk fence on Asotin Creek and Wooten Wildlife Areas twice annually or as conditions require.
- Initiate and set up at least one new grazing agreement on the Asotin Creek Wildlife Area.
- Conduct at least two grazing evaluations annually on grazing agreements. Submit completed forms to Olympia. Attempt to assess range condition every two weeks during grazing season of use.
- Maintain and monitor four agricultural leases on Asotin creek Wildlife Area annually.
- Initiate at least 1 habitat enhancement project annually with RMEF, Blue Mountains Elk Initiative, TNC, etc.
- Control noxious weeds along Tucannon River and in 10 campgrounds using RMEF funds.
- Plant and maintain at least two annual foodplots on Chief Joseph Wildlife Area annually.

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- Establish and maintain four big-game foodplots on Asotin Creek and Wooten Wildlife Areas (15 acres minimum each). Plant/replant/maintain one out of four of the foodplots annually.
- Treat weed outbreaks on a minimum of 500 acres annually on the four wildlife areas.
- Participate in at least two cooperative weed control project with local weed boards, Wallowa resources, TNC, etc.
- Continue to support and assist with Mountain Quail reintroduction project on Asotin Creek Wildlife Area.
- Pursue research into life requisites and ecological limiting factors for sharp-tailed grouse on Asotin Creek Wildlife Area.
- Complete endangered plant surveys on BPA funded portions on Asotin Creek Wildlife Area. Survey other non-BPA funded lands as funding opportunities allow.
- Maintain 8 “plant and take” lakes stocked with rainbow trout, steelhead, and Chinook salmon on the Wooten Wildlife Area.
- Maintain dike on Spring Lake. Repair damage caused by vegetation and leaking dike to meet DOE codes and standards on Wooten Wildlife Area.
- Evaluate existing guzzlers and either repair or discard as necessary. Five evaluations annually.
- Evaluate old agricultural fields for restoration into native grass habitat. Evaluate two fields per year on the Blue Mountain Wildlife Areas.
- Establish and monitor amphibian populations in at least 10 permanent ponds throughout the four wildlife areas on an annual basis.
- Continue to monitor four breeding bird point-count plots established in 2004 on the Asotin Creek Wildlife Area.
- Begin establishment of bird survey transects to inventory avian species on the four wildlife areas.
- Continue to limit trail access to non-motorized vehicles only on the four wildlife areas except for green gulch on the Chief Joseph Wildlife Area which is open Oct. 1 – Nov. 30.
- Continue to implement and monitor big-game winter range closure gates on the Asotin Creek Wildlife Area.
- Maintain mineral enhancement sites for big game on the four wildlife areas. Asotin Creek – 9, Wooten – 4, Chief Joseph – 4, Grouse Flats – 1
- Maintain agricultural lease on Grouse Flats Wildlife Area to retain high quality forage on 100-acre agricultural field for elk retention.
- Evaluate wildlife area campgrounds and consider establishment of designated campsites with fire rings as funding allows.
- Continue to monitor and maintain established campgrounds on the four wildlife areas.
- Monitor and utilize where possible, water rights on the four wildlife areas. Install flow meters on irrigation pumps to accurately monitor water usage. Document usage.
- Install 1 informational Kiosks displaying Wildlife Area maps, noxious weed information and plant and animal species of concern on the Chief Joseph Wildlife Area. Maintain Kiosks installed on the Wooten and Asotin Creek Wildlife Areas.
- Finish Wooten campground improvement project by fall 2007.
- Implement hazard tree removal contract.

- Survey and fence contested boundary between State land and Russell property as time and funding allow.
- Seek funding and support to bury Columbia REA power line between Tucannon Hatchery and Camp Wooten State Park.
- Maintain and improve three seeps on Ables Ridge.
- Revisit 33 post-fire monitoring photopoints in May.
- Identify and prioritize fish passage barriers on the wildlife area complex. Address at least on barriers annually.
- Maintain/install 25 bluebird boxes and 10 wood duck boxes as time allows.

Citizens Advisory Group Input

Issue: Root Wads used to border campgrounds are unsightly (Wooten).

Response: The root wads will eventually rot while in the meantime, shrubs and trees planted as borders will mature.

Issue: Yellow starthistle on blind grade needs sprayed.

Response: Wildlife Area Staff completed this task spring 2007.

Issue: Establish more foodplots on Hartsock Unit.

Response: Wildlife Area staff planted several acres to sunflowers as a winter food source in spring 2007.

Issue: Make signs in Spanish as well as English. A lot of Hispanics use the wildlife area.

Response: As time and funding allows, bilingual Wildlife Area signs will be installed.

Issue: Create and email list to notify people of volunteer projects.

Response: We can do this.

Issue: A rifle range somewhere on the Asotin Creek or Chief Joseph Wildlife Area would be a nice improvement for the public.

Response: Wildlife Area staff will look into the possibility of securing IAC funding for a rifle range.

Issue: Stringtown gulch area needs a stock gate for horseback users.

Response: Wildlife Area staff can make this modification to the boundary fence. Staff will also look at other key areas where the public may want to access WDFW lands with horses.

Want to see the full plan?
Go to -
http://wdfw.wa.gov/lands/wildlife_areas/management_plans/index.htm

WDFW Contacts:
Chief Joe/Asotin Wildlife Area
Office (509) 758-3151

Wooten Wildlife Area Office
(509) 843-1530

Weintraub,Nancy H - KEC-4

From: DeHerrera,Joe - KEWU-4
Sent: Thursday, September 04, 2008 2:40 PM
To: Grimm,Lydia T - LC-7; Weintraub,Nancy H - KEC-4
Subject: FW: Grazing meeting

fyi

From: Robinette, Kevin (DFW) [mailto:ROBINKWR@dfw.wa.gov]
Sent: Thursday, September 04, 2008 11:39 AM
To: DeHerrera,Joe - KEWU-4
Cc: Dice, Bob (DFW)
Subject: Re: Grazing meeting

Joe,

The meeting went well. I plugged in by conference call. Here are the minutes that Jack Field took.

Jennifer Quan and John Pierce will be meeting with DNR Natural Heritage Program staff tomorrow to talk about the rare plant situation. I and possibly Bob will be plugging in by conference call.

I've contacted USFWS biologists here in Spokane to get them in the loop.

We'll keep you apprised on how things are progressing.

* Kevin

>>> DeHerrera,Joe - KEWU-4 09/04/2008 10:12 AM >>>
Bob,
How did the meeting go? Any updates you can share on the T&E plants?
Joe

-----Original Message-----

Date: 08/27/2008 02:44 pm -0700 (Wednesday)
From: Jack Field
To: Sam Ledgerwood, Chuck Perry, hilltop@northcascades.net, Brittell. Dave [DFW], Bracken. Edd [DFW], Jim Sizemore, Childs. Wendy [DFW], Dice. Bob [DFW], 'Cattle Producers of Washington', 'Cindi Confer', 'Dave Duncan', 'Jeff Dawson', Quan. Jennifer [DFW], 'Jerry Barnes', Olson. Jim [DFW], 'Joe Deherrera', Pierce. John [DFW], 'Kattie Davenport', Robinette. Kevin [DFW], Romain-Bondi. Kim [DFW], 'Linda Hardesty', 'Mark Charlton', Baker. Nanette [DFW], 'Ray Dagnon', 'Russ Stingley', 'Steven Link', 'Vic Stokes'
CC: 'Jack Field'
Subject: Grazing Committee Meeting 8-27-08

1/23/2009

Please review the agenda and minutes and email back any additions you would like to make.

thanks

jack

Agenda

Grazing Committee Meeting

Agenda

August 27, 2008

1:00 pm

1. Review and accept agenda
2. Discuss WDFW's financial responsibility for fence maintenance
3. Discuss recent developments in Pilot Grazing Program
4. Update on the public information effort
5. Schedule for finalizing 2009 grazing schedule on Pintler Creek and Smoothing Iron Pastures
6. Update on Crossing Permits Jennifer Quan
7. Sam Ledgerwood new information

August 27, 2008

Attendance: Jim Sizemore, Jennifer Quan, Dave Duncan, Edd Bracken, Bob Dice, Russ Stingley, Jeff Dawson, Sam Ledgerwood, Linda Hardesty, Tom Hendrickson, Jack Field, Kevin Robinette (via phone)

Meeting called to order by Jim Sizemore at 1:05 pm

Discussion on WDFW's and private sector responsibilities to maintain fencing. (see RCWs below) Jack Field

RCW 16.60.020

Partition fence - Reimbursement.

When any fence has been, or shall hereafter be, erected by any person on the boundary line of his land and the person owning land adjoining thereto shall make, or cause to be made, an inclosure, so that such fence may also answer the purpose of inclosing his ground, he shall pay the owner of such fence already erected one-half of the value of so much thereof as serves for a partition fence between them: PROVIDED, That in case such fence has woven wire or other material known as hog fencing, then the adjoining owner shall not be required to pay the extra cost of such hog fencing over and above the cost of erecting a lawful fence, as by law defined, unless such adjoining owner has his land fenced with hog fencing and uses the partition fence to make a hog enclosure of his land, then he shall pay to the one who owns said hog fence one-half of the value thereof.

RCW 16.60.030

Partition fence - Erection - Notice.

1/23/2009

~31~

When two or more persons own land adjoining which is inclosed by one fence, and it becomes necessary for the protection of the interest of one party said partition fence should be made between them, the other or others, when notified thereof, shall erect or cause to be erected one-half of such partition fence, said fence to be erected on, or as near as practicable, the line of said land.

RCW 16.60.040

Partition fence - Failure to build - Recovery of half of cost.

If, after notice has been given by either party and a reasonable length of time has elapsed, the other party neglect or refuse to erect or cause to be erected, the one-half of such fence, the party giving notice may proceed to erect or cause to be erected the entire partition fence, and collect by law one-half of the cost thereof from the other party.

RCW 16.60.060

Partition fence - Discontinuance.

When any party shall wish to lay open his inclosure, he shall notify any person owning adjoining inclosures, and if such person shall not pay to the party giving notice one-half the value of any partition fence between such enclosures, within three months after receiving such notice, the party giving notice may proceed to remove one-half of such fence, as provided in RCW 16.60.055.

Jennifer Q - talked about some possibilities for the WDFW to partner on fence maintenance and recommended that the WDFW continue to address fence issues on a case by case basis.

Jennifer Q - spoke about District Team meeting in Pullman with the Regional Team.

Kevin Robinette- talked about the District Team meeting and utilization discussions that the Team had with WSU.

Linda Hardesty - thought there were concerns from the District Team about utilization and soil erosion regarding the Pilot Grazing Program. Linda thought that the meeting went well.

Jennifer Q- discussion of the identification of the Silene. WDFW will be meeting with the DNR regarding possible management of the plant, as well as the USFWS. Discussed implementing the Fed's management plan on the ground.

Edd B - spoke about the recovery plan for the Silene

Linda H - talked about finalizing the grazing plans possibly before the end of October.

Linda H - talked about WSU's public information efforts and about a possible blog

Jennifer Q - update on possible DRAFT components of the 2009 grazing plan.

Sam L - talked about incorporating monitoring of the fires in the area of the Pilot Sites as well.

Jennifer Q - update on crossing permits. WDFW will be talking with the acquisitions office to be sure that new acquisitions of land include historic crossings.

Jennifer Q - talked about acquisitions and WWRP rankings. The Habitat Conservation Plans will include this.

1/23/2009

~32~

Russ S - update on the Whiskey Dick grazing program

Edd B - talked about the installation of 3 additional transects in one of the pastures

Meeting adjourned 2:45 pm

11/19/2008

[

*Exemption 5 - Attorney/Client Privilege
Deliberative Process*

]

~34~

Exemption 5 - Attorney-Client Privilege

Deliberative Process

Call → Kevin Robinson at WDFW
what is status of

small meeting w/ USFWS in Spokane - one of
them Petaluma/ Boise and WDFW to
talk about what to do with wildlife.

They - survey conducted - Pleasant and figure
out they missing is locusts in 1990

~35~

"consult" with small c with usfws (not pg c)

Worley - avoidance in time & space -
would usfw's help meeting w/ experts on plant
and FS quarry.

next few weeks - get TNC & FS botanists who
usfw people and range researchers
and the usfw's people - and talk

quarry in general - middle work w/ usfw
to modify existing plans - update from 07
status

meet w/ cattlemen next Tuesday & hopefully
will have first draft of new quarry
plan
some minor ps as to stocking & thinning
(not related to plants)

plains & work will help monitor quarry utilization -
but usfw will tell cattlemen to be true to go

no teeth on state - listed species
for state

more focus on maintain diagonal integrity
see if our experimental quarry
maintain

- of course this would include
no harm to state - listed species

Worley

~36~

[

Non-Responsive

]

From: Grimm, Lydia T - LC-7
Sent: Thursday, November 20, 2008 12:06 PM
To: Delwiche, Gregory K - KE-4
Cc: DeHerrera, Joe - KEWU-4; Weintraub, Nancy H - KEC-4; Kinsey, Bill - LC-7; Key, Philip S - LC-7
Subject: Asotin grazing, follow up re: Kavanagh call to you

PRIVILEGED/CONFIDENTIAL ATTY-CLIENT COMMUNICATION

Hi Greg, just wanted to close the loop on this issue with WDFW's pilot grazing program occurring in part on BPA-funded wildlife lands (Schlee property/Smoothing Iron Unit of the WDFW Asotin Wildlife Area) and the issues Mr. Kavanagh continues to raise regarding impacts of the WDFW grazing on an ESA-listed plant. Joe, Nancy and I met again to discuss current status.

[

Exemption 5 - Attorney/Client Privilege

Deliberative Process

~37~

[
Exemption 5 - Attorney/Client Privilege

Deliberative Process]

**Thanks,
Lydia**

[
NON Responsive

]

Grimm, Lydia T - LC-7

From: Weintraub, Nancy H - KEC-4
Sent: Monday, December 15, 2008 3:28 PM
To: Templeton, Ian R - DKP-7; Grimm, Lydia T - LC-7; DeHerrera, Joe - KEWU-4
Subject: FW: One more time

Attachments: Kavanaugh response letter.doc

I added my comments to Lydia's and responded to her one comment (we've talked with WDFW about listed bull trout and plants).
Nancy

From: Grimm, Lydia T - LC-7
Sent: Monday, December 15, 2008 3:18 PM
To: Templeton, Ian R - DKP-7; Weintraub, Nancy H - KEC-4; DeHerrera, Joe - KEWU-4
Subject: FW: One more time

Ok, just a few more suggested edits from me, thanks.

From: Templeton, Ian R - DKP-7
Sent: Monday, December 15, 2008 3:03 PM
To: Grimm, Lydia T - LC-7; Weintraub, Nancy H - KEC-4; DeHerrera, Joe - KEWU-4
Subject: One more time



Kavanaugh
esponse letter.doc ..

~39~

Kavanaugh letter

[

Exemption 5 - Attorney/Client Privilege

Deliberative Process

~40~

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Exemption 5 - Attorney/Client Privilege

Deliberative Process

~41~

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Exemption 5 - Attorney-Client Privilege

Deliberative Process

~42~



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

December 17, 2008

In reply refer to: KE-4

Mr. Rob Kavanaugh

Dear Mr. Kavanaugh:

I am writing in response to your November 23 letter to Steve Wright, concerning Washington Department of Fish and Wildlife (WDFW) activities in the Asotin and Blue Mountain wildlife areas and BPA's relationship to those activities.

As part of its efforts to protect, mitigate and enhance wildlife affected by the construction of federal hydroelectric projects in the Columbia River Basin and the inundation of land behind them, the Bonneville Power Administration (BPA) provided funds to the WDFW to purchase some of the units of the Asotin Wildlife Area. Under a memorandum of agreement between BPA and WDFW, the units funded by BPA are owned and maintained by WDFW for wildlife mitigation.

In your letter, you raise concerns about several aspects of the WDFW's management of the Asotin and Blue Creek wildlife areas and about BPA's role in relationship to those activities. One of your primary concerns is in regard to WDFW's Pilot Grazing Project, and its potential impact on fish and plant species listed as threatened or endangered under the Endangered Species Act (ESA) and on wildlife generally. You assert that BPA has failed to enter ESA Section 7 consultation with the appropriate regulatory agency in regard to WDFW's grazing activities.

WDFW's grazing project is a pilot project that BPA does not fund or carry out and that does not require BPA authorization. Mr. DeHerrera correctly reported to you that BPA has not undertaken Section 7 consultation in regard to the grazing project because there is no federal action to trigger such a consultation.

This is not to say that BPA has no interest in the Pilot Grazing Project or its effects. BPA has reviewed WDFW's management activities for consistency with the memorandum of agreement between BPA and WDFW as well as with related intergovernmental contracts between BPA and WDFW. Further, we have talked with WDFW on several occasions about the Pilot Grazing Project and the ESA-listed species that occur within the Asotin Creek Wildlife Area. We believe WDFW is taking appropriate steps to address the needs of those species.

BPA also remains interested in the monitoring and evaluation being conducted by WDFW and Washington State University regarding the Pilot Grazing Project as it will help evaluate the

~43~

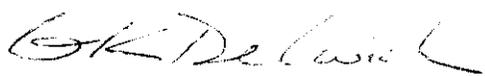
project's compatibility with BPA's wildlife mitigation program overall. However, none of this converts the state-authorized and conducted project into a federal action requiring ESA Section 7 consultation.

BPA is, however, undertaking a Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) concerning the effects of BPA-funded WDFW efforts at routine fence and building maintenance, conversion of agricultural fields to native habitat, and herbicide application to treat invasive/noxious weeds on the three units of the Asotin Wildlife Area that we helped purchase. While the presence of invasive/noxious weeds can compromise the value of the land as wildlife habitat, we want to make sure that the program for removing the invasive weeds does not itself harm any of the species we wish to protect. We expect to conclude the consultation and for USFWS to issue a biological opinion prior to the use of any herbicide next spring. BPA and WDFW will comply with all terms and conditions of the biological opinion.

On the issue of fencing, BPA supports fencing the perimeter of land our partners purchase with ratepayer funds for fish and wildlife mitigation. Fencing can help protect the wildlife habitat from trespassing cattle and unauthorized motorized vehicles. WDFW's use of internal fences and their effect on wildlife will be evaluated as part of WDFW's review of its Pilot Grazing Project.

All status reports on the work WDFW conducts under contract with BPA are consistent with invoices from WDFW. BPA is satisfied with WDFW's performance under the BPA contracts regarding the Asotin Wildlife Area to date. The agency has no evidence of a transfer of \$42,000 from the BPA-funded Asotin project to the Whiskey Dick Wildlife Area so an audit is not necessary.

Sincerely,



Gregory K. Delwiche
Vice President, Environment, Fish & Wildlife

~44~

Nov. 23, 2008

RECEIVED BY BPA ADMINISTRATOR'S CIC-LOG #: 08 0143
RECEIPT DATE: 12.04.08

Mr. Steve Wright
BPA Administrator
Independence Ave. Wa. D.C.

12.18.08

RE; Phon Call from Joe deHerra BPA WDFW Contract
Adminsitator 22Nov.2008

Greetings:

The purpose of this letter is to inform you and your Portland staff that you have failed to accomplish your responsibilities to properly administer federal funds awarded to the Wa. Dept. of Fish & Wildlife for the Blue Mtn. Wildlife Area in Asotin Co. Wa. I have repeatedly asked your staff to take corrective actions and they have not. Please refer to my letter of Oct. 2008, and previous letters. My concerns are as follows:

1. The BPA transfers federal mitigating funds each year via the WDFW/BPA MOA to mitigate wildlife habitat loss caused by the Snake Rv. dams. But are these funds being used for intended purpose? These contracts need a annual financial and performance audit as I stated earlier. Your staff fail to accomplish this important control measure as admitted by earlier letters to me. (Delwick) And they do not measure trends in wildlife or wildlife habitat by any independent scientific methods.
2. The BPA funds the construction of cattle fences on the Wildlife Area at great expense when Wa. law does not require boundary fences to enforce against cattle trespass at all. Our law states cattle can not be on our state lands without a written permit. These fences are being constructed primarily for the benefit of adjacent ranch owners who are basically getting a free ranch fence for their property boundary. This wasteful practice must be discontinued in your contracts for the Blue Mtn. WMA. These federal funds must not be used to subsidize the WCA.
3. We find that the BPA fails to enter into Title 16, Sec. 7 Consultation with the WDFW over their activities that will or already are damaging ESA species. We pointed out that WDFW was knowingly allow cattle to graze within the riparian areas of the ESA summer run steelhead and the bull trout as early as 2005 on the Smoothing Iron and Pintler Units. These grazing activities are strongly opposed by the WDFW Dist. Tm and the Nez Perce Tribe who have Treaty rights to this area. The grazing reports show damage to the habitat of elk & deer. (Pat Fowler) Yet your BPA staff ignore their responsibility to act to protect wildlife. They claim no involvement in the grazing issue? Yet they fund the cattle fences on the boundary. Internal fences disrupt big game migration & mvts and are not needed w/o cattle.
4. We find further that the BPA is funding the use of chemical herbicides that are threatening the endangered plant (Fed. ESA listed & state listed) silene spaldingii which is long been known to exist on this wildlife area. (see Silene Spaldingii Recon by Karen Gray) This funding support must cease until WDFW complies with the USFWS Fed. Recovery Plan of 2008. As late as Nov. 08

ASSIGN: KE-4

cc: FO3, DKN/Wash, L-7, T/Ditt2, TE/Ditt2,
TER-3, KEW-4, Joe DeHerrera-KEWU-4,
Sonya Baskerville-DKN/Wash

~45~

Kerr, Mary K - KE-4

From: Carrie_J_Cordova@fws.gov
Sent: Tuesday, December 23, 2008 11:15 AM
To: ROBINKWR@dfw.wa.gov; jhustafa@fs.fed.us; rtaylor@TNC.ORG; quanjlq@dfw.wa.gov; lhardest@wsu.edu; Susan_Burch@fws.gov; Suzanne_Audet@fws.gov; gretchen_sausen@fws.gov; dicerid@dfw.wa.gov; jfrazee@fs.fed.us; Weintraub, Nancy H - KEC-4; DeHerrera, Joe - KEWU-4; Colleen_Stinson@fws.gov; Bill_Vogel@fws.gov
Subject: Smoothing Iron

Hello everybody,

Thank you very much for participating on the conference call last Thursday. I think we got a lot of information on the table and have some good resources and knowledge out there that we can all work with regarding grazing in spalding's catchfly habitat. Although there are lots of unknowns given the biology of the plant, at least there is some guidance that will help with a draft monitoring plan at the WDFW Smoothing Iron Unit. The e-mail list of participants is in the address line and I have added phone numbers as I have them. Would the people who do not have their phone numbers on the list, please add them and send the list around so everybody can keep in touch throughout this process and in the future.

I will be compiling the notes that I took during the meeting and will work on getting those out as soon as possible. just some brief notes on the discussion during the call. I will also forward any documentation that we discussed. thank you. CC

Jerold Hustafa
Wallowa Mountain Zone Botanist
And Aspen Program Coordinator
Wallowa Valley Ranger District

Kevin Robinette, WDFW
(509) 892-7859

Suzanne Audet, USFWS

88401 HWY 82
Office
Enterprise OR 97828
541-426-5576
FAX 541-426-5522
jhustafa@fs.fed.us

Upper Columbia Fish and Wildlife

(509) 893-8002

William O. Vogel, Fish and Wildlife Biologist
(Forest Monitoring and Evaluation)
U.S. Fish and Wildlife Service
Western Washington Fish and Wildlife Office
Division of Conservation and Hydropower Planning
510 Desmond Drive
Lacey, WA 98503
Office: (360) 753-4367
Cell: (360) 528-9145
Fax: (360) 753-9518
Bill_Vogel@fws.gov

Nancy H. Weintraub
Fish and Wildlife Environmental Team Lead
Bonneville Power Administration KEC-4
P.O. Box 3621
Portland, OR 97208-3621
Office: 503-230-5373
Fax: 503-230-5699

Bob Dice, Wildlife Area Manager
1049 Port Way

~46~

Clarkston, WA 99403
509-758-3151 Office
509-758-9151 Fax

Linda Hardesty
Department of Natural Resources Sciences
Washington State University
509-335-6632
lhardest@wsu.edu

Colleen Stinson, USFWS
Lacey, WA
(360)753-9440

Bill Vogel, USFWS
Lacey, WA
(360)753-4367

Carrie Cordova
Fish & Wildlife Biologist
Upper Columbia Fish & Wildlife Office
11103 E. Montgomery
Spokane, WA 99206
(509)893-8022

~47~

Weintraub,Nancy H - KEC-4

From: Bob Dice [dicerid@DFW.WA.GOV]
Sent: Wednesday, December 03, 2008 8:12 AM
To: DeHerrera,Joe - KEWU-4; Weintraub,Nancy H - KEC-4
Subject: Fwd: Fw: meeting re: Smoothing Iron

Follow Up Flag: Follow up
Flag Status: Red

Hello Joe

FYI

Bob Dice, Wildlife Area Manager
1049 Port Way
Clarkston, WA 99403
509-758-3151 Office
509-758-9151 Fax

>>> Carrie_J_Cordova@fws.gov 12/03/2008 6:33 AM >>>

Hello there,

I wanted to give you both a chance to participate in a meeting we would like to have as soon as possible to discuss the WDFW proposed pilot grazing plan for the Smoothing Iron unit in the Asotin WMA in Asotin County, Washington. The survey that was completed in the fall of 2008 counted 700+ Spalding's catchfly plants located in that area. The final report will be completed soon. We need to work together to come up with a clear monitoring plan for grazing in Spalding's catchfly habitat. Any information/ideas/suggestions that anybody has for this would be appreciated and helpful for this meeting.

We would like to get together in Spokane at the Upper Columbia Fish and Wildlife Office to discuss. WDFW will be providing a draft proposal, which will include maps, and any other important information. I would appreciate your timely responses as to possible future dates that people could come to Spokane. If there is anyone else that would be helpful for this meeting, please let me know so we can include them.

If you have any questions or comments, please feel free to call me.
Thank you. CC

Carrie Cordova
Fish & Wildlife Biologist
Upper Columbia Fish & Wildlife Office
11103 E. Montgomery
Spokane, WA 99206
509-893-8022

Weintraub,Nancy H - KEC-4

From: Weintraub,Nancy H - KEC-4
Sent: Wednesday, December 03, 2008 3:00 PM
To: 'Carrie_J_Cordova@fws.gov'
Subject: FW: Fw: meeting re: Smoothing Iron

Hi Carrie, Joe DeHerrera and I from BPA would be interested in attending. Do you think this would happen prior to the holidays? Although we aren't funding the grazing, I'm working on our BA for the herbicide use at the BPA-funded portions of the wildlife area, as we discussed earlier. I have a copy of the survey report from Bob.
Nancy

Nancy H. Weintraub
Fish and Wildlife Environmental Team Lead
Bonneville Power Administration KEC-4
P.O. Box 3621
Portland, OR 97208-3621
Office: 503-230-5373
Fax: 503-230-5699

-----Original Message-----

From: Bob Dice [mailto:dicerid@DFW.WA.GOV]
Sent: Wednesday, December 03, 2008 8:12 AM
To: DeHerrera,Joe - KEWU-4; Weintraub,Nancy H - KEC-4
Subject: Fwd: Fw: meeting re: Smoothing Iron

Hello Joe

FYI

Bob Dice, Wildlife Area Manager
1049 Port Way
Clarkston, WA 99403
509-758-3151 Office
509-758-9151 Fax

>>> Carrie_J_Cordova@fws.gov 12/03/2008 6:33 AM >>>

Hello there,

I wanted to give you both a chance to participate in a meeting we would like to have as soon as possible to discuss the WDFW proposed pilot grazing plan for the Smoothing Iron unit in the Asotin WMA in Asotin County, Washington. The survey that was completed in the fall of 2008 counted 700+ Spalding's catchfly plants located in that area. The final report will be completed soon. We need to work together to come up with a clear monitoring plan for grazing in Spalding's catchfly habitat. Any information/ideas/suggestions that anybody has for this would be appreciated and helpful for this meeting.

We would like to get together in Spokane at the Upper Columbia Fish and Wildlife Office to discuss. WDFW will be providing a draft proposal, which will include maps, and any other important information. I would appreciate your timely responses as to possible future dates that people could come to Spokane. If there is anyone else that would be helpful

~49~

Weintraub,Nancy H - KEC-4

From: Weintraub,Nancy H - KEC-4
Sent: Wednesday, December 17, 2008 7:42 AM
To: 'Carrie_J_Cordova@fws.gov'
Subject: RE: smoothing iron Dec. 18 meeting

Thanks Carrie! Yeah, weather doesn't look too good!
FYI I'm using these weather-related telecommute days to get the Asotin BA for the BPA-funded activities drafted. Hope to have it to you beginning of the year, an extra gift to look forward to after the holidays!
Nancy

-----Original Message-----

From: Carrie_J_Cordova@fws.gov [mailto:Carrie_J_Cordova@fws.gov]
Sent: Wednesday, December 17, 2008 7:00 AM
To: ROBINKWR@dfw.wa.gov; jhustafa@fs.fed.us; rtaylor@TNC.ORG; quanjlq@dfw.wa.gov; lhardest@wsu.edu; Susan_Burch@fws.gov; Suzanne_Audet@fws.gov; gretchen_sausen@fws.gov; dicerid@dfw.wa.gov; jfrazee@fs.fed.us; Weintraub,Nancy H - KEC-4; DeHerrera,Joe - KEWU-4; Colleen_Stinson@fws.gov; Bill_Vogel@fws.gov
Subject: smoothing iron Dec. 18 meeting

Well, it looks like most people will be conferencing in for this meeting. We will begin at 10:00 a.m. and try to finish up by 2:00. Here is the conference call info:

Call in #:

Participant Passcode:
4110122

Talk to you all tomorrow. Thanks. CC

Carrie Cordova
Fish & Wildlife Biologist
Upper Columbia Fish & Wildlife Office
11103 E. Montgomery
Spokane, WA 99206
(509)893-8022

~50~

Weintraub,Nancy H - KEC-4

From: Dice, Bob (DFW) [dicerid@dfw.wa.gov]
Sent: Monday, November 03, 2008 10:34 AM
To: Weintraub,Nancy H - KEC-4
Cc: Robinette, Kevin (DFW)
Subject: Re: Plant survey

Hi Nancy,

You shouldn't believe everything Rob says. My impression last week was that the survey is not complete and ready for distribution. If I hear otherwise, I'll let you know. Thanks.

Bob Dice, Wildlife Area Manager
1049 Port Way
Clarkston, WA 99403
509-758-3151 Office
509-758-9151 Fax

>>> Weintraub,Nancy H - KEC-4 10/30/2008 2:22:13 PM >>>

Hi Bob, I got a call from Rob Cavanaugh the other day; among other things he told me the survey for the Silene is completed. Is that true, and if so, could I please get a copy? He was asking me about our consultation with USFWS, so I need to get going on that. He wants me to include the grazing, but I told him that we didn't plan to include it because we aren't funding or permitting it. He wasn't really happy with that answer. He says that the state is not going to do anything about it and he wants us to. Do you know if anything is happening on the WDFW side and if so what? I'm just curious.

Thanks,
Nancy

Nancy H. Weintraub
Fish and Wildlife Environmental Team Lead
Bonneville Power Administration KEC-4
P.O. Box 3621
Portland, OR 97208-3621
Office: 503-230-5373
Fax: 503-230-5699

~51~

Weintraub,Nancy H - KEC-4

From: Robinette, Kevin (DFW) [ROBINKWR@dfw.wa.gov]
Sent: Thursday, September 04, 2008 3:51 PM
To: Weintraub,Nancy H - KEC-4
Cc: DeHerrera,Joe - KEWU-4; Dice, Bob (DFW)
Subject: RE: Grazing meeting

My contact is:

Carrie Cordova
Fish & Wildlife Biologist
Upper Columbia Fish & Wildlife Office
11103 E. Montgomery
Spokane, WA 99206
(509)893-8022

>>> Weintraub,Nancy H - KEC-4 09/04/2008 3:01 PM >>>

Hi Kevin, I am the environmental person at BPA working with Joe. Could you tell me who you contacted at USFWS about the plant? I need to talk with them also about the activities that we are funding, and I'd like to be talking with the same person.

Thanks,
Nancy Weintraub

Nancy H. Weintraub
Fish and Wildlife Environmental Team Lead
Bonneville Power Administration KEC-4
P.O. Box 3621
Portland, OR 97208-3621
Office: 503-230-5373
Fax: 503-230-5699

From: DeHerrera,Joe - KEWU-4
Sent: Thursday, September 04, 2008 2:40 PM
To: Grimm,Lydia T - LC-7; Weintraub,Nancy H - KEC-4
Subject: FW: Grazing meeting

fyi

From: Robinette, Kevin (DFW) [mailto:ROBINKWR@dfw.wa.gov]
Sent: Thursday, September 04, 2008 11:39 AM
To: DeHerrera,Joe - KEWU-4
Cc: Dice, Bob (DFW)

9/17/2008

Weintraub,Nancy H - KEC-4

From: DeHerrera,Joe - KEWU-4
Sent: Tuesday, November 18, 2008 4:37 PM
To: Weintraub,Nancy H - KEC-4
Subject: FW: 2008 Final Asotin Silene spaldingii survey.pdf

Attachments: 2008 Final Asotin Silene spaldingii survey.pdf



2008 Final
tin Silene spal

-----Original Message-----

From: Quan, Jennifer L (DFW) [mailto:Jennifer.Quan@dfw.wa.gov]
Sent: Tuesday, November 18, 2008 3:26 PM
To: Robinette, Kevin (DFW); Dice, Bob (DFW); Sutter, Janet V (DFW); Fowler, Pat (DFW); Andrews, John (DFW); Dahmer, Paul A (DFW); Craig, Kelly D (DFW); Tveten, Richard K (DFW); Dobler, Fred (DFW); GAMON, JOHN (DNR); CRAWFORD, REX (DNR); Kernutt, Matt (ATG); lhardest@wsu.edu; Susan_Burch@fws.gov; Suzanne_Audet@fws.gov; Gina_Glenne@fws.gov; jhustafa@fs.fed.us; >; rtaylor@TNC.ORG; Pamplin, Nathan (DFW); DeHerrera,Joe - KEWU-4;
Cc: Pierce, John (DFW)
Subject: 2008 Final Asotin Silene spaldingii survey.pdf

<<2008 Final Asotin Silene spaldingii survey.pdf>> Hello all -

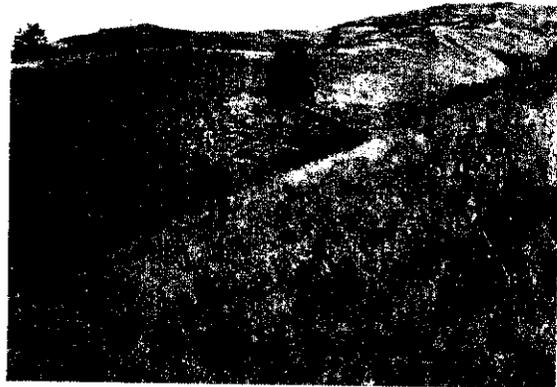
Please find attached the final report on the Siliene survey conducted this fall.

Please feel free to pass on to those that I have missed.

Thanks,

Jennifer

2008 FIELD SURVEY FOR
SILENE SPALDINGII
(SPALDING'S CATCHFLY)
IN THE ASOTIN WILDLIFE AREA,
ASOTIN COUNTY, WASHINGTON.



Karen Gray

2008

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ABSTRACT

Silene spaldingii (Spalding's catchfly) is a rare plant endemic to bunchgrass grasslands, sagebrush-steppe, and open pine communities of the inland Pacific Northwest. It was listed as Threatened by the U.S. Fish and Wildlife Service in 2001 and is considered State Threatened in Washington. In late September 2008, I conducted a survey for Spalding's catchfly on Washington Department of Fish and Wildlife lands in the Asotin Creek and Pintler Creek drainages within the Asotin Wildlife Area. I found over 700 *Silene spaldingii* plants in Pastures 3, 4, and 5 of the Smoothing Iron drainage. I found no plants during a cursory survey in the Pintler Creek drainage, an area that is heavily infested with non-native species. However, patches of apparently suitable habitat persist, and further surveys in these areas are warranted.

KEYWORDS

Silene spaldingii, Spalding's catchfly, Asotin Wildlife Area, *Onopordum acanthium*, Scotch thistle, *Bromus inermis*, smooth brome, *Bromus tectorum*, cheatgrass, *Bromus japonicus*, Japanese brome, *Taeniatherum caput-medusae*, medusahead, *Cirsium arvense*, Canada thistle, *Poa pratensis*, Kentucky bluegrass, *Poa compressa*, Canada bluegrass, *Potentilla recta*, sulfur cinquefoil.

SUGGESTED CITATION

Gray, Karen. 2008. 2008 field survey for *Silene spaldingii* (Spalding's catchfly) in the Asotin Wildlife Area, Asotin County, Washington. Final Report to Washington Department of Wildlife, Olympia, Washington. 8 p. plus appendices.

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INTRODUCTION

Silene spaldingii (Spalding's catchfly) is a rare plant endemic to bunchgrass grasslands, sagebrush-steppe, and open pine communities in the inland Pacific Northwest (Hill and Gray 2004). It was listed as Threatened by the U. S. Fish and Wildlife Service (USFWS) in 2001 (U.S. Fish and Wildlife Service 2001). It is State Threatened in Washington State, and rated G2S2 by NatureServe (NatureServe2008). A species rated G2 is considered globally imperiled—at high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors; A species rated S2 is considered imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation in the state (NatureServe 2008). *Silene spaldingii* was documented in the Smoothing Iron drainage within the Asotin Wildlife Area in 2008. The Washington Department of Fish and Wildlife (WDFW) contracted a late September survey for the species in grazing management units within the Smoothing Iron and Pintler Creek drainages of the Asotin Wildlife Areas.

STUDY AREA

The Smoothing Iron study area comprised a mosaic of bunchgrass grasslands and shrub patches, with occasional, scattered *Pseudotsuga menziesii* (Douglas-fir) and *Pinus ponderosa* (ponderosa pine). The portion of the Pintler study area surveyed supported bunchgrass and shrubs, but lacked trees.

METHODS

I conducted field surveys in suitable *Silene spaldingii* habitat in the Pintler Creek study area on 24 September and in the Smoothing Iron study area on 20, 21, 22, 23, 25, and 26 September 2008. The surveys were conducted as a reconnaissance, with the objective of surveying the maximum amount of area. I spent less time collecting habitat information than in a traditional survey in order to emphasize documenting *Silene spaldingii* locations. I zig-zagged across hillsides with suitable habitat, recording GPS waypoints of all *Silene spaldingii* I encountered. When locations for the rare plant *Calochortus macrocarpus* var. *maculosus* or invasive, non-native weeds would serve to document my survey route, I recorded GPS locations for them as well.

General survey guidelines provided by the Washington Natural Heritage Program (Appendix 1) were used to prioritize areas to focus surveys. Potential habitats included northeast- to north- to northwest- facing slopes that were dominated by bunchgrasses and that supported *Festuca idahoensis* (Idaho fescue). Other species often found with Spalding's catchfly served as indicators of potential habitat, including *Koeleria macrantha* (prairie junegrass), *Arnica sororia* (twin arnica), *Besseyia rubra* (red besseyia), *Erigeron corymbosus* (long-leaf fleabane), *Frasera albicaulis* (white-stem fraseria), *Geum triflorum* (prairie smoke), *Hieracium albertinum* (western hawkweed), *Penstemon glandulosus* (glandular penstemon), *Solidago missouriensis* (Missouri goldenrod), *Artemisia ludoviciana* (prairie sage), *Symphoricarpos albus* (snowberry), *Rosa woodsii* (Wood's rose) and *Rosa nutkana* (Nootka rose).

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In addition, WDFW prioritized the study area grazing management units (pastures) to be surveyed in the following order: 1) Smoothing Iron - Pastures 4, 3, 5; 2) Pintler Creek - Kelly Creek, Owl Gulch; 3) Smoothing Iron - Pastures 2, 6, 1; and 4) Pintler Creek - Ayers Gulch.

I submitted an excel spreadsheet of *Silene spaldingii* GPS coordinates and a Washington Natural Heritage Program Rare Plant Survey Form for *Silene spaldingii* to WDFW in Olympia, Washington.

RESULTS AND DISCUSSION

Silene spaldingii occurred in Pastures 3, 4 and 5 in the Smoothing Iron study area. Over 700 plants were tallied—115 in Pasture 3, 518 in Pasture 4, and 80 in Pasture 5 (Appendix 3) but more plants were probably present underground or were present earlier in the summer. *Silene spaldingii* may remain dormant underground for one or more growing seasons, and many plants that come up in the spring disappear over the summer. In addition, *Silene spaldingii* plants may appear as rosettes, either as first-year recruits or as adults. Because rosettes are difficult to see while walking, the aboveground portion of many plants disappears by summer, and some plants are dormant underground, survey counts are underestimates of the total plants actually present.

Most plants were senescent, with dehisced capsules (Figure 1). Some plants retained green tissue in the leaves (Figure 2), and one cluster of four plants was green and flowering (Figure 3). The plants occurred on northerly-facing slopes in typical bunchgrass meadows (Figure 4) or bunchgrass meadows with *Symphoricarpos albus* or native *Rosa* sp. (Figure 2).

Most of the associated forbs found in the bunchgrass meadows were senescent by September 20. A few were green, including *Lithospermum ruderale* (stoneseed), and *Heuchera* sp. (alumroot). *Geum triflorum* had green leaves, but dry flowerheads, and green leaves of *Penstemon glandulosus* were evident. In some cases, *Hieracium albertinum* and *Solidago missouriensis* were in flower. What appeared to be dried *Arnica sororia*, *Erigeron corymbosus*, *Frasera albicaulis*, *Besseyia rubra* and *Calochortus macrocarpus* var. *maculosus* were present, but could be identified with more confidence in spring or summer. *Artemisia ludoviciana* and some *Rosa* leaves were greenish, but most of the *Symphoricarpos albus* leaves had fallen.

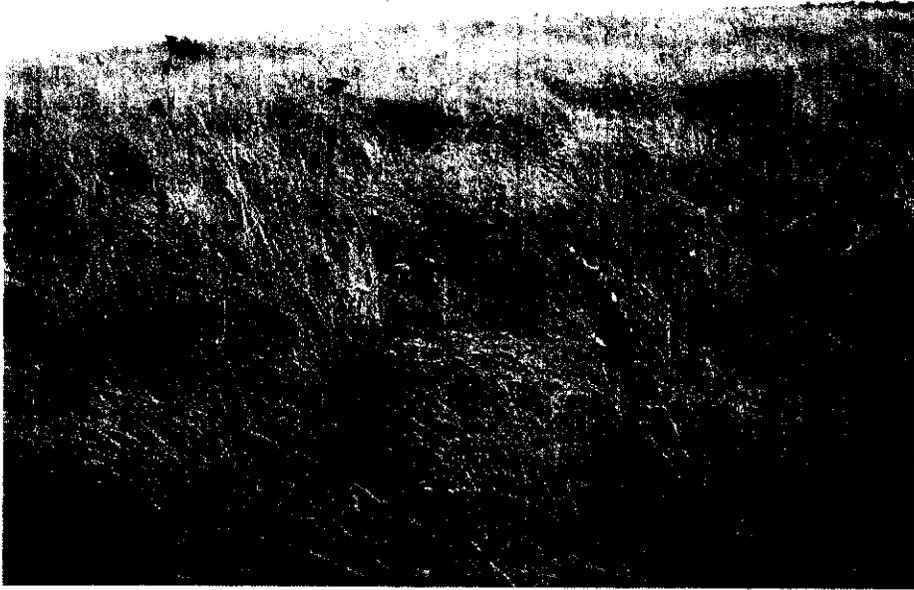


Figure 1. Senescent *Silene spaldingii* plants.



Figure 2. Partially green *Silene spaldingii* in bunchgrass/*Symphoricarpos albus* habitat.

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Figure 3. Flowering *Silene spaldingii* plant. Only four plants that were in flower were observed during this survey; the remainders were in fruit.



Figure 4. Bunchgrass meadow habitat. Orange flagging marks *Silene spaldingii* plants.

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A cursory (one day) survey in Kelly Creek in the Pintler Creek study area revealed no *Silene spaldingii* plants. The Kelly Creek area was more disturbed than the Smoothing Iron area, and there were fewer good-quality grasslands. However, I encountered patches of what appeared to be suitable *Silene spaldingii* habitat, in Kelly Creek and there are reputedly good-quality grasslands in Owl Gulch. Given the likelihood of suitable habitat in other areas of the Pintler Creek area, additional survey work is recommended.

Invasive, non-native species grew near several *Silene spaldingii* plants (Figures 5, 6 and 7). Non-native annual bromes (*Bromus japonicus*, *Bromus brizaeformis* and *Bromus tectorum*) were widespread among the bunchgrasses. Patches of *Onopordum acanthium* (Scotch thistle), *Potentilla recta* (sulfur cinquefoil) and *Cirsium arvense* (Canada thistle) were scattered. *Taeniatherum caput-medusae* (medusahead) had established on a lower slope of Pasture 3. *Sisymbrium altissimum* (Jim Hill mustard) was common in *Bromus tectorum* and *Bromus japonicus* patches. *Poa pratensis* (Kentucky bluegrass) was present in swales and draws.

The CRP pasture on the plateau above Pasture 3 is planted to *Bromus inermis* (smooth brome), which has become established in the native grasslands (Figures 8 and 9). In many places, the rhizomatous grass has spread over the pasture fence line along the border of the CRP pasture into the native bunchgrass meadows. Small *Bromus inermis* patches—often about 1 meter in diameter—occur sporadically on the hillsides among the native bunchgrasses or in the *Symphoricarpos albus* stands.



Figure 5. Northerly-facing hillside (right side of photo) that supports *Silene spaldingii*. The north faces are deeply and closely terraced by animals (terracing visible in upper right of photo). Much of the area is heavily infested with invasive, non-native species (foreground). Pasture 5.

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Figure 6. *Silene spaldingii* plant in foreground. The non-natives *Onopordum acanthium*, *Rumex crispus* (curly dock), *Bromus tectorum* and *Bromus japonicus* are in the background. Pasture 5.

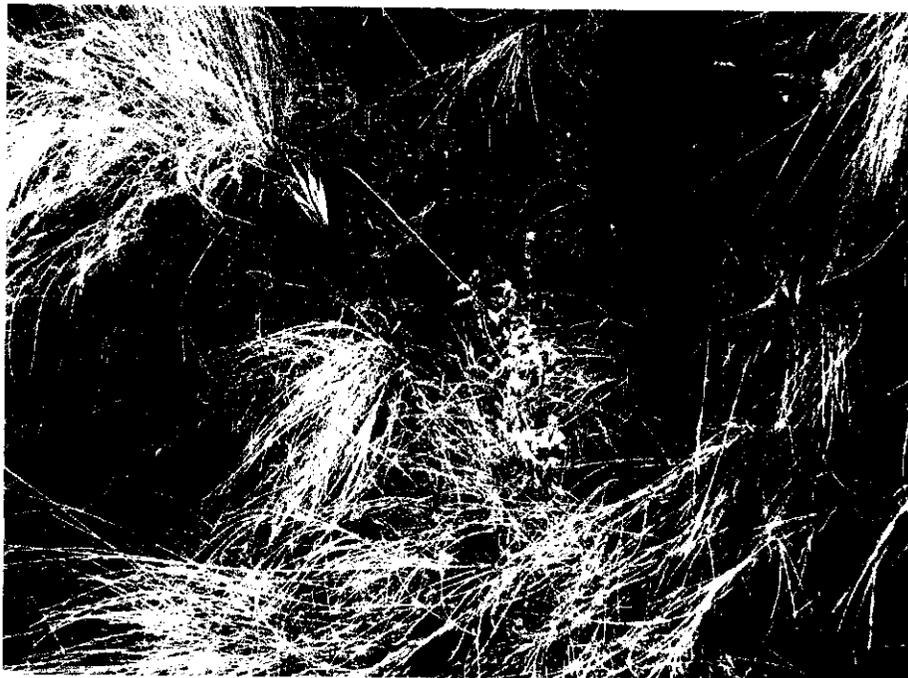


Figure 7. *Silene spaldingii* plant flanked by *Bromus inermis* (yellow-green, wide-leaved grass). Pasture 4.

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Figure 8. *Bromus inermis* (wide-leaved, green grass near center of photo) invading an otherwise high-quality bunchgrass meadow.



Figure 9. Weedy, flat area in Pasture 3. The green grass is *Bromus inermis*, and the tall plant in the foreground is *Onopordum acanthium*. Rhizomatous grasses such as *Bromus inermis* form mats that displace native vegetation.

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More *Silene spaldingii* plants are likely present in the Smoothing Iron study area. The north-facing slopes in the southern portion of Pasture 5 were not surveyed, nor were Pastures 1, 2 and 6. *Silene spaldingii* plants may also be present in the Pintler Creek study area, particularly in Owl Gulch. Further surveys are recommended. Surveys should be conducted in July or July.

LITERATURE CITED

- Hill, J. L., and K. L. Gray. 2004. Conservation Strategy for Spalding's catchfly (*Silene spaldingii* Wats.). Unpublished report for U. S. Fish and Wildlife Service, Boise, Idaho, and Idaho Conservation Data Center, Boise, Idaho. 153 pp. plus appendices.
- NatureServe. 2008. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.0. NatureServe, Arlington, Virginia. Available at <http://www.natureserve.org/explorer>. (Accessed October 20, 2008).
- U. S. Fish and Wildlife Service. 2001. Endangered and threatened wildlife and plants; final rule to list *Silene spaldingii* (Spalding's catchfly) as threatened. Federal Register 66: 51598-51606.

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Appendix 1

DRAFT Survey Guidelines for *Silene spaldingii*
Prepared by John Gamon, Washington Natural Heritage Program
September 10, 2008
Edits by Joe Arnett, September 11 and November 14, 2008
DRAFT – WORK IN PROGRESS – SUBJECT TO CHANGES

These guidelines for surveying for *Silene spaldingii* are being prepared at the request of the Washington Department of Fish and Wildlife (WDFW). They are meant to assist WDFW in their efforts to determine the presence of *Silene spaldingii* on lands managed by WDFW in southeastern Washington. One primary question addressed is how effective surveys conducted in late 2008 might be at detecting *Silene spaldingii*.

Prior to conducting on-the-ground inventories, clear objectives for the survey work should be documented. The survey protocol may be more or less rigorous, depending on the objectives. For example, if the objective is to perform a reconnaissance of the project area in order to get a better handle on the scope of future survey needs, less rigor may be appropriate. However, if land management decisions will be based on the results, greater rigor would likely be appropriate.

Perhaps the primary challenge of conducting surveys for this species in 2008 is the lateness of the season. In the NHP database, survey dates for *Silene spaldingii* occurrences in the Blue Mountains range from July 4 to September 8, with most observations recorded in late August or early September. Plants were in fruit but clearly visible and identifiable at Steptoe Butte in Whitman County this year on September 4, at an elevation of approximately 1,000 ft. This was the optimum time for surveying for this species this year at that location because the *Silene spaldingii* remains green for a period of time when much of the surrounding vegetation has dried to brown. Eventually the *Silene spaldingii* also dries, and then the plants are harder to see but still identifiable until later in the season when the above-ground portion of the plants disintegrate. Records in our database include sightings as late as September 28. Surveyors would need to examine *Silene spaldingii* in the field to verify whether late surveys are reasonable in the target area at this time.

Here is a draft outline of the recommended steps in this survey process:

- First, visit a known site for *Silene spaldingii*. Confirm that you can identify the plant and distinguish it from other vegetation, in particular given that it is already late in the season for this species.
- Second, make sure that all personnel involved in doing survey work visit a known site so that they can develop a search image that matches current conditions.
- Within your project area, focus surveyors' efforts in the most appropriate habitats. The following habitat characteristics should help (the information was obtained from the Recovery Plan for the species). *Silene spaldingii* is known to occur:
 - Between 1,200 to 5,300 feet in elevation
 - On flat areas to slopes as great as 70 percent

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- Primarily in deep loamy soils (fertile soils composed of organic material, clay, sand, and silt) and in more mesic, moist sites such as **northern aspects**, swales, or other small landscape features
- Primarily in grassland and shrub habitats, rarely intermingled within open Ponderosa pine forests
 - Primary grassland habitat types known to support the species include:
 - *Festuca idahoensis* – *Symphoricarpos albus* (snowberry)
 - *Festuca idahoensis* – *Rosa* spp. (rose)
 - *Festuca idahoensis* – *Koeleria cristata* (prairie junegrass)
 - *Festuca idahoensis* – *Pseudoroegneria spicata*
 - Primary shrub habitats include:
 - *Artemisia tridentata* (big sagebrush) – *Festuca idahoensis*
 - Primary forest habitat types include:
 - *Pinus ponderosa* (ponderosa pine) – *Festuca idahoensis*
 - *Pinus ponderosa* – *Symphoricarpos albus*
- To save field time, try to delineate the above attributes on maps prior to entering the field.
- Depending on available resources (including time), consider the following:
 - Mapping the habitats identified above (this will help focus future inventory efforts)
 - Using a floristic survey approach – in which every species encountered is identified. This is quite time consuming and may have questionable value given the lateness in the season.
 - Using a targeted search – looking only for *Silene spaldingii*. This is probably the best approach for this late in the season. However, recording even those species that are recognizable would document the survey and that the area surveyed was appropriate habitat for *Silene spaldingii*.
 - Adapting search patterns to the situation
 - Random meander – surveyor searches areas that appear good based on professional judgment and intuition. This approach is probably the most often used approach for rare plant species. It relies on trained individuals familiar with the species and its habitat preferences.
 - Systematically dividing up the area to be searched – using transects for larger areas. The transects don't need to be permanently marked; they're used simply as a means of systematically surveying the desired area.
 - Adjusting and varying search intensity
 - You might consider allotting more of your survey resources to those habitats (from the list above) in which cows are more likely to spend more time or have a greater impact.

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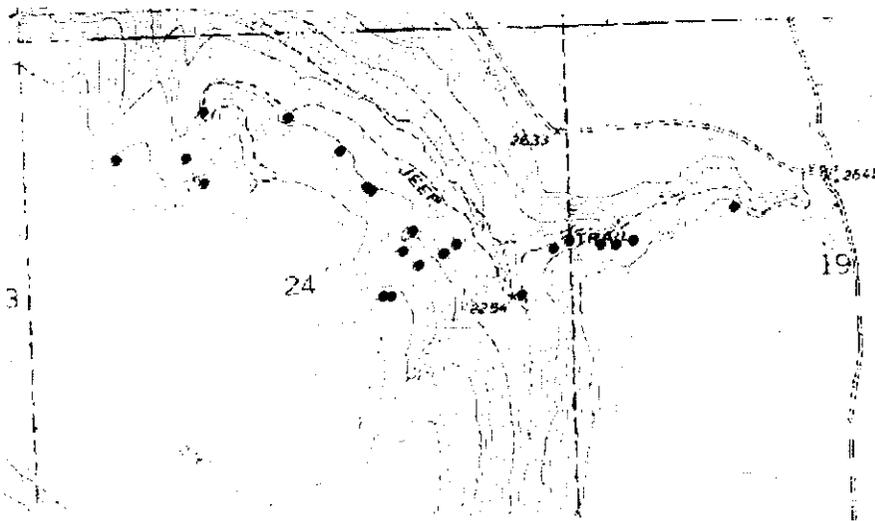
- Report the results of your efforts
- Report occurrences of the target species to the Washington Natural Heritage Program, using the attached sighting form.
- Inform the USFWS of newly discovered occurrences, indicating that you have fully reported them to the NHP.

Appendix 2

Maps.

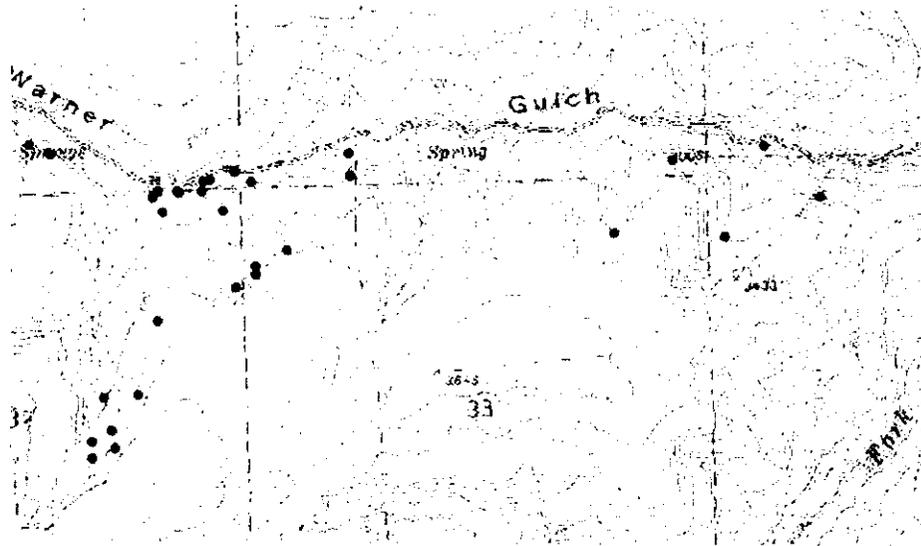


Map 1. Survey route. Smoothing Iron Wildlife Area.

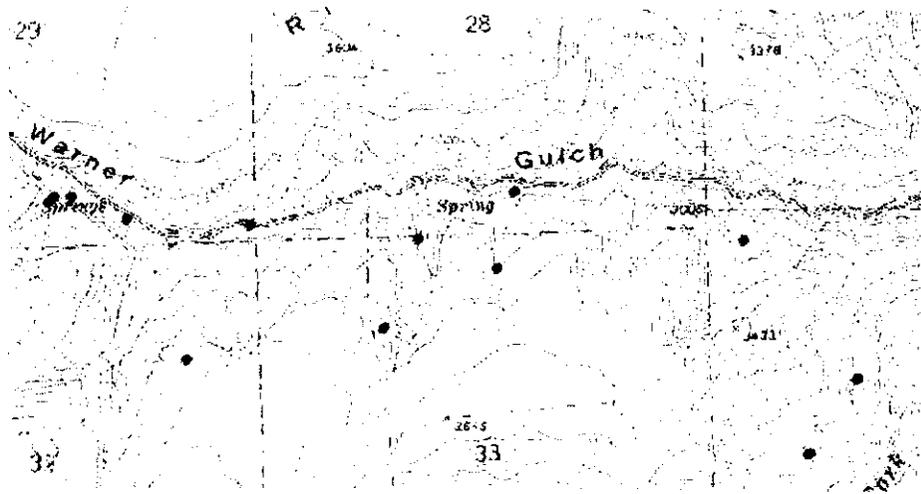


Map 2. Survey route. Pintler Creek Wildlife Area.

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Map 3. *Bromus inermis* locations. Smoothing Iron Wildlife Area.



Map 4. *Onopordum acanthium* locations. Smoothing Iron Wildlife Area.

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Appendix 3

Areas surveyed, 2008.

Unit surveyed	Date(s) visited	Number of survey hours	Species	Abundance	Comments
Pasture 2	Sept. 23	1			 <p>North face rather brushy. There may be grassy meadows further up the hillside.</p>
Pasture 3	Sept. 22, 23	18	<i>Silene spaldingii</i>	~115	Extensive habitat present on northerly faces.
Pasture 4	Sept. 20, 21, 25, 26	27	<i>Silene spaldingii</i>	~518	Extensive habitat present on northerly faces.
Pasture 5	Sept 26	8	<i>Silene spaldingii</i>	~80	 <p>Northerly-facing hillsides (such as the slope with pines) are potential <i>Silene spaldingii</i> habitat.</p>
Kelly Creek	Sept. 24	9			 <p>Light beige vegetation comprises mostly weeds.</p>

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Weintraub,Nancy H - KEC-4

From: DeHerrera,Joe - KEWU-4
Sent: Thursday, August 21, 2008 7:45 AM
To: Weintraub,Nancy H - KEC-4
Subject: Spalding's Silene

Nancy,

The following link is WDFW's 2006 Blue Mt. Mgmt Plan.

See p. 90 for section on Enhance and Protect Endangered, Threatened, and Sensitive Species, p. 92 for Rare Plant Survey. Appendix 8 for list of species (p.166 - Spalding's Silene).

As of 2006, WDFW does not list Spalding's Silene as being present on the Smoothing Iron (Schlee) property.

WDFW's 2007 Pilot Grazing Project Status Report does not list Spalding's Silene as a sensitive plant species on the Smoothing Iron.

Joe

http://wdfw.wa.gov/lands/wildlife_areas/management_plans/pdfs/draft_blue_mountain_plan.pdf

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Weintraub,Nancy H - KEC-4

From: Weintraub,Nancy H - KEC-4
Sent: Friday, December 19, 2008 5:08 PM
To: 'Bob Dice'; Ackley,Sandra J - KEC-4; quanjlq@dfw.wa.gov
Subject: DRAFT Asotin BA

Attachments: Asotin BA121908.doc

Hi everyone, here is my draft. Still needs some work, but if you get a chance to take a look, I would appreciate it. Bob, I've highlighted some questions for you.
I will be on leave until Jan. 5, so I'll check in with you all then.
Happy holidays!



Asotin
1908.doc (130 KB)

Nancy

Nancy H. Weintraub
Fish and Wildlife Environmental Team Lead
Bonneville Power Administration KEC-4
P.O. Box 3621
Portland, OR 97208-3621
Office: 503-230-5373
Fax: 503-230-5699

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Asotin Wildlife Area, Funding of Wildlife Management Activities Bonneville Power Administration

Location: Asotin County, Washington

Contact Person: Nancy Weintraub, BPA
Phone: 503-230-5373
Bob Dice, WDFW
Phone: 509-758-3151

Introduction

The purpose of this biological assessment is to review the proposed funding of wildlife management activities by Bonneville Power Administration on the Asotin Wildlife Area in sufficient detail to determine to what extent the proposed action may affect any of the threatened, endangered, or proposed species listed below. This biological assessment is prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act (16 U.S.C. 1536 (c)).

The species considered in this document are:

Threatened, Endangered, Proposed Threatened or Proposed Endangered Species listed for Asotin County, Washington

Gray wolf (*Canis lupus*) E
Bull trout (*Salvelinus confluentus*) T
Canada lynx (*Lynx canadensis*) T
Spalding's silene (*Silene spaldingii*) T
Ute ladies'-tresses (*Spiranthes diluvialis*) T

Critical Habitat

The action addressed within this biological assessment falls within Critical Habitat for the Columbia River distinct population segment of the bull trout.

Background, Current Management and Direction

The Asotin Creek Wildlife Area was created by the Washington Department of Fish and Wildlife (WDFW) in 1962 and originally contained 2,468 acres. Through a number of purchases and leases, the managed area has grown to over 26,000 acres in fee ownership and 6,000 acres leased from the Washington Department of Natural Resources. In 2003, BPA and the Rocky Mountain Elk Foundation funded the purchase of the 8,500 acre Schlee Ranch by WDFW, which was incorporated into the wildlife area. The ranch is divided into two parcels – the Smoothing Iron unit and the western portion of the George Creek unit (also know as the Lower Schlee and Bickford units). BPA has funded limited

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maintenance and wildlife management activities on these units since October 2005. BPA's funding of the purchase and operations and maintenance activities is partial mitigation for the loss of wildlife habitat caused by the construction and operation of the Federal Columbia River Power System as required under the Northwest Power Act (16 U.S.C. 839 et seq., Section 4.[h][10][A]).

In 2006 WDFW drafted the *Blue Mountains Wildlife Area Complex Wildlife Area Management Plan* (WDFW 2006). This plan provides management direction for several wildlife areas in the Blue Mountain area, including the Asotin Wildlife Area. A management plan update was completed in 2007 (WDFW 2007). Contractual agreements between BPA and WDFW applying to the Smoothing Iron, Lower Schlee, and Bickford units are addressed in Appendix 9 of the 2006 management plan.

Consultation to Date

BPA had previously concluded that the funded activities at Asotin Creek Wildlife Area had no effect on listed species for the reasons detailed below. A plant survey conducted in 2005 (Salstrom and Easterly 2005) found no listed plants in the area. However, in late summer of 2008 several Spalding's silene plants were found and a survey in September found over 700 plants (Gray 2008), prompting the need for consultation.

WDFW is also currently meeting with US Fish and Wildlife Service to discuss impacts to Spalding's silene from their pilot grazing project. The project is evaluating the use of livestock grazing as a habitat management tool. While some of the grazing under this project is taking place on the Smoothing Iron unit, this activity is not funded by BPA and therefore is not addressed in this consultation.

Description of the Proposed Action

The locations of the Smoothing Iron, Lower Schlee, and Bickford units are shown in Figure 1, within the context of the Asotin Wildlife Area. The Lower Schlee/Bickford units are comprised of steep canyons and predominately a shrub/steppe habitat type. The area was traditionally used for livestock production and dryland farming. The land has several problems associated with that type of long-term management - mainly noxious weeds and degraded riparian management zones. Noxious weeds are mainly controlled by chemical measures and application is difficult in the steep terrain.

The Smoothing Iron unit is also comprised of steep canyons, with agricultural fields on top of the ridges. Steep canyons with timbered north-facing slopes are common, while south-facing slopes are usually a shrub/steppe habitat type. Noxious weed problems, boundary fence issues, and facility maintenance are the main issues associated with the Smoothing Iron unit.

The activities funded by BPA and implemented by WDFW include the following:

- Routine maintenance of buildings associated with the Schlee Ranch that are being used by WDFW
- Maintenance and replacement of boundary stock fences

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- Agricultural field restoration and maintenance
- Control of noxious weeds

These actions are ongoing, except that the agricultural field restoration will hopefully be eventually reduced to minor maintenance and control of noxious weeds once the native plants are established. Detailed descriptions of each action follow.

Building maintenance: There are eleven structures on the Smoothing Iron unit associated with the former ranch, and a hay shed on the Bickford unit that require ongoing routine maintenance. This includes winterizing the water systems to protect them from freeze damage, repairing storm damage to roofs and buildings, maintaining doors on the shops and house, and controlling vegetation around the structures to prevent fire danger. Vegetation is controlled by mowing and herbicide use. All activities occur within the existing building and ranch footprints and disturbed areas that would not provide habitat for any listed species. The ranch is historic and was evaluated as being eligible to the National Register of Historic Places. No new construction or ground disturbance is anticipated.

Fence maintenance and repair: Approximately 10 miles of the existing boundary stock fence and internal fences are walked each year in each of the three units to check for damaged or down sections and are repaired as needed to exclude trespass livestock. Downed sections of fence are repaired and set back in place; broken wires are mended; rusty and defective barbed wire is replaced; and rotting or damaged rock jacks and wooden and metal poles are replaced as needed. Light pickup trucks and 4-wheel all-terrain vehicles are used to transport materials when needed.

Agricultural field restoration and maintenance: The former rancher has decided to no longer farm nearly 600 acres of agricultural fields on the Smoothing Iron unit. These fields, located on the relatively flat upland ridge tops, were being sharecropped by Mr. Schlee since the land transfer, but high fuel costs, escalating input costs, and difficulty in maintaining access to the ridge tops with large equipment have made farming these fields uneconomical. WDFW began converting these fields from wheat stubble to a seed bed in spring of 2008 with the application of Roundup herbicide to prevent cheatgrass and other weeds from germinating and setting seed. They began disking and cultivating the fields soon after the herbicide was applied. In fall of 2008 they began seeding 500 acres of the fields to native grasses. The remaining 100 acres will be seeded to a forage crop that will be highly attractive to deer and elk with the objective of retaining big game on Smoothing Iron Ridge.

The new grass will require maintenance to ensure establishment for the next several years. It will be mowed and/or herbicide will be applied to control emerging broadleaf weeds in the spring and summer. The forage crop will be plowed and seeded annually?? with funding from sources other than BPA.

Noxious weed control: All three units require ongoing noxious weed control. Infestations of noxious weeds are prioritized and treated by means of spraying with

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herbicide, mowing, biocontrol agents?, or hand pulling. Weed concentrations are prioritized for treatment as follows:

1. "A" list weed species as defined by the Asotin County Weed Board (ACWB)
2. critical wildlife habitats or plant communities
3. riparian cover types
4. trails/access sites/roads
5. neighboring boundaries

All other weeds are treated as funds and opportunity allow. Cooperative control projects are continually sought with the ACWB, neighboring landowners, and other cooperating government agencies. Herbicides are applied through the use of backpack sprayers, ATV mounted boom sprayers, and a pickup mounted tanks with hand gun sprayers. Weedar 64 (2,4 D), glyphosate, Curtail (chlorypyrid) [Bob I don't see that you have used these in the last couple of years – they are in your SOW but not on your proposed 2008 herbicide use form??], Tordon 22k (picloram), dicamba, and metsulfuron methyl herbicides are used to control noxious weeds such as *Onopordum acanthium* (scotch thistle), *Centaurea solstitialis* (yellow starthistle), Mediterranean sage (class A), *Potentilla recta* (sulfur cinquefoil), houndstongue, *Linaria dalmatica* (dalmation toadflax), *Chondrilla juncea* (rush skeletonweed), and *Euphorbia esula* (leafy spurge).

BPA has a programmatic biological opinion from the National Marine Fisheries Service (NMFS) for its habitat improvement programs, the Habitat Improvement Program Biological Opinion, or HIP BO (NMFS 2008). One of the activities covered by the biological opinion is herbicide use. All herbicide use funded by BPA is required to conform with the conservation measures and terms and conditions imposed by this biological opinion. See Appendix A for a description of these measures. Appendix B documents the BPA-funded proposed herbicide use at Asotin Wildlife Area for 2009 and the actual herbicide use in 2008.

The HIP BO measures were developed to protect listed salmonid species from impacts due to herbicide use. In addition to these measures, BPA and WDFW propose the following conservation measures to protect the listed plant Spalding's silene:

- Continue to conduct surveys for Spalding's silene in all suitable habitats where herbicides are to be used, except in drought years.
- Herbicide applications will be limited to the October through April time period, when Spalding's silene is dormant. ??Bob is this practical?
- If spraying near known populations of silene, locate individual plants and observe the following buffers:
 - 50 feet for boom spraying
 - Wiping and wicking are the only application techniques that will be used within 50 feet of silene plants
 - Manual control (hand pulling or mowing; no herbicide use) is the only control technique that will be used within one foot of silene plants.
- Herbicide use in the vicinity of known populations of silene will be limited to conditions where the wind speed is less than 5 mph.

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- Use herbicides that break down quickly, not picloram ??Bob you are using this now, can you find an acceptable substitute for the silene habitat areas? Persistent herbicides such as picloram will not be used within 50 feet of existing known silene plants. Herbicides that do not affect members of the Caryophyllaceae family will be used when possible.
- Herbicide use not related to controlling noxious weeds will be avoided within a one-mile radius of silene populations.

Action Area

[Describe all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. Use the effects analysis below as the reasoning for your delineation of this area.]

Species Accounts and Status of the Species in the Action Area

Gray wolf

The gray wolf was listed as endangered in 1978. In 1930, it was believed that breeding populations of wolves in Washington were extinct because of fur trading pressure in the 1800's followed by the establishment of bounties on all predators in 1871 in the Washington Territory. Recent observations indicate that wolves exist in Washington, likely in small numbers, and mostly as individuals. Several family units have been documented, indicating that some level of recolonization has occurred recently. Wolves have been considered to have been extirpated from Oregon since the last animal was bountied in 1946. However, single animals from the experimental population in Idaho have been sighted in northeastern Oregon within the last several years (including a radio-collared animal) (USFS 2003). The current status of the gray wolf in Washington is endangered. The delisting of the Northern Rocky Mountain distinct population segment, which included the eastern one-third of Washington, was struck down by court order in October, 2008. USFWS re-opened a comment period on the delisting, which closed November 28, 2008 (USFWS 2008).

Range: The probable range of gray wolves in Washington is in the Cascade Mountains and northeastern Washington. In northeastern Washington, the majority of the reported wolf activity is in the eastern half of the Colville National Forest and Colville Indian Reservation and also adjacent private and public lands (USFS 2003). A wolf pack (2 adults and 6 pups) was discovered near Twisp, Washington, in July 2008. Their territory is outside the proposed NRM DPS border. Genetic analysis indicated the two adults did not come from the wolf population in the NRM DPS. Instead, they likely originated from south central British Columbia. The pack is being monitored via radio telemetry by the Washington Department of Fish and Wildlife (USFWS 2008).

There are no records of wolf sightings within 10 miles of the Smoothing Iron, Bickford, or Lower Schlee units in the Washington Natural History Database.

Habitat Requirements: The habitat of the gray wolf is identified as open tundra and forests. However, gray wolves can use a variety of habitats as long as cover and a food supply are

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available. They tend to focus on areas that are free from human disturbance and harassment, have low road densities and which support large numbers of prey species (deer, elk, goat, moose, and beaver). While they may consume some small mammals, most of their diet consists of ungulates (USFS 2003).

Wolves follow the movements of ungulate herds (deer, elk, moose) across openings and through forested areas. Wolves have territories ranging from 70 to 800 square miles. Wolves generally live in packs made up of 2 to 12 or more family members and individuals, lead by a dominant male and female. Denning by wolves generally occurs between April and June. Den sites often have forested cover nearby and are distant from human activity. The pups remain at the den site for the first 6 to 8 weeks, and then they move to a rendezvous site until they are large enough to accompany the adults on a hunt. Once the pups are large enough to go hunting, the pack travels throughout its territory (USFS 2003).

Bull trout

Bull trout are divided into five distinct population segments (DPSs). All five DPSs are listed as threatened, including the Columbia River and Klamath River DPSs (June 10, 1998) where the Asotin Wildlife Area is located. Bull trout are threatened by habitat degradation and fragmentation from past and ongoing land management activities such as mining, road construction and maintenance, timber harvest, hydropower, water diversions/withdrawals, agriculture, and grazing. Bull trout are also threatened by interactions with introduced nonnative fish such as brook trout (*S. fontinalis*) and lake trout (*S. namaycush*).

Bull trout are estimated to have occupied about 60% of the Columbia River Basin and presently occur in 45% of the estimated historical range. Bull trout have declined in overall range and numbers of fish. Though still widespread, there have been numerous local extirpations reported throughout the Columbia River Basin. Although some strongholds still exist, bull trout generally occur as isolated subpopulations in headwater lakes or tributaries where migratory fish have been lost.

Range: Bull trout, members of the family Salmonidae, are native to the Pacific Northwest and western Canada. The headwaters of Asotin Creek originate in the Blue Mountains and flow east into the Snake River at Asotin, WA. Its primary tributaries consist of Pintler, George, Charley, South Fork Asotin, North Fork Asotin, Lick, Middle Branch North Fork Asotin, and South Fork of North Fork Asotin Creeks. Bull trout have only been documented in Charley, North Fork, Middle Branch, and South Fork of North Fork Asotin Creeks. Based on geographic distribution, these are considered to be distinct wild stocks of fluvial and resident bull trout. Adfluvial bull trout were probably present in the lower three miles of Asotin Creek prior to human settlement of the lower Asotin Creek valley and the resulting water diversions and withdrawals; there is a remote possibility that they may still be present in the lower sections. Charley Creek is located one mile downstream from the mouth of the North Fork Asotin Creek. The bull trout here are isolated from others in the basin due to physical and

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temperature barriers. These were likely contiguous with other fluvial and perhaps adfluvial forms that probably freely mixed prior to the creation of human-caused obstacles. The resident forms may be distinct in the sub-basin. A survey conducted by Forest Service in 1993 documented six bull trout, while a 1994 survey conducted by Washington Department of Fish & Wildlife found no bull trout.

North Fork Asotin Creek bull trout were historically distributed throughout the drainage. Up until the mid-1970's, they were found in the headwaters and also in Cougar Creek. Surveys conducted by the Washington Department of Fish and Wildlife during 1990, 1991, and 1992 documented their presence in the lower four miles of the creek. Fish were observed, but no spawning was confirmed. Electrofishing produced fish in the six-to-ten-inch range, indicating that they were probably resident life history forms. Surveys conducted by the Forest Service in 1992, 1995, and 1996 also documented the presence of bull trout.

Surveys conducted by the Forest Service in 1993 of the Middle Branch of the North Fork Asotin Creek documented the presence of eight bull trout in the lower 2.5 miles of the creek. The fish observed were most likely resident life history forms.

The Forest Service conducted a survey of the lower 1.5 miles of the South Fork of the North Fork Asotin Creek in 1993. Seven bull trout were observed. They were similar in size to those found in the middle branch and are thought to be resident forms. (Bull trout excerpt taken from Del Groat's USDA Forest Service Biological Evaluation for Threatened, Endangered, and Sensitive Aquatic Species in Umatilla National Forest, Pomeroy Ranger District, Upper Charley Creek EIS 1999 as quoted in Asotin Creek 2001 BA from BPA files.)

No use of the streams in the Smoothing Iron, Bickford, or Lower Schlee units by bull trout is shown on the Streamnet database maps. However, George Creek, which flows through the Bickford and Lower Schlee units, is designated critical habitat (Unit 23).

Habitat Requirements: Bull trout exhibit resident and migratory life history strategies through much of their current range. Resident bull trout complete their life cycle in tributary streams in which they spawn and rear. Migratory bull trout spawn in tributary streams where juvenile fish rear from 1 to 4 years before migrating to either a lake (adfluvial), river (fluvial), or in certain coastal areas, to saltwater (anadromous), where maturity is reached in one of the three habitats.

Bull trout have relatively specific habitat requirements compared to other salmonids. Habitat components that appear to influence bull trout distribution and abundance include water temperature, cover, channel form and stability, valley form, spawning and rearing substrates, and migratory corridors. Watersheds must have specific physical characteristics to provide the necessary habitat requirements for bull trout to successfully spawn and rear; however, the characteristics are not necessarily ubiquitous throughout watersheds in which bull trout occur. Because bull trout exhibit a patchy distribution,

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even in pristine habitats, they should not be expected to simultaneously occupy all available habitats.

Bull trout are found primarily in colder streams, although individual fish are often found in larger river systems. Water temperatures above 15°C (59°F) limit bull trout distribution, which partially explains their generally patchy distribution within a watershed. Spawning areas are often associated with coldwater springs, groundwater infiltration, and the coldest streams in a given watershed.

All life history stages of bull trout are closely associated with complex forms of cover, including large woody debris, undercut banks, boulders, and pools. Bull trout have been observed overwintering in deep beaver ponds or pools containing complex large woody debris in the Bitterroot River drainage in Montana, suggesting that suitable winter habitat may be more restrictive than summer habitat. Maintaining bull trout populations requires high stream channel stability and relatively stable stream flows. Juvenile and adult bull trout frequently inhabit areas with complex cover associated with side channels, stream margins, and pools. These areas are sensitive to activities that directly or indirectly affect stream channel stability and alter natural flow patterns. For example, altered streamflow in the fall may disrupt bull trout during the spawning period, and channel instability may decrease survival of eggs and young juveniles in the gravel from winter through spring. Preferred spawning habitat consists of low-gradient streams with loose, clean gravel and water temperatures of 5°C to 9°C (41°F to 48°F) in late summer to early fall.

Increases in fine sediments have been found to be related to reduced egg survival and emergence. High juvenile densities were observed in Swan River, Montana, and tributaries with diverse cobble substrate and low percentages of fine sediments. Juvenile bull trout in four streams in central Washington occupied slow-moving water, less than 0.5 meter per second (1.6 feet per second), over a variety of sand to boulder-size substrates.

The size and age of maturity for bull trout is variable depending upon life history strategy. Growth of resident fish is generally slower than migratory fish, and resident fish tend to be smaller at maturity and less fecund. Individuals normally reach sexual maturity in 4 to seven years and are known to live as long as 12 years. Repeat and alternate-year spawning has been reported, although repeat spawning frequency and post-spawning mortality are not well known. Bull trout typically spawn from August to November during periods of decreasing water temperatures. However, adult migratory bull trout frequently begin spawning migrations as early as April and have been known to move upstream as far as 250 kilometers (km) (155 miles [mi]) to reach spawning grounds. In the Blackfoot River, Montana, bull trout migrate to spawning areas in response to increasing temperatures. Temperatures during spawning generally range from 4°C to 10°C (39°F to 51°F), with redds often constructed in stream reaches fed by springs or near other sources of cold groundwater. Depending on water temperature, incubation is normally 100 to 145 days. After hatching, juveniles remain in the substrate. Time from egg deposition to emergence may surpass 200 days. Fry normally emerge from early April through May depending upon water temperatures and increasing streamflows.

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Growth varies depending upon life history strategy. Resident adults range from 150 to 300 millimeters (mm) (6 to 12 inches [in.]) total length, and migratory adults commonly reach 600 mm (24 in.) or more.

Bull trout are opportunistic feeders, with food habits primarily a function of size and life history strategy. Resident and juvenile migratory bull trout prey on terrestrial and aquatic insects, macro zooplankton, amphipods, mysids, crayfish, and small fish. Adult migratory bull trout are primarily piscivorous and known to feed on various trout (*Salmo* spp.), salmon (*Oncorhynchus* spp.), whitefish (*Prosopium* spp.), yellow perch (*Perca flavescens*), and sculpin (*Cottus* spp.).

Canada lynx from

<http://www.blm.gov/or/esa/reports/examples/Fish%20Passage%20Restoration%20BA.pdf>

The Canada lynx was listed as threatened in the contiguous United States on March 24, 2000. In the final rule, the Fish and Wildlife Service concluded that the single factor threatening the population was the inadequacy of existing regulatory mechanisms, specifically the lack of guidance for conservation of lynx in National Forest Land and Resource Management Plans and the BLM Land Use Plans (USFS 2003).

Range: Historically and currently, lynx were and are present in Alaska and Canada from the Yukon and Northwest Territories east to Nova Scotia and New Brunswick and south into the continental U.S. Records document lynx occurrence in 24 states, including Washington. Lynx habitat has been identified on the nearby Wallowa-Whitman National Forest. The U.S. Fish and Wildlife Service has designated the Blue Mountains as non-occupied, peripheral habitat (May, 2006). There are no lynx sightings within 10 miles of the Smoothing Iron, Bickford, or Lower Schlee units in the Washington Natural History Database.

Habitat Requirements: Canada lynx are associated with conifer forests that are southern extensions of northern boreal forest, a pattern that conforms to our biological understanding of lynx habitat. Lynx habitat quality is believed to be lower in the southern periphery of its range, because landscapes are more heterogeneous in terms of topography, climate and vegetation. In Washington, lynx habitat is correlated very closely with subalpine fir vegetation types (USFS, 2003).

Canada lynx are specialized predators and their distribution coincides with the snowshoe hare. Studies in the southern portion of lynx range documented starvation as a primary cause of adult lynx mortality. The same studies reported low kitten survival. Two vegetation conditions; young, dense conifer and older, multi-storied stands, are very important to lynx because they support conditions suitable to higher densities of snowshoe hare (USFS, 2003).

Snowshoe hare habitat is characterized by forests that provide dense, low horizontal cover. Snowshoe hares appear to reach their highest densities in dense, early successional forests with woody seedlings and shrubs, which provide food and cover, and escape from predators

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and extreme weather. Lynx usually select habitats with an abundance of snowshoe hares for foraging. They use the abundant cover to stalk and lie in wait for hares (USFS, 2003).

Lynx require late-successional forests that contain cover for kittens (especially deadfalls) and for den sites. Breeding occurs in late March to early April, and young are born in late May or early June. Lynx populations in Alaska and Canada exhibit a cyclic oscillation in population with lynx lagging several years behind snowshoe hare population trends. This relationship does not appear to exist in the contiguous United States due to lower snowshoe hare populations resulting from patchier habitat and the presence of additional competitors and predators not present in the northern regions (USFS, 2003).

Ute ladies'-tresses

Spiranthes diluvialis was federally listed as threatened in 1992 when it was only known from Colorado, Utah, and Nevada. However, since that time, it has been found in Wyoming, Montana, Nebraska, Idaho and Washington. The species is located in Okanogan and Chelan Counties in Washington State, but has not been documented on federal land, although it is suspected to occur on the Okanogan-Wenatchee NF, and also on the Wallowa-Whitman NF in Oregon. The main threat factors cited for listing were loss and modification of habitat and the hydrological conditions of existing and potential habitat. The orchid's pattern of distribution in small, scattered groups, restricted habitat, and low reproductive rate under natural conditions make it vulnerable to both natural and human-caused disturbances. A draft recovery plan was issued in 1995 (USFWS 1995).

Habitat Requirements. Ute ladies'-tresses is a perennial, terrestrial orchid that is endemic to moist soils in mesic or wet meadows near springs, lakes, or perennial streams (USFWS 1995). The species is found in a variety of soil types ranging from fine silt/sand to gravels and cobbles, and has also been found in highly organic or peaty soils. The species has not been found in heavy or tight clay soils or in extremely saline or alkaline soils (pH>8.0) (USFWS 1995). It is generally intolerant of shade, preferring open grass and forb-dominated sites.

Populations of Ute ladies'-tresses are found along medium to large stream systems of moderate gradient (not slow and meandering), in broad intermontane valleys associated with wetlands within the sagebrush-steppe and dry woodland zones. Habitat tends to be mesic riparian meadows where the vegetation is relatively open and not overly dense or tall. Apparently, the orchid does not compete well with aggressive clonal plants, nor does it tolerate saturated soils throughout the growing season. The orchid colonizes early successional riparian habitat such as point bars and low lying coarsely textured substrate. Within a floodplain setting, the orchid may be found in a mesic transitional area between dry graminoid (bluegrass [*Poa pratensis*]) meadows and sedge dominated wet areas. Soils remain moist in the rooting zone throughout the growing season and are often alkaline. Redtop (*Agrostis stolonifera*) is a common associate within these mesic zones.

Vegetation surveys conducted by SEE Botanical Consulting in 2005 (SEE 2005) and Karen Gray in 2008 (Gray 2008) failed to detect Ute ladies'-tresses in the Smoothing Iron, Bickford, and Lower Schlee units.

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Spalding's silene

Spalding's silene (also known as Spalding's catchfly) was listed as threatened in 2001, and at the time of listing, it was known from a total of 52 populations in the United States and British Columbia, Canada. Seven of these populations occurred in Oregon (Wallowa County) and 28 in Washington (Asotin, Lincoln, Spokane, and Whitman Counties). Much of the remaining habitat occupied by *Silene spaldingii* is fragmented. Additional threats are habitat destruction and further fragmentation by agricultural and urban development, trampling by native herbivores and livestock, herbicide treatment, and competition from nonnative plants species (USFS 2003). A final recovery plan for Spalding's silene was issued by the U.S. Fish and Wildlife Service in 2007 (USFWS, 2007)

Habitat Requirements. Spalding's catchfly is primarily restricted to mesic prairie or steppe vegetation of the Palouse region, which is considered a subset of the Pacific Northwest bunchgrass habitat type. More than 98% of the original Palouse prairie habitat type has been lost or modified. The species is also found in canyon grassland habitat dominated by the same bunchgrass species as Palouse prairie, but the two habitat types differ in their overall plant species composition as well as topography. Canyon grasslands occur in steep, highly dissected canyon systems whereas Palouse grasslands generally occur on gently rolling plateaus (USFS 2003).

Over 700 Spalding's catchfly plants were found on the Smoothing Iron unit in September 2008 in canyon grassland habitat. The Bickford/Lower Schlee units were not surveyed at this time. A previous survey by SEE Botanical Consulting (SEE 2005) of both the Smoothing Iron and the Bickford/Lower Schlee (also called the Rockpile) units did not identify any Spalding's catchfly; however they did not survey the area where the plants were found in 2008. GPS coordinates for the plant locations were submitted to Washington Department of Fish and Wildlife in Olympia, Washington (Gray, 2008).

There are only 10 populations of *Silene spaldingii* that may be considered relatively large, each with over 500 individuals (USFWS 2007). The largest population with over 10,000 plants is at The Nature Conservancy's Dancing Prairie Preserve in Montana, followed by Garden Creek, Idaho, (managed by The Nature Conservancy and the Bureau of Land Management) with approximately 4,000 plants. The other 8 large populations range from 500 plants at Coal Creek, Washington, to some 2,385 individuals at Crow Creek on the Wallowa-Whitman National Forest in Oregon. Approximately 78 percent of the total known individuals of *S. spaldingii* are found within these few large populations. Of the 99 known *S. spaldingii* populations, two-thirds (66 populations, or 67 percent) are small populations, each made up of fewer than 100 individuals (USFWS 2007), so this Smoothing Iron population of over 700 individual plants is significant.

Life History: *Silene spaldingii* is an herbaceous perennial, emerging in spring and dying back to below ground level in the fall. Typically *S. spaldingii* blooms from mid-July through August, but it can bloom into September. Individuals may regularly reach an age of at least 15 to 20 years. However, it is hypothesized some individuals may live up to 30

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years of age or longer. Seedlings generally sprout in spring, form rosettes the first year, and occasionally flower the second year, but generally flowering does not occur until during or after the third season. Adult plants emerge in spring, usually May, as either a stemmed plant, a rosette, or occasionally as a plant with both rosette(s) and stem(s). Stemmed plants may remain vegetative or may become reproductive in July or August. Plants senesce or wither in fall (September or October), reappearing the next spring (USFWS 2007).

A demographic study in Montana found *Silene spaldingii* exhibits prolonged or summer dormancy; that is, plants can remain below the ground, without leaves, for up to 6 years when conditions are unfavorable. Prolonged dormancy of *Silene spaldingii* can make population estimates and monitoring difficult. In one demography study in Montana, dormancy varied from a yearly low of 11 percent of individuals dormant to a high of 74 percent. Long-term monitoring is necessary to accurately assess population trends of *S. spaldingii*. Due to this ability to go dormant, population estimates of *S. spaldingii*, if based on visible plants, will always be lower than the actual population size (USFWS 2007).

Silene spaldingii reproduces only by seed, with no means of vegetative reproduction (spread by vegetative growth). The species is partially self-compatible, meaning the pollen is capable of fertilizing the female reproductive structures on the same plant. Flowers of *S. spaldingii* contain both male (stamen) and female (pistil) parts. However, the male parts mature, shed pollen, and wither prior to the female parts of the same flower becoming receptive. This reduces the chances of self-pollination within an individual flower, but still allows for pollination between different flowers on the same plant (USFWS 2007).

Effects

Gray wolf

Wolves are wide-ranging carnivores that may pass through the project area. Individual gray wolves have been confirmed both south of Asotin County in the Blue Mountains, and north in the Pend Orielle valley, but currently no wolves are known to occur near the project area. There are no records of wolf sightings within 10 miles of the Smoothing Iron, Bickford, or Lower Schlee units in the Washington Natural History Database. There are currently no known denning or rendezvous sites near this project.

Elk are present in the Asotin Wildlife Area, and it is possible that, as gray wolf populations recover, wolves will migrate through the area or use it for hunting. However, the amount of forested cover in the Smoothing Iron, Bickford, and Lower Schlee units is scant, and it is unlikely that wolves would den here or use it for a rendezvous site. Routine maintenance of the existing buildings and fences on the wildlife units would not affect wolves, as they would be very likely to avoid these areas, and the fence design would not hinder the movements of wolves. Restoration and maintenance of the

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agricultural fields would possibly benefit wolves in that it would expand habitat for them and their prey species, elk.

The effects of the use of herbicides to control noxious weeds and assist in the restoration of the agricultural fields in the wildlife units on wolves could include toxicity effects and changes to habitat. The list of herbicides and amounts used, and application methods in the Smoothing Iron, Bickford, and Lower Schlee units in 2007 are shown in Table 1.

Regarding possibly toxicity effects, Shawn Bautista of the Forest Service has evaluated effects of herbicide use on wildlife in the Pacific Northwest, including the herbicides being used at Asotin (2,4 D, picloram, dicamba, and metsulfuron methyl. She reviewed the human health and ecological risk assessments from SERA (REF). She reported that of these four herbicides, metsulfuron methyl did not exceed thresholds of concern for birds or mammals; and picloram had only minor concerns. Dicamba is expected to cause adverse effects to reproduction and substantially exceeds thresholds at high rates of application. 2,4 D is of the highest concern. It exceeded thresholds in more scenarios than any of the 12 herbicides evaluated, and can be expected to affect internal organs of herbivores at typical application rates. At high rates, mortality can occur to large mammals (Bautista, 2006).

However, effects are the result of both toxicity and exposure to the herbicides. The herbicides are targeted to the noxious weed locations, and are hand controlled with no widespread broadcast or aerial application involved. The minimum amounts needed to control noxious weeds are used. If and when wolves use the wildlife area, they would probably not spend enough time in the areas being treated for noxious weeds to have significant long-term exposure to the herbicides. Control of the noxious weeds will allow long-range restoration of natural habitats that could benefit wolves.

Bull Trout

Effects to bull trout would result from ground disturbing activities that can result in erosion and sedimentation in streams, and possible toxicity from exposure to herbicides. It is highly unlikely that building and fence maintenance activities at the Asotin units would affect bull trout. This work involves very little to no ground disturbance. None of the buildings are located in bull trout habitat and only a few of the fences cross it.

The conversion of agricultural fields to native habitat is taking place on the flat uplands, well removed from bull trout or riparian habitat, and only on the Smoothing Iron unit, where there is no designated critical habitat. While some erosion and sedimentation may result from the plowing of the fields, it will not exceed the normal levels associated with the ongoing farming activities that occurred historically on the ranch prior to its purchase by WDFW. Conversely, the conversion will result in long-term curtailment of the annual plowing, and stabilization of the soils with native grasses and shrubs.

The use of herbicides to control noxious weeds probably presents the highest potential effect to bull trout of any of the activities. BPA has consulted with the National Marine

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Fisheries Service on the effects of the use of herbicides to control noxious weeds on listed salmon and steelhead in its Habitat Improvement Program Biological Assessment and Biological Opinion (ref). This consultation addressed toxicity and other effects of herbicide use in upland and riparian areas. Since bull trout are also salmonids, BPA believes that the potential effects to bull trout are similar to the effects evaluated for salmon and steelhead. WDFW complies with all conservation measures and terms and conditions of the HIP BO in using herbicides on the Asotin wildlife units. In addition, none of the WDFW herbicide use at the Asotin wildlife units occurs in riparian areas, and no riparian habitat, including the listed critical habitat on George Creek, is affected by herbicide use. [correct, Bob??] The herbicides used have been selected for their rapid breakdown and properties that will minimize the potential for their migration into water. Given this and the fact that bull trout are not known to use the streams in the wildlife units, it is highly unlikely they would encounter any of the herbicides.

Canada lynx

The Asotin wildlife units do not provide habitat for Canada lynx. The late-successional subalpine fir vegetation types they require are not present. The nearby Blue Mountains are considered to be non-occupied peripheral habitat. Therefore, it is highly unlikely that lynx would occur in the area.

Ute Ladies'-Tresses

It is highly unlikely that Ute Ladies'-Tresses are present at or anywhere near the Asotin Wildlife Area. The only known populations in Washington are located on the west side of the Cascades in Okanogan and Chelan counties. Research by SEE Botanical Consulting did not identify it as a plant known from adjacent physiographic provinces with potential to occur in the study area. Two botanical surveys have been done in the Smoothing Iron and Bickford/Lower Schlee units (referred to in the SEE report as the Rockpile Unit); while they were focused on Spalding's silene, they did not find any Ute Ladies'-Tresses. The habitat type of medium to large stream systems of moderate gradient in broad intermontane valleys is not present in either unit.

Spalding's silene

Effects to Spalding's silene from the BPA-funded activities at the Asotin units could occur from trampling due to walking or driving over populations or individual plants, ground-disturbing activities, and toxicity from exposure to herbicides. It is highly unlikely that building maintenance activities would affect the silene. None of the populations were found near any of the outbuildings, and there is no suitable habitat present near them.

Fence repair and maintenance activities could affect individual silene plants by trampling, as the WDFW staff access the fences by foot, ATV, or pickup truck. However, this would not result in any long-term ground disturbance unless the plants are found immediately adjacent to where a fence post would have to be replaced. These effects

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could be mitigated, however, by training the WDFW staff to recognize and avoid *S. spaldingii* plants, known locations, and areas of high probability of their presence.

The agricultural field restoration work will result in ground disturbance, however it is occurring in fields on the ridgetops that have been cultivated for many years and any silene populations that were once present there are most likely extirpated. However, by restoring native species in these agricultural fields it is possible that these former Palouse prairie habitats could be restored and could again become suitable habitat for *S. spaldingii*.

The activity that could most affect *S. spaldingii* is the noxious weed control using herbicides. Nonnative plant invasions have been identified by numerous individuals working with *S. spaldingii* as one, if not the largest, of the threats facing the species and its habitat (USFWS 2003). Annual invasive nonnative grasses co-occur with *Silene spaldingii* at most populations and pose a threat to the species in most locations.

The annual invasive grasses are most commonly represented by *Bromus japonicus* (Japanese brome), *Bromus secalinus* (cheat), *Bromus tectorum* (cheatgrass), and *Ventenata dubia* (ventenata). Gray (2008) found that invasive, non-native species grow near several of the *S. spaldingii* plants she found. Non-native annual bromes (*Bromus japonicus*, *Bromus brizaeformis* and *Bromus tectorum*) were widespread among the bunchgrasses. Patches of *Onopordum acanthium* (Scotch thistle), *Potentilla recta* (sulfur cinquefoil) and *Cirsium arvense* (Canada thistle) were scattered. *Taeniatherum caput-medusae* (medusahead) is established on a lower slope of Pasture 3 (see Fig. ? for pasture locations). *Sisymbrium altissimum* (Jim Hill mustard) is common in *Bromus tectorum* and *Bromus japonicus* patches. *Poa pratensis* (Kentucky bluegrass) is present in swales and draws. The CRP pasture on the plateau above Pasture 3 is planted to *Bromus inermis* (smooth brome), which has spread to the native grasslands.

Rhizomatous invasive nonnative plants, because of their deep and extensive root systems, are the most difficult invasive nonnative plants to remove from *Silene spaldingii* habitat, often requiring persistent herbicides for control. Persistent herbicides, such as picloram products, remain in the soil longer where they may be transported and affect non-target plant species, such as *S. spaldingii*. Co-occurring rhizomatous species being controlled in the Asotin wildlife units include *Chondrilla juncea* (rush skeletonweed), *Cirsium arvense* (Canada thistle), *Euphorbia esula* (leafy spurge), and *Linaria dalmatica* (Dalmatian toadflax) (USFWS 2008).

Some of these invasive nonnative plants can invade and displace native plant communities in a relatively short period of time. For example, at Garden Creek Ranch in Idaho, *Centaurea solstitialis* spread from approximately 60 hectares (150 acres) in 1987 to 810 hectares (2,000 acres) in 1998. *Centaurea solstitialis* is found in the vicinity of all *Silene spaldingii* populations in Idaho, and at the Asotin units. This aggressive and invasive nonnative plant can form almost complete monocultures, invading and outcompeting native species. Even small areas that experience soil disturbance are almost immediately colonized by *Centaurea solstitialis* or other invasive nonnative winter

annuals. A roadside *S. spaldingii* site in Idaho (Lawyer's Creek) was apparently extirpated as a result of the disturbance caused by highway construction in 1990 and the subsequent invasion of *Centaurea solstitialis* (USFWS 2008).

While the purpose of the noxious weed control is to promote healthy native habitats and reduce the threats discussed above (a beneficial effect), if herbicides are applied to or near *S. spaldingii* plants while they are actively growing, the herbicides may weaken or kill them. Herbicide spraying effects on *S. spaldingii* have not been researched, although it is reasonable to assume that broad spectrum herbicides such as glyphosate, picloram, and 2,4-D that kill most herbaceous perennials will also kill *S. spaldingii* (USFWS 2008).

One of the problems with herbicide use is drift. Herbicides being applied in even moderate winds can drift, causing them to spread over larger than intended areas. However, the sticky hairs blanketing the surface of *S. spaldingii* may help to protect the plant from some herbicide drift, as observed in other hairy plant species (USFWS 2008).

The conservation measures listed in the description of the proposed action section of this BA for noxious weed control will mitigate most if not all of the effects of this activity on *Silene spaldingii*. Ongoing surveys will help identify where the plants are located, so that they can be avoided where possible, and so that appropriate buffers can be established. Limiting herbicide use to the October through April time period will lessen the effects, since the plant will be dormant. Using more conservative application methods such as wiping and wicking or manual control within 50 feet of silene plants will help avoid accidental spraying as well as drift. Drift will be further controlled by limiting application to conditions where the wind speed is less than 5 mph. The use of picloram and other long-lasting herbicides will be re-evaluated and eliminated if possible. If not possible, these herbicides will not be applied within 50 feet of existing known silene plants. Use of herbicides not related to controlling noxious weeds will be controlled to further protect the known populations from accidental spray or drift.

Cumulative Effects (state and private actions)

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological assessment. Future Federal actions that are unrelated to the proposed action are not considered in this section because they will be subject to separate consultation pursuant to section 7 of the Act.

WDFW pilot grazing project

[Present all known and relative effects to population, e.g., fish stocking, fishing, hunting, other recreation, illegal collecting, private wells, some developments, grazing, local trust programs, etc. Include impacts to the listed and proposed species in the area that you know are occurring and that are unrelated to your action--e.g., road kills from off-road vehicle use, poaching, trespass, etc.] [Cumulative effects under ESA are *not* the same as the definition under NEPA. Be careful not to mix them up.]

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Conclusion and Determination

Based on the discussion of the effects above, BPA has made the following determinations:

Gray wolf (*Canis lupus*) – may affect, not likely to adversely affect due to the possibility of wolves straying through the area and being exposed to herbicides.

Bull trout (*Salvelinus confluentus*) – no effect due to individuals not being known to use the area, minimal ground disturbance, and no ground disturbance or herbicide use in the riparian area

Bull trout critical habitat – no adverse effect due to no ground disturbance or herbicide use in the critical habitat or adjacent riparian area

Canada lynx (*Lynx canadensis*) – no effect, highly unlikely to be present

Spalding's silene (*Silene spaldingii*) – may adversely affect due to use of herbicides in vicinity of known plant population and potential for trampling during off-road driving

Ute ladies'-tresses (*Spiranthes diluvialis*) – no effect, highly unlikely to be present

List of Contacts/Contributors/Preparers

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Maps

[Please include an area map as well as a vicinity map. The vicinity map should be at a 1:24,000 scale with the USGS quad name included.]

BOB – can you send me maps electronically? I know you had some on your computer.

1. Vicinity map showing location of all three units in relation to the rest of the wildlife area complex
2. Smaller-scale maps of a. Smoothing Iron, showing the boundaries and the pastures and b. Lower Schlee/Bickford
3. any other maps you think would be useful. I don't think we want to include the plant locations file from Karen Gray, that should be confidential info.

References

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Asotin grazing explained.