

## Exhibit 7.5

### Maps

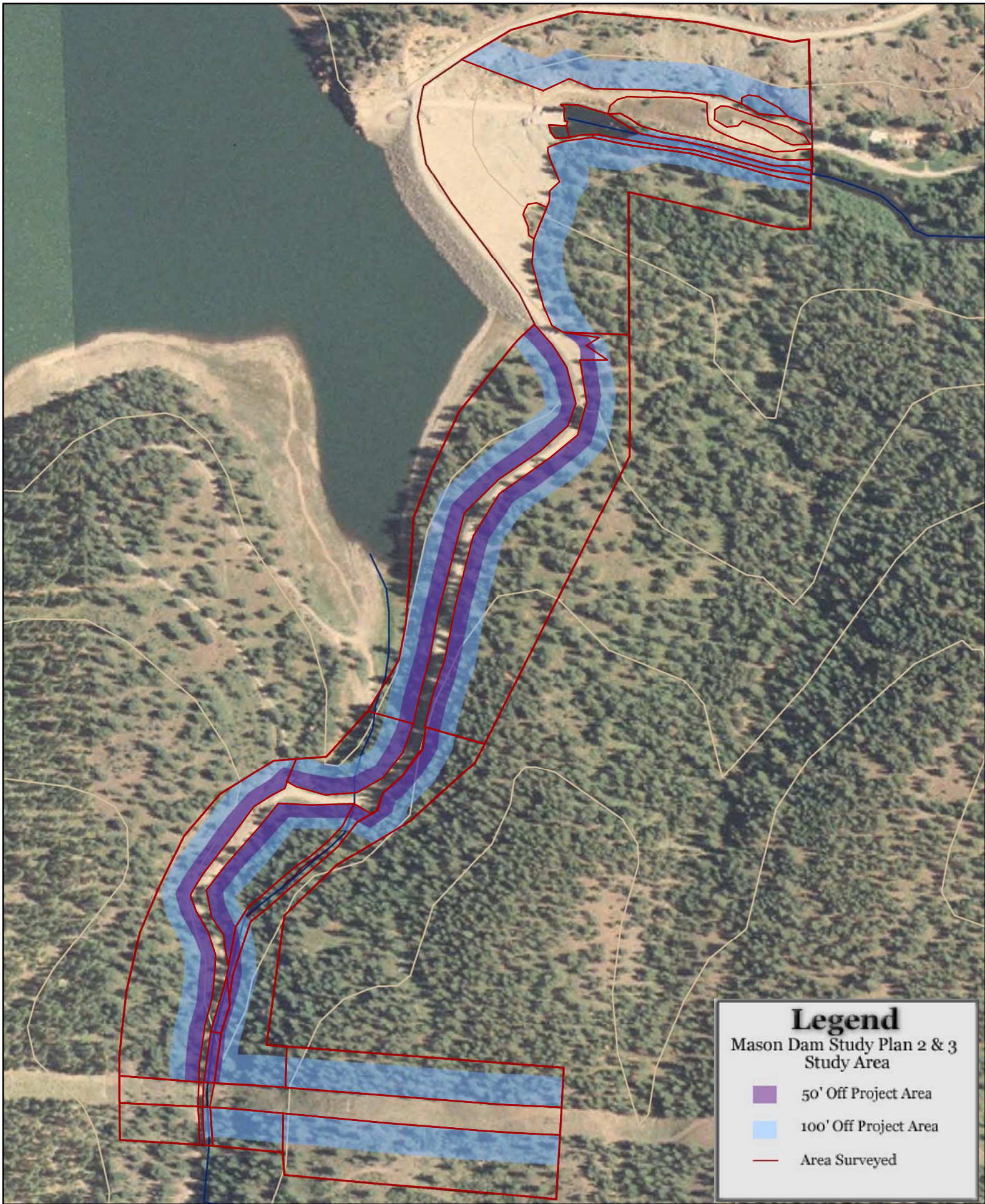
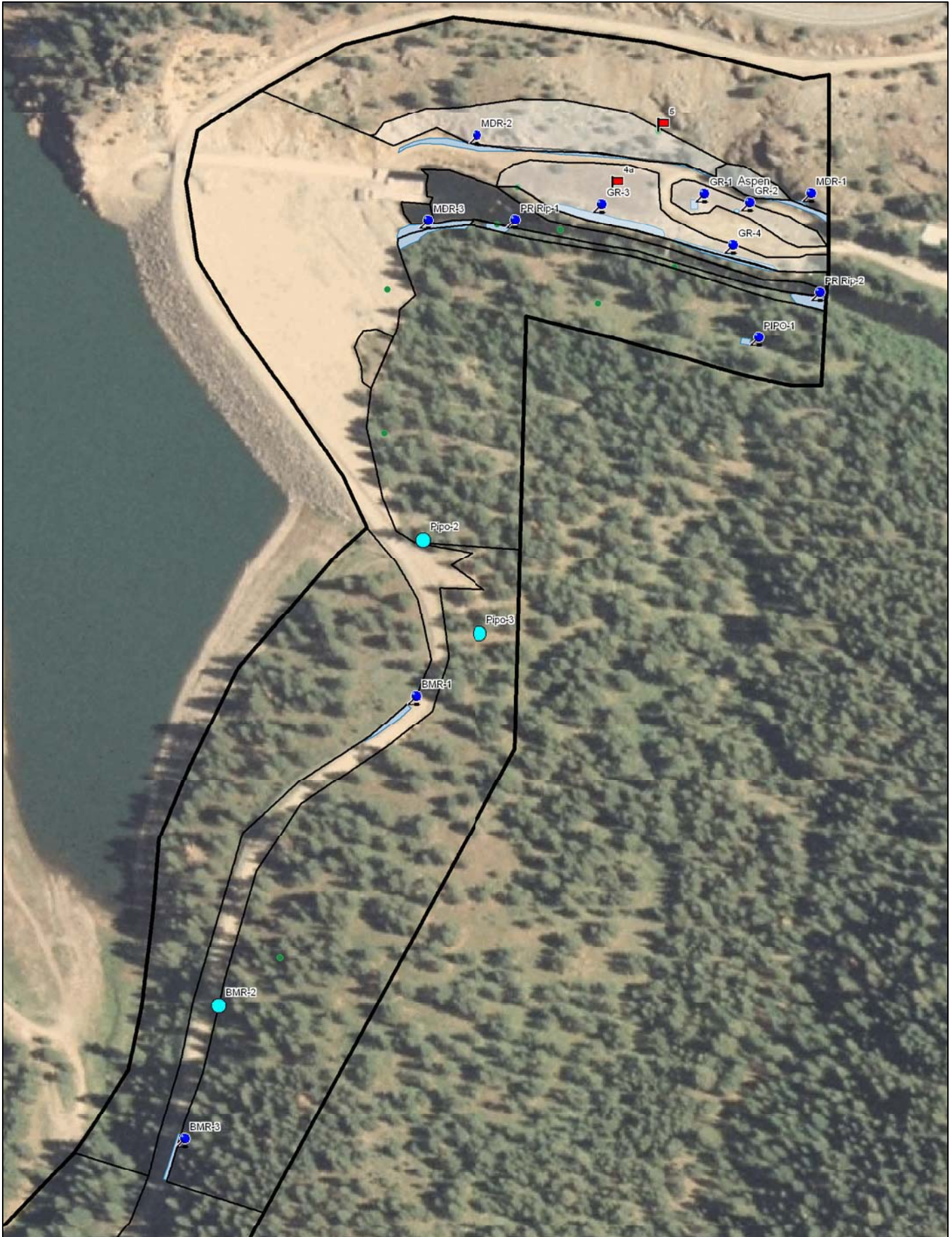


Exhibit 7.5.1 Mason Dam Study Plan 2 and 3 Project Boundary





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www.delorme.com Mason Dam Hydroelectric Project  
FERC No. P-12686





Scale 1 : 3,200  
0 80 160 240 320 400 ft  
0 20 40 60 80 100 m  
Mason Dam Hydroelectric Project  
1" = 266.7 ft Data Zoom 16-0  
FERC No. P-12686

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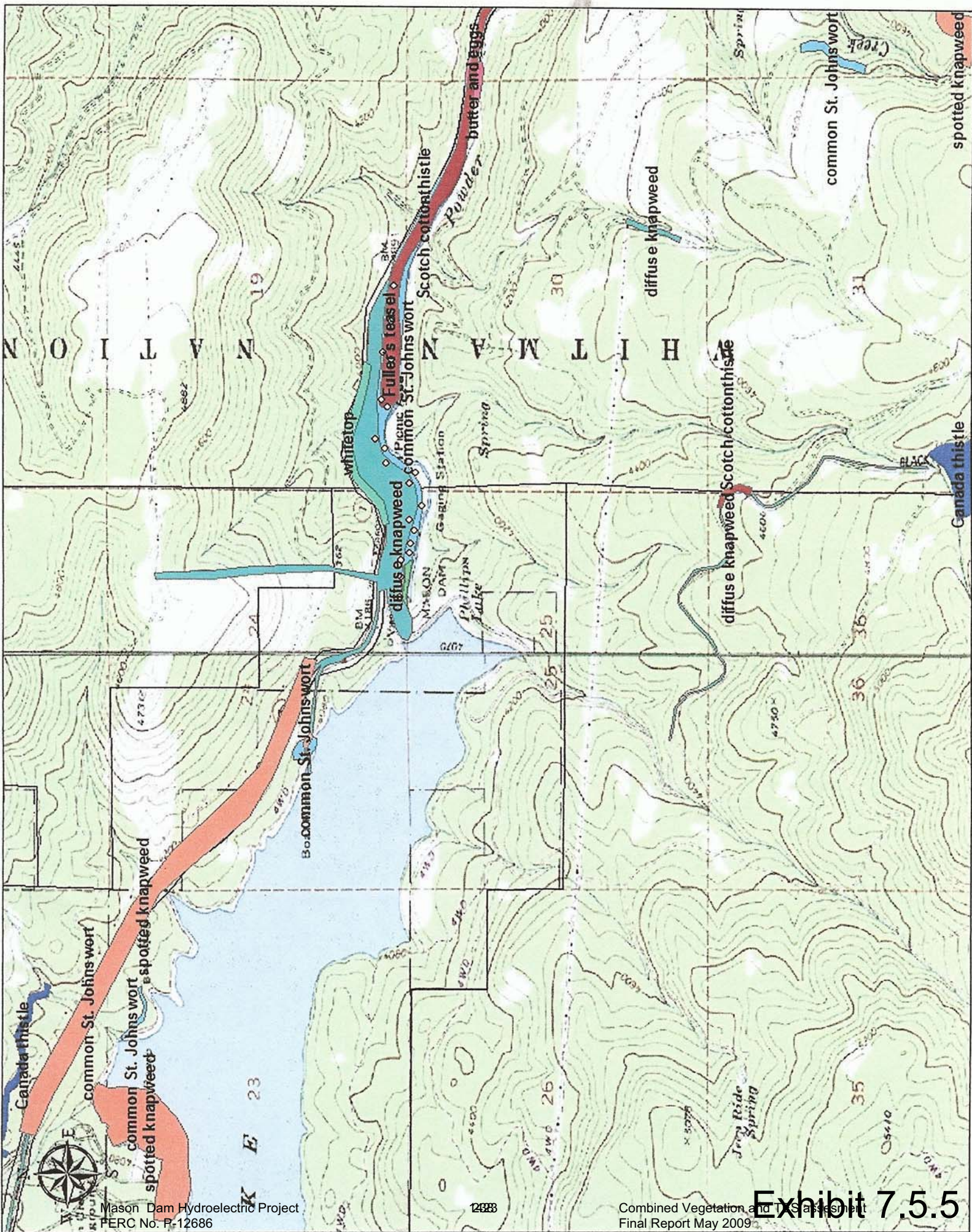
**Exhibit 7.5.3**  
Combined Vegetation and TES assesment  
Final Report May 2009

Exhibit 7.5.4 List of Noxious and Invasive Species Occurrences								
Hab Type	Occurrence #	Description	Area	Lineal Feet	PLANTS Code	Status	Cover (%)	
Bare								
P. Lot Area	MDR-1	moist area east of aspen patch	1295 sqft	100	CIVU	B,4	125	20%
					DIFU2	B,2	45	5%
					MEOF	Regional FS list	unk	1%
	MDR-2	rd edge at base of talus	4750 sq ft	659	CIAR4	2	6	t
					CIVU	B,4	1	t
					BRTE	Regional FS list	na	1-5%
					VETH	C, Regional FS list	64	<1%
	P.lot-gen	very minor (inches) around edges not mapped	na	na	CED13	A,1	2	<1%
					BRTE	Regional FS list	62	t
					LASE	Regional FS list	2	t
MDR-3		old road	3438 sq ft	100	CIAR4	2	9	3%
		includes part of adj forest edge			CIVU	B,4	21	
					CIRSI	2	7	
					DIFU2	B,2	157	5%
					BRTE	Regional FS list	3	t
BMR	BMR-1	west edge, linear	1003 sq ft	115	PORE5	B,2	200	15%
	BMR-2	west edge, spot	na	na	CEMA	A,1	1	na
	BMR-3	east edge, linear	754 sq ft	97	CIAR4	2	8	5-7%
					DIFU2	B,2	1	of ROW
					VETH	C, Regional FS list	24	
	BMR-4	south edge, at Y	341 sq ft	33	CIAR4	2	50	10%
					VETH	C, Regional FS list	1	t
	BMR-5	parallels aspen, linear	917 sq ft	100	CYOF	3	17	5-7%
BMR-6					CIAR4	2	5	of ROW
					VETH	C, Regional FS list	2	
		extends from rd into tributary	3370 sq ft	200	CYOF	3	100	5%
					DIFU2	B,2	969	20%
					CIAR4	2	54	3%
BMR-7					CIVU	A,4	6	t
					VETH	C, Regional FS list	65	3%
		E side, below culvert	792 sq ft	na	CIAR4	2	25	5%
BMR-8	east side, linear	unkn	100 ft	MEOF	Regional FS list	unk	unk	

<b>GR</b>	P. lot grassland general	polygon 4a	1.32 ac	na		BRTE	Regional FS list	na	25%
		scattered				CYOF	3		t
	Gr-1	outhouse, 5 ft path around	na	65		VEDH	C, Regional FS list		
		new, sm patch	64 sq ft	na		VEDH	A,1	2	<1%
	Gr-2					LASE	Regional FS list	110	70%
						VEDH	A,1	5	50%
	Gr-3	N Bank Powder River	3858 sq ft	238		VEDH	A,1	147	10%
		West of foot bridge				DIFU2	B,2	13	1%
	Gr-4					CYOF	3	1	t
						VEDH	2	1	t
T. Line grassland	N Bank Powder River	2296 sq ft	210		VEDH	C, Regional FS list	15	1%	
	East of foot bridge extends into rip habit				DIFU2	B,2	354	25%	
Talus	polygon 5	5.8 ac	na		CYOF	Local FS list	1	t	
	scattered				DIFU2	B,2	8	<.05%	
asp-gen					VEDH	Regional FS list	na	5%	
					VEDH	C, Regional FS list	50	1-2%	
Upland Forest	in polygon 5	5663 sq ft	na		VEDH	2	22	1%	
					CYOF	B,4	2	t	
PR Rip-1					CYOF	3	1	t	
					VEDH	B,2	9	na	
PR Rip-2	in 7a, picnic area	237 sq ft	na		VEDH	C, Regional FS list	37	15%	
	dispersed camp area	200 sq ft	na		VEDH	B,2	25	na	
PR Rip-3	in 7b, 15' circle	176 sq ft	na		CYOF	B,4	2	t	
	old log landing	1400 sq ft	na		VEDH	3	10	1%	
PR Rip-4					VEDH	C, Regional FS list	246	15%	
					VEDH	2	45	5%	
PR Rip-5	DP 2b-1 west seep	683 sq ft	na		CYOF	B,4	2	t	
	polygon 2b-2 east seep	1623 sq ft	na		VEDH	2	196	15%	
PR Rip-6					CYOF	B,4	15	2	
					DIFU2	B,2	38	7	
PR Rip-7					CYOF	3	2	t	
					VEDH	3	2	t	

<b>LEGEND</b>	
<b>Habitat Types</b>	
P.Lot=Existing Mason Dam Recreation Parking Lot	
MDR=Mason Dam Road	
BMR=Black Mountain Road	
GR=Grassland	
Pipo=Ponderosa Pine Forest	
PR Rip=Powder River Riparian	
Asp=Aspen	
Gen=In general, weeds are scattered and not concentrated in this polygon	
<b>Status Codes</b>	
A, B, C	Class A, B or C as per Baker County Noxious Weed List
1,2,3,4	Baker Ranger District Priority Number
<b>PLANTS Code</b>	
BRTE	Bromus tectorum
CED13	Centauarea diffusa
CEMA	Centuarea maculosa
CIAR4	Cirsium arvense
CIMU	Cirsium vulgare
CISRSI	Cirsium spp.
CYOF	Cynoglossum officinale
DIFU2	Dipsacus fullonum
LASE	Lactuca serriola
MEOF	Mellilotus officinale
PORE5	Potentilla recta
VETH	Verbascum thapsus







## **Exhibit 7.6 STUDY PLAN 2: Vegetation, Rare Plant and Noxious Weeds**

These studies were requested by FERC and US Forest Service. In consultation with US Fish and Wildlife and the Oregon Dept. of Fish and Wildlife these issues also arose.

### *2.0 Introduction*

Baker County filled for their preliminary license and received it on October 8, 2003 for the 3 MW Mason Dam Hydroelectric Project (Project No. P-12058-002). The project is run of release meaning Baker County does not and will not have any control over the release of the water at Mason Dam. The Bureau Of Reclamation and Baker Valley Irrigation District have control of the release of water and will not change water flows at Baker County's request.

The project consists of two small turbines that will be housed in a power plant at the base of Mason Dam. The power generated will be sent approximately 1 mile to an existing Idaho Power Company 138kv transmission line. The 34.5kv power line connecting the power plant to the substation and then to the 138kv transmission line will be buried in the Black Mountain Road right of way.

The project boundary consists of 100 feet beyond the area that contains the powerhouse and tailrace facilities, and the substation to the interconnect with IPC transmission line. It also includes 50 feet on each side of the underground power line that will be placed in the Black Mountain Road right of way.

### *2.1 Goals and Objectives*

The goal of this study is to evaluate the effects of project construction, operation and maintenance and other related activities on the distribution and composition of botanical resources, including wetland and riparian habitats, rare plants, and noxious weeds, in the project area. The objectives of the study are to:

1. Identify, describe, classify, and delineate land map vegetation cover types on a map. Describe each cover type by species composition, successional stage, and aerial extent (acreage). Wetland classifications should distinguish the degree of inundation (seasonally flooded, permanently flooded) in areas affected by project construction, operation and maintenance.
2. Determine the extent and relative quality of wetlands and riparian habitat in the tailrace, along the Powder River and in areas that would be affected by project construction, operation and maintenance.
3. Determine the presence and distribution of rare plants and noxious weeds within the influence of project construction, operation and maintenance activities through ground truth mapping efforts.
4. Identify project-related actions that may influence the distribution of wetlands, riparian habitat, rare plants and noxious weeds.
5. After collection of the above information is complete prepare a report that includes the above mapping effort, and identifies, describes, and assesses the extent to which project-related actions and activities may influence riparian and

wetland habitats (and species dependent on these habitats), rare plants, and noxious weeds.

The project is proposed to work primarily in areas that have previously been disturbed. The goal to protect vegetation and rare plants and to control noxious weeds can be accomplished with a compilation of known and gathered data.

## *2.2 Relevant Resource Management Goals*

All resource agencies are responsible for the protection of sensitive or threatened and endangered species. In making its license decision, the Commission must equally consider the environmental, recreational, fish and wildlife, and other non-developmental values of the project, as well as power generation. Any license issued shall be best adapted to a comprehensive plan for improving or developing a waterway for all beneficial public uses.

Wetlands, riparian habitat, rare plant communities, and invasive and noxious weeds are resources of particular interest because of their rarity and/or ecological functions. Ensuring that environmental measures pertaining to these resources are considered relevant to the Commission's public interest determination.

Control of noxious weeds is a priority in Baker County and we have a Weed Department that works with all resource agencies to formulate plans and control noxious weeds.

## *2.3 Background and Existing Information*

Information on botanical resources in the following attachments:

1. A list of federally designated and special status species that have been documented or may occur in the Wallowa-Whitman National Forest or Powder River Subbasin. (Attachment A)
2. A list of state and federal special status plant species found in the Upper Powder River Subbasin. (Attachment B)
3. A map of wetland and deep-water habitats in the State of Oregon. (Attachment C)
4. A list of noxious weeds designated in the Baker County Noxious Weed Rating System. (Attachment D)

While this information is useful in narrowing the scope of the requested studies, we agree that an assessment of the area within the project boundary is necessary. As the project boundary and work area are all to be contained within previously disturbed areas, assessment for special status species, rare plants, wetlands and other types of vegetation can be accomplished in a cost effective manner. The issues associated with invasive and noxious weeds will be mitigated with effective baseline data, revegetation of disturbed areas and control of post construction weeds during the life of the project. Baker County intends to work with all agencies to identify and mitigate these issues.

## *2.4 Project Nexus*



Project related activities, especially ground disturbing activities, related to construction of powerhouse, power lines and substation, could adversely affect wetland and riparian habitats and their associated wildlife and botanical resources. These could include special status species, and rare plant communities, through direct loss, disturbance or habitat alterations. If potential effects on these resources are identified, environmental measures may be developed to reduce or eliminate these effects. Baker County agrees that there is a project nexus within close proximity to the Project Boundary.

## 2.5 *Study Area and Methods*

A vegetation, rare plant, and noxious weed survey in the Mason Dam project area will identify the vegetation type, rare plant and noxious weed species, and their distribution and abundance in the project area. The following sections describe the planned survey.

### 2.5.1 Study Area

The study area is defined in section 2.0 as the project boundary.

### 2.5.2 Survey Methodology

The rare plant and noxious weed survey of the Mason Dam study area will be performed using commonly accepted botanical survey methods to systematically locate and identify rare plant and noxious weed presence and distribution. Survey methods are straightforward, and involve visually searching the study area for the presence of rare plants and noxious weeds. The timing of field surveys will be concurrent with the flowering times and identifiability of potential plant and weed species. A spreadsheet will be formulated by the surveyor of the plant and weed species found on attachments A, B, and D of their flowering and identifiability times prior to the field survey. Findings will be documented on Forest Service forms TES Plant Element Occurrence field forms (Attachment E) and TES Plant Survey field form (Attachment F) for the plant survey. Findings for the weed survey will be documented on Forest Service Invasives Plant field form (Attachment G) and Rangeland General Form (Attachment H). The following Forest Service reference guides will be used The Threatened, endangered and Sensitive Plants Survey field guide, The Threatened, Endangered and Sensitive Plant Element Occurrence field guide, and The Invasive Plant Inventory, Monitoring and Mapping Protocol field guide.

The vegetation survey of the Mason Dam study area will be done by using existing Forest Service GIS vegetation data. From this data, base maps will be created of the study area. Field sampling points will be selected from these maps. Each major cover type will be sampled. The general locations for each sample point will be assigned prior to fieldwork; exact location will be determined in the field to ensure that sample points are representative of the cover type. Major vegetative and structural characteristics will be documented using a plotless, rapid vegetation assessment technique. The following data will be collected at each point:

- Universal Transverse Mercator (UTM) coordinates
- Representative photograph(s)
- Species and estimated cover for dominant and subdominant trees and shrubs
- Estimated diameter at breast height (DBH) of dominant trees, or height of dominants in non-forested areas
- Plant community type

- Plant association, if defined for the habitat
- Estimated local density of snags and coarse woody debris
- Potential for or occurrence of special status species
- At wetland sites, observe source(s) of wetland hydrology
- At wetland sites, hydrogeomorphic classification
- At wetland sites, classification of dominant wetland types

Revisions to the draft maps will be digitized and final GIS vegetation coverage will be prepared, with all sampling information included in a layer of the GIS map data. The total acreage of each cover type will also be determined.

The focus of the rare plant survey will be on those listed on the State and Federal special status plant species in the Powder River Subbasin as listed in attachments A and B.

The noxious weed survey will be focused on Baker County Weed Control Noxious Weed List (see attachment D). Baker County's list is composed of four major classifications; the Watch List, the "A" List, the "B" List, and the "C" list.

The Watch List is defined as small, isolated and identified sites of very high concern. These sites are designated for periodic treatment by the Baker County Weed Supervisor. At this time, there are no known sites of this classification of noxious weeds within the project boundary.

The second classification, known as the "A" List, is defined as those noxious weeds that are found in limited numbers and distribution, but have a high likelihood of detrimentally affecting Baker County's agriculture and environment. The Baker County Board of Commission and the County Weed Board has designated these weeds "Mandatory Control" countywide.

The third classification, known as the "B" List, is defined as those weeds that are widespread, but still of economic and environmental concern throughout the county.

The fourth and final classification, known as the "C" list, is composed of weeds that are widespread and of moderate concern. This classification includes species that are ubiquitous throughout the county, and therefore are of lesser priority than the above-defined classifications.

Rare plants and noxious weeds will be identified using the Flora of the Pacific Northwest (Hitchcock and Cronquist, 1973) and Weeds of the West (Western Society of Weed Science, 2000).

Once identified, sites for each species will be quantifiably surveyed using the measurement of Density (the number of individual plants in a given unit of area) and Frequency (the number of species within a given site) using a Line-Transect methodology as outlined in Measurement of Terrestrial Vegetation (Bonham, 1989). Individual sites where species are located will be mapped using GPS and ArcView® technology. Given the modest size of the study area, this process will be a simple but highly effective method at defining the amount of individual plants within each species present in the study area.



### 2.5.3 Products

With this information:

1. A noxious weed report will be prepared by Baker County Weed Control that includes the above mapping effort. This report will include a description of the methodology used, dates of surveys, identify, describe and assess the extent to which project-related activities may potentially affect all noxious weeds present within the study area, and include the survey forms as an appendix to the report. In addition, this report will also outline effective noxious weed management strategies to address and alleviate project-related actions. The maps included in the noxious weed report should show any concentrations of weeds in relationship to any project facilities and disturbance areas as well as roads and trails.
2. A rare plant report will be prepared that discusses the methodology used, dates of surveys, the rare species found, their distribution, habitat associations, and include survey forms as an appendix to the report. If results indicate that there is a demonstrated impact or likely impact, a management plan will be developed to include some combination of avoiding impacts, protecting resources, and conducting mitigation as needed. The report should include maps showing any rare plants in relationship to any project facilities and disturbance areas as well as roads and trails.
3. A vegetation coverage report that will include study objectives, study area, methods, tabulated results, descriptions of habitats, and electronic GIS files of vegetation cover types and sample points.

### 2.6 *Level of Effort and Cost*

A literature review to obtain information on rare and special status species will need to be done. The mapping and survey efforts can be completed within one year.

Technicians would be expected to spend approximately one to two days to assess and review ground vegetation. With the relative low acreage of the project boundary and working in disturbed areas, aerial photos would be of little use. Baker County intends to contract with local agency personnel to do the appropriate mapping, assessment and report preparations.

It is proposed this study will begin with the field season starting in May 1, 2007 and ending in October 31, 2007. A draft report will be submitted by December 15, 2007. Comments will be due by January 15, 2008. The final report will be completed by February 15, 2008.

## Attachment A

### FEDERALLY LISTED THREATENED, ENDANGERED, PROPOSED, CANDIDATE SPECIES AND SPECIES OF CONCERN WHICH MAY OCCUR WITHIN BAKER COUNTY, OREGON

#### LISTED SPECIES<sup>1/</sup>

##### Birds

Bald eagle *Haliaeetus leucocephalus* T

##### Fish

Bull trout (Columbia River Basin)<sup>3/</sup> *Salvelinus confluentus* CH T

##### Plants

Howell's spectacular thelypody<sup>4/</sup> *Thelypodium howellii* ssp. *Spectabilis* T

#### PROPOSED SPECIES

None

#### CANDIDATE SPECIES<sup>5/</sup>

##### Birds

Yellow-billed cuckoo *Coccyzus americanus*

##### Amphibians and Reptiles

Columbia spotted frog *Rana luteiventris*

##### Plants

Slender moonwort *Botrychium lineare*

#### SPECIES OF CONCERN

##### Mammals

Pygmy rabbit *Brachylagus idahoensis*

Pale western big-eared bat *Corynorhinus townsendii pallescens*

California wolverine *Gulo gulo luteus*

Silver-haired bat *Lasionycteris noctivagans*

Small-footed myotis (bat) *Myotis ciliolabrum*

Long-eared myotis (bat) *Myotis evotis*

Fringed myotis (bat) *Myotis thysanodes*

Long-legged myotis (bat) *Myotis volans*

Yuma myotis (bat) *Myotis yumanensis*

California bighorn *Ovis canadensis californiana*

Preble's shrew *Sorex preblei*

##### Birds

Northern goshawk *Accipiter gentilis*

Western burrowing owl *Athene cunicularia hypugea*

Ferruginous hawk *Buteo regalis*

Greater sage-grouse *Centrocercus urophasianus*

Olive-sided flycatcher *Contopus cooperi*

Willow flycatcher *Empidonax trailli adastus*

Yellow-breasted chat *Icteria virens*

Lewis' woodpecker *Melanerpes lewis*

Mountain quail *Oreortyx pictus*

White-headed woodpecker *Picoides albolarvatus*

##### Amphibians and Reptiles

Tailed frog *Ascaphus truei*

Northern sagebrush lizard *Sceloporus graciosus graciosus*

##### Fishes

Interior redband trout *Oncorhynchus mykiss gibbsi*

##### Plants

Wallowa ricegrass *Achnatherum wallowaensis*

Upward-lobed moonwort *Botrychium ascendens*

Crenulate grape-fern *Botrychium crenulatum*

Mountain grape-fern *Botrychium montanum*

Twin spike moonwort *Botrychium paradoxum*

Stalked moonwort *Botrychium pedunculatum*

Clustered lady's-slipper *Cypripedium fasciculatum*



Cronquist's stickseed  
Red-fruited desert parsley  
Cusick's lupine  
Oregon semaphore grass  
Snake River goldenweed  
Biennial stanleya

*Hackelia cronquistii*  
*Lomatium erythrocarpum*  
*Lupinus lepidus* var. *cusickii*  
*Pleuropogon oregonus*  
*Pyrrocomma radiata*  
*Stanleya confertiflora*

(E) - Listed Endangered (T) - Listed Threatened (CH) - Critical Habitat has been designated for this species

(PE) - Proposed Endangered (PT) - Proposed Threatened (PCH) - Critical Habitat has been proposed for this species

Species of Concern - Taxa whose conservation status is of concern to the Service (many previously known as Category 2 candidates), but for which further information is still needed.

\* Consultation with NOAA's National Marine Fisheries Service may be required.

<sup>1/</sup> U.S. Department of Interior, Fish and Wildlife Service, October 31, 2000, Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12

<sup>2/</sup> Federal Register Vol. 60, No. 133, July 12, 1995, - Final Rule - Bald Eagle

<sup>3/</sup> Federal Register Vol. 63, No. 111, June 10, 1998, Final Rule - Columbia River and Klamath River Bull Trout

<sup>4/</sup> Federal Register Vol. 64, No. 101, May 26, 1999, Final Rule - *Thelypodium howellii* ssp. *spectabilis*

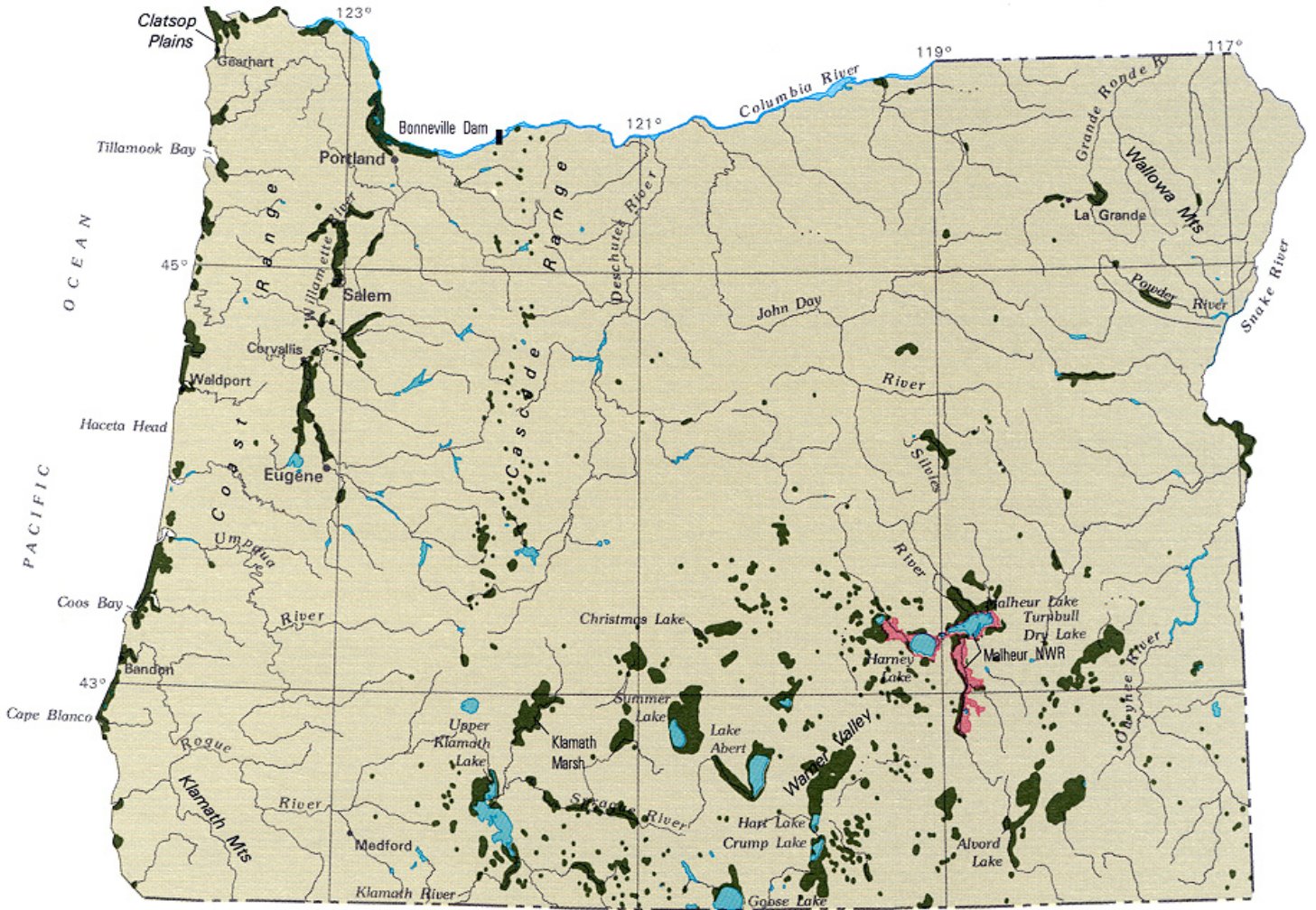
<sup>5/</sup> Federal Register Vol. 69, No. 86, May 4, 2004, Notice of Review - Candidate or Proposed Animals and Plants

**Attachment B**  
**State and Federal Special Status Plant Species in the Powder River**  
**Subbasin**

*Table from Powder River Subbasin Plan (10)*

<b>Common Name</b>	<b>Scientific Name</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Documented Locations (drainages)</b>
Upward-lobed moonwort	<i>Botrychium ascendens</i>	Species of Concern	Candidate Species	Powder, Upper John Day
crenulate moonwort	<i>Botrychium crenulatum</i>	Species of Concern	Candidate Species	
skinny moonwort	<i>Botrychium lineare</i>	Species of Concern	None	
Twin-spike moonwort	<i>Botrychium paradoxium</i>	Species of Concern	Candidate Species	Powder, Upper John Day, NF John Day
Clustered lady's-slipper	<i>Cypripedium fasciculatum</i>	Species of Concern	Candidate Species	
Red-fruited lomatium	<i>Lomatium erythrcarpum</i>	Species of Concern	Listed Endangered	Powder
Oregon semaphoregrass	<i>Pleuropogon oregonus</i>	Species of Concern	Listed Threatened	Powder
Snake River goldenweed	<i>Pyrrcoma radiata</i>	Species of Concern	Listed Endangered	
Howell's spectacular thelypody	<i>Thelypodium howellii</i>	Listed Threatened	Listed Endangered	Powder

**10. M. Cathy Nowak, Cat Tracks Wildlife Consulting. Powder River Subbasin Plan. May 28, 2004. Prepared for the Northwest Power and Conservation Council.**

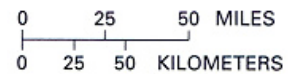


**A WETLANDS AND DEEPWATER HABITATS**

**Distribution of wetlands and deepwater habitats—**

This map shows the approximate distribution of large wetlands in the State. Because of limitations of scale and source material, some wetlands are not shown

- Predominantly wetland
- Predominantly deepwater habitat





Attachment D  
**Baker County Noxious Weeds List**  
**2006-2007**

*“Watch List”, “A”, “B” & “C” Designated Weeds*

“Watch List” – Known Sites; Controlled by Weed Supervisor County-Wide

- |                       |                   |
|-----------------------|-------------------|
| 1. Musk Thistle       | Carduus nutans    |
| 2. Mediterranean sage | Salvia aethiopsis |
| 3. Dyers Woad         | Istaxis tinctoria |

“A” Designated Weeds – Mandatory Control County-wide

- |                         |                        |
|-------------------------|------------------------|
| 1. Tansy ragwort        | Senecio jacobaea       |
| 2. Leafy spurge         | Euphorbia esula        |
| 3. Rush skeletonweed    | Chondrilla juncea      |
| 4. Spotted knapweed     | Centaurea maculosa     |
| 5. Diffuse knapweed     | Centaurea diffusa      |
| 7. Dalmation toadflax   | Linaria dalmatica      |
| 8. Yellow starthistle   | Centaurea solstitialis |
| 9. Perennial pepperweed | Lepidium latifolium    |
| 10. Purple loosestrife  | Lyrum salicaria        |
| 11. Black henbane       | Hyoscyamus niger       |
| 12. Jointed goatgrass   | Aegilops cylindrica    |
| 13. Buffalobur          | Solanum rostratum      |
| 14. Common bugloss      | Anchusa officinalis    |
| 15. Japanese knotweed   | Polygonum cuspidatum   |
| 15. Myrtle spurge       | Euphorbia myrsinites   |
| 16. Scotch Thistle      | Onopordum acanthium    |
| 17. Whitetop            | Lepidium draba         |

Whitetop is listed as an “A” weed in designated areas of the County. Pine Valley, West Baker Valley and the Bowen Valley-Sumpter areas North and West of Oregon State Highway 7 are classified as Mandatory Control for whitetop.

“B” Designated Weeds – Widespread and/or of High Concern

- |             |                |
|-------------|----------------|
| 1. Whitetop | Lepidium draba |
|-------------|----------------|
- (Whitetop is a “B” weed in all other areas of the County not listed in the above section.)
- |                     |                      |
|---------------------|----------------------|
| 2. Russian knapweed | Centaurea repens     |
| 3. Canada thistle   | Cirsium vulgare      |
| 4. Venice mallow    | Hibiscus trionum     |
| 5. Yellow toadflax  | Linaria vulgaris     |
| 6. Dodder           | Cuscuta campestris   |
| 7. Chickory         | Cichorium intybus    |
| 8. Teasel           | Dipsacus fullonum    |
| 9. Common Tansy     | Tanacetum vulgare    |
| 10. Klamathweed     | Hypericum perforatum |
| 11. Puncturevine    | Tribulus terrestris  |

“C” Designated Weeds – Widespread and/or of Moderate Concern

- |                       |                            |
|-----------------------|----------------------------|
| 1. Water hemlock      | Circuta maculata           |
| 2. Poison hemlock     | Conium maculatum           |
| 3. Morningglory       | Convolvulus arvensis       |
| 4. Russian thistle    | Salsola iberica            |
| 5. Medusahead wildrye | Taeniatherum caput-medusae |
| 6. Kochia             | Kochia scoparia            |
| 7. Common mullein     | Verbascum thapsis          |
| 8. Moth mullein       | Verbascum blattaria        |
| 9. Bur buttercup      | Ranunculus testiculatus    |

**R6 TES PLANT ELEMENT OCCURRENCE - FIELD FORM - USDA FOREST SERVICE 2005**

Ⓡ = required field, Ⓡ\* = conditionally required field, Ⓡ = R6 REQUIRED FIELD

**General Information**

1) FS SITE ID: Ⓡ		2) DATE: Ⓡ		3) SITE NAME:	
4) NRCS PLANT CODE: Ⓡ					
5) SCIENTIFIC NAME: Ⓡ					
6) RECORD SOURCE: Ⓡ		7) SURVEY ID: Ⓡ*		8) Survey Name:	
9) EXAMINER(S)- LAST: Ⓡ			FIRST:		MIDDLE INITIAL:
LAST:			FIRST:		MIDDLE INITIAL:
10) OWNERSHIP: Ⓡ					
11) E.O. #			12) NEW OCCURRENCE – YES: OR NO:		
13) STATE: Ⓡ*		14) COUNTY: Ⓡ*			
15) REGION: Ⓡ*		16) FOREST: Ⓡ*		17) DISTRICT: Ⓡ*	
18) Entire extent mapped: Yes: No: Uncertain:			19) Area (Est):		20) Area UOM: Ⓡ*
21) Canopy Cover Method Ⓡ* (circle one): COVER PERCENT; DAUBEN; NRMCOV					

**Element Occurrence Data**

22) EO Canopy Cover: Ⓡ %Cov: or Cover Class Code:		23) Lifeform:	
24) Number of subpopulations:			
25) Plant Count: Ⓡ	26) Count Type: Ⓡ Genet/Ramet/Undetermined		27) Count: Ⓡ Actual or Est.
28) Revisit needed - Yes or No		29) Revisit Date:	
30) Revisit Justification:			
31) Phenology (%) Ⓡ (Sum to 100%): Vegetative . . . . . ____ Flower/Bud . . . ____ Fruit/Dispersed . ____ Seedlings/ Juvenile . . . . . ____	32) Population Comments: (e.g., distribution, vigor, density, phenology, dispersal)		
33) Evidence of disease, competition, predation, collection, trampling, or herbivory: Yes ___ or No ___			
34) Evidence Comments:			
35) Pollinator observed – Yes or No		36) Pollinator type(s):	
37) Pollinator comments:			

**Site Morphometry**

38) Percent Slope: Ⓡ		39) Slope position: Ⓡ	
40) Aspect: Ⓡ azimuth: or cardinal:			
41) Elev.: Ⓡ Ave: Min: Max:		42) Elev UOM: Ⓡ*	

**Soil Characteristics and Light Conditions**

43) Substrate on which EO occurs:					
44) Parent Material:		45) Soil Moisture:		46) Soil Texture:	
47) Soil Type:				48) Light Exposure: Ⓡ	

**Site Classifications**

Record taxonomic units of the given type(s) if published classifications exist for the area.			
CLASS TYPE	CLASS CODE	CLASS SHORT NAME	CLASS SET
49) Existing Veg			
50) Potential Veg	®	®	®
51) Ecotype			

**Habitat Quality and Management Comments**

52) Habitat Description:	
53) Dominant Process:	
54) Community Quality (L, M, H):	55) Landscape Integrity (L, M, H):
56) Process Comment:	
57) Disturbance/Threats (present or imminent):	
58) Disturbance/Threats Comment:	
59) Non-Native Comment:	
60) Current Land Use Comment:	

**Canopy Cover**

Record % canopy cover by actual percent, <i>or</i> by cover class (as indicated in General Information Block).			
Lifeform Canopy Cover	61)% Cov or Code	Ground Cover	62) % Cov or Code
Tree		Bare	
Shrub		Gravel	
Forb		Rock	
Graminoid		Bedrock	
Non-vascular		Moss	
Lichen		Litter/Duff	
Algae		Basal Veg	
		Water	
		Road surface	
		Lichen	





### Image Information ® (IF IMAGES TAKEN)

77) Image ID	78) Image Description

### Location Information

(State, County, Region, Forest, District will be auto-populated by the database application when the spatial feature is entered)

<b>79) USGS Quad Number:</b>	<b>80) USGS Quad Name:</b>
<b>81) Forest Quad Number:</b>	<b>82) Forest Quad Name:</b>

<b>83) Legal Description: ® Required where public land survey is available.</b>				
Meridian:	Township and Range:			
Section: _____	Q Sec: _____	QQ Sec: _____	QQQ Sec: _____	QQQQ Sec: _____

<b>84) Latitude and Longitude (either in degrees, minutes, seconds or in decimal degrees)</b>							
Geodetic Datum:							
Latitude: Degrees	___	N	Minutes	___	Seconds	___.	___
Longitude: Degrees	___	W	Minutes	___	Seconds	___.	___
GPS Datum:							
GPS Lat. Dec. Degrees:			GPS Long. Dec. Degrees:				

<b>85) UTM</b>	
UTM Datum:	UTM Zone:
Easting: _____	Northing: _____

<b>86) GPS Equipment Used (Manufacturer and Model):</b>

<b>87) Metes and Bounds</b>

**88) Directions to Site**

**89) Sketch of Site or Area**












### Optional Location Information

Location information to represent the survey area may be recorded,  
in addition to entering the spatial feature in the application

<b>33) USGS Quad Number:</b>	<b>34) USGS Quad Name:</b>
<b>35) Forest Quad Number:</b>	<b>36) Forest Quad Name:</b>
<b>37) Legal Description: Required where public land survey is available.</b>	
Meridian: _____	Township and Range: _____
Section: _____	Q Sec: _____ QQ Sec: _____ QQQ Sec: _____ QQQQ Sec: _____
<b>38) Latitude and Longitude (either in degrees, minutes, seconds or in decimal degrees)</b>	
Geodetic Datum: _____	
Latitude: Degrees ___ N	Minutes _____ Seconds ____.
Longitude: Degrees ___ W	Minutes _____ Seconds ____.
GPS Datum: _____	
GPS Lat. Dec. Degrees: _____	GPS Long. Dec. Degrees: _____
<b>39) UTM</b>	
UTM Datum: _____	UTM Zone: _____
Easting: _____	Northing: _____
<b>40) GPS Equipment: Manufacturer:</b> _____	<b>Model:</b> _____
<b>41) Metes and Bounds</b>	

### 42) Directions to Survey Area

### 43) Sketch of Survey Area





## ATTACHMENT G

### INVASIVES PLANT FIELD FORM

G

#### General Information

SITE ID _____ R	DATE (MMDDYYYY) _____ R
EXAMINER: LAST _____ R	FIRST _____ R
Middle Initial _____	

#### Data Elements

Plant Code _____ R	Common Name _____
Genus _____	Species _____
Subspecies _____	Variety _____
Phenology _____	Life Form _____
Infested Area _____ R	Unit of Measure _____ R
Gross Area _____	Unit of Measure _____
Gross Area to Infested Area Calculation: Gross area X _____ (% of land area occupied by weeds) = _____ Infested Area	
Plant Status _____	Plant Treatment Priority _____

#### Canopy Cover

<p><b>Canopy Cover</b> is a required data element. You can describe canopy cover by either entering the actual percent, (<i>Canopy Cover Percent</i>) or by using canopy cover classes (<i>Canopy Cover Set</i> and <i>Cover Code</i>). <b>R</b></p>		
Canopy Cover Set _____	Cover Code _____	Canopy Cover Percent _____ %

#### Distance to Water

Horizontal Distance to Water _____	Unit of Measure _____ I
Vertical Distance to Water _____	Unit of Measure _____

#### Associated Species

Associated Species Code _____	
Assoc. Genus _____	Assoc. Species _____
Assoc. Subspecies _____	Assoc. Variety _____
Associated Species Code _____	
Assoc. Genus _____	Assoc. Species _____
Assoc. Subspecies _____	Assoc. Variety _____
Associated Species Code _____	
Assoc. Genus _____	Assoc. Species _____
Assoc. Subspecies _____	Assoc. Variety _____



# ATTACHMENT H

## RANGELAND GENERAL FORM – FOR INTERIM INVASIVE TOOL

(® INDICATES A REQUIRED FIELD)

### Site Information

SITE ID _____ ®	
DATE (MMDDYYYY) _____ ®	
Project Name _____ ®	Project Purpose _____
Site Sample Type _____ ®	

### General Information

EXAMINER:	LAST Name _____ ®	FIRST Name _____ ®	Middle Initial _____
Ownership _____ ®			
Region _____ ®	National Forest/Grassland _____ ®	District _____ ®	
Proclaimed National Forest/Grassland _____			
Proclaimed National Forest/Grassland Name _____			
State _____ ®	County Number _____ ®	County Name _____	
Sample Area Size _____		Unit of Measure _____	

### Location Information

<b>QUADS</b>	
USGS Quad Number _____	USGS Quad Name _____
Forest Quad Number _____	Forest Quad Name _____

**Data Entry is Required in at least one of the displayed location methods below.**  
 The site location can be described through at least one, and maybe more of the following methods.  
 Users with GIS technology may link the location directly with that information. Some users may substitute Metes and Bounds (**Required.**)

<b>Legal Description:</b>				
Meridian _____	Township/Direction Range/Direction _____			
SEC _____	Q SEC _____	QQ SEC _____	QQQ SEC _____	QQQQ SEC _____

<b>Latitude and Longitude</b>				
Geodetic Datum _____				
Lat dms:	Degrees _____ N	Minutes _____	Seconds _____	
Long dms:	Degrees _____ W	Minutes _____	Seconds _____	
Geodetic Datum _____				
GPS Latitude Decimal Degrees _____				
GPS Longitude Decimal Degrees _____				

<b>UTM</b>	
UTM Datum _____	UTM Zone ____
Easting: _____	Northing: _____

**Metes and Bounds:** (narrative) Metes are the bearing and distance to get to someplace or to return to the place of origin. Bounds are the written directions going to something or someplace.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Management Area

Allotment (RMU) Number _____	Allotment Name _____
Pasture (Sub-RMU) Number _____	Pasture Name _____
Key Area Number _____	Key Area Name _____

Area Number _____	Area Name _____
-------------------	-----------------

Watershed HUC # ** _____ ®
HUC Name _____
**Required for aquatic invasive species

### Site Information

Elevation Average _____	Min Elevation _____
Max Elevation _____	Elevation UOM _____

Aspect-Azimuth _____	Aspect-Cardinal Direction _____
Percent Slope _____	Slope Position _____

### Existing Vegetation Information

Please enter one or more of the three listed existing vegetation classification types.

<b>Plant Community</b>	
Class Set Name _____	Class Code _____
Class Name _____	
SAF Cover Type Code _____	SAF Cover Type _____
SRM Cover Type Code _____	SRM Cover Type _____



Dominant Life Form _____ ®
Dominant Species _____ (Genus, Species, Subspecies, Variety)
Co-Dominant Species _____ (Genus, Species, Subspecies, Variety)
Co-Dominant Species _____ (Genus, Species, Subspecies, Variety)
Co-Dominant Species _____ (Genus, Species, Subspecies, Variety)

**Potential Vegetation Information**

Range Site/Eco Classification	
Class Code _____	Class Name _____

Habitat Type Code _____	Habitat Type Name _____
HT Phase Code _____	HT Phase Name _____
Plant Association Code _____	Plant Association Name _____
Seral Stage _____	Ecological Status (%) _____

Ecological Map Unit Code _____
Ecological Map Unit Name _____
Ecological Type Code _____
Ecological Type Name _____

**Soil/Geo Climate Information**

Soil Name _____	Class Level _____
Texture _____	Common Landform Code _____
Common Landform Description _____	
Mean Annual Precipitation _____	UOM _____

**Reference**

**Include information in locating the starting point for the traverse leg and other important description information.**

<b>Narrative (detailed description of location, direction to site and map location if applicable.)</b>
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**Traverse information for start point to sample point.**

<b>Azimuth (degrees)</b> _____	<b>Distance</b> _____
<b>Distance UOM</b> _____	

**Photo/Image**

<b>Aerial Photo Information</b>	
<b>Photo Label</b> _____	<b>Aerial Photo Set</b> _____
<b>Photo Number</b> _____	<b>Flight Line Code</b> _____
<b>Photo Date\Time (mm/dd/yyyy hh:mm)</b> _____	

<b>Photo Information</b>	
<b>Photo Number</b> _____	<b>Film Type</b> _____
<b>File Name</b> _____	<b>File Directory</b> _____

**Comments**

**Comments**

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## APPENDIX I: TECHNICAL MEMORANDUM

**DATE:** May 5, 2009  
**TO:** Jason Yencopal, Baker County  
**RE:** **Mason Dam: ODFW Sensitive Species**  
**FROM:** Leslie Gecy, EcoWest Consulting, Inc.

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On March 16, 2009, the Oregon Department of Fish and Wildlife (ODFW) requested that the State sensitive wildlife species list, dated December 8, 2008 be considered in the Combined Study Plan 2/3 report (Combined Report). ODFW noted during the meeting that most of these species have been addressed under the discussions for federal and state-listed species in the Combined Report, and requested that (1) the list be acknowledged in the study plan report and (2) any additional sensitive species not previously discussed, be addressed. The ODFW list is attached as Appendix A to this memorandum and includes all sensitive species regardless of their location in the State.

EcoWest reviewed the State wildlife sensitive species to identify:

- Species that had already been addressed in the Combined Report
- Species that had the potential to occur in the project area or vicinity
- Any additional sensitive species with the potential to occur in the project area that had not previously been discussed.

To screen which species had the potential to occur in the project vicinity, the Wallowa-Whitman National Forest (WWNF) pre-field screening of the Regional Forester's Sensitive Species List for the Pacific Northwest (see Appendix B of the Combined Report) was examined. Those species identified by the FS with no potential to occur in the project vicinity were not considered further. The complete FWS list of species of concern for Oregon was also examined to identify which species the FWS had also determined were not likely to occur in the project vicinity. For example, a number of torrent salamanders (*Rhyacotriton* spp) are listed as sensitive by ODFW and also as species of concern by FWS on a statewide basis. However, the FWS has identified that these species are only likely to occur in western Oregon and would not likely occur east of the Cascades. As a result, these species were identified as not likely occurring in the project vicinity.

The results are discussed by major species group: fish, amphibians, reptiles, birds and mammals. Both the sensitive-critical and sensitive-vulnerable lists are discussed together for each group.

Unless otherwise noted, the species accounts in this section are summarized from data developed for ICBEMP (Quigley and Arbelbide 1997), Powder River SubBasin Plan (2004), Natureserve (2009), Jones et al. (2005), Csuti et al. (2001) and from data and summaries already presented in the

ECW-1

Combined Report.

### **Fishes**

Most of the fish species on the ODFW list represent geographically Distinct Population Segments (DPS), Evolutionarily Significant Units (ESU) or Species Management Units (SMU) of salmon, steelhead or redband trout. The inland redband trout (*Oncorhynchus mykiss gairderi*) is known to occur in the project vicinity but other *O. mykiss* subspecies are not known to occur. Similarly, the bull trout (*Salvelinus confluentus*) Columbia Basin DPS (also referred to as the Hell's Canyon bull trout SMU) is known to occur in the project vicinity, but not other bull trout SMUs. The only other fish species with the potential to occur in the project vicinity are the westslope cutthroat trout (*O. Clarki lewisi*) and the Pacific lamprey (*Lampetra tridentate*). All four species were addressed in the Combined Report (See Table 1 for the report section in which the species were discussed).

### **Amphibians**

There are four amphibian species listed as critical on the ODFW list and 17 species listed as vulnerable. A number of the species are also listed as threatened, endangered, candidate or species of concern by the FWS on a statewide basis. However, many of these species are strictly restricted to western or southwestern Oregon. This includes the Oregon spotted frog (*Rana pretiosa*; federal Candidate), foothill yellow-legged, northern red legged and Cascades frogs (*Rana boylei*, *R. aurora*, *R. cascadae*; federal species of concern), and the coastal tailed frog (*Ascaphus truei*, federal species of concern). In addition, all of the ODFW sensitive salamander species (*Dicamptodon copei*, *Rhyacotriton* spp., *Plethodon* spp., *Aneides* spp. And *Batrachoseps wrightorum*), are geographically restricted to the wetter western areas of the state.

The Northern leopard frog (*Lithobates pipiens*), western toad (*Anaxyrus boreas*), Rocky mountain tailed frog (*Ascaphus truei*) and the Columbia spotted frog (*Rana luteiventris*) have the potential to occur in the project vicinity. The Columbia spotted frog and Rocky Mountain tailed frog were addressed in the Combined Report (see Table 1). The Northern leopard frog and western toad are addressed below.

**Northern leopard frog.** The northern leopard frog has a relatively large range throughout much of the US and is still common in many areas. However, the historic populations in Oregon have declined and the species is restricted to southeast Oregon. The leopard frog habitat includes a variety of wetland/open water habitats requiring shallow, still permanent open water with rooted aquatic vegetation. They do not occupy areas with rapidly flowing water, areas with large seasonal fluctuations in water level, or areas with fish predator access. There is no available habitat for the leopard frog in the project area (see aquatic habitats descriptions in the Combined Report, section 6.2 and also the discussions regarding the Columbia spotted frog which has similar habitat requirements in sections 3.1 and 4.4).

ECW-2



**Table 1. ODFW Sensitive Fish, Amphibian and Reptile Species with the Potential to Occur In the Mason Dam Project Vicinity.**

<b>Species</b>	<b>ODFW Sensitive Status</b>	<b>Federal Status</b>	<b>FS Status-WWNF</b>	<b>Addressed in Existing TES Report</b>
<b>Fish Species</b>				
West slope cutthroat trout <i>Oncorhynchus clarki lewisi</i>	Critical	None	Sensitive	Yes, section 4.2
Bull trout-Hells Canyon SMU <i>Salvelinus confluentus</i>	Critical, also state listed as threatened	Threatened	Federally-Listed	Yes, section 3.1 and 5.1
Pacific lamprey <i>Lampetra tridentata</i>	Vulnerable	Species of Concern	Federally-Listed	Yes, section 3.3
Inland Columbia Redband trout <i>Oncorhynchus mykiss gairderi</i>	Vulnerable	None	Sensitive	Yes, section 4.2 and 5.2
<b>Amphibians</b>				
Columbia spotted frog <i>Rana luteiventris</i>	Vulnerable in Blue Mts	Candidate	Federally-Listed	Yes, section 3.1, 4.4 and 5.3
Northern leopard frog <i>Lithobates pipiens</i>	Critical	None	None	No, see discussion in this memo
Rocky Mountain tailed frog <i>Ascaphus truei</i>	Vulnerable	Species of Concern	Sensitive	Yes, section 3.3
Western toad <i>Anaxyrus boreas</i>	Vulnerable	None	None	No, see discussion in this memo
<b>Reptiles</b>				
Northern sagebrush lizard <i>Sceloporus graciosus graciosus</i>	Critical	Species of Concern	None	Yes, section 3.3

**Western toad.** The western toad is known to occur in the Powder River watershed and Baker County. Substantial declines have occurred in many populations recently, with diseases, fungal infections and parasites thought to be large contributing factors. In the Cascades, common raven predation during the breeding season appears to have contributed significantly to declines of some populations. Habitat loss and non-native predators have also played a role in the species decline.

Western toads inhabit a variety of habitats such as slow-moving streams, shallow lake margins, and wetlands with shallow, stable open water. As described for the Columbia spotted frog (sections 3.1 and 4.4 of the Combined Report), these habitats may occur in the project vicinity but do not occur in the Mason Dam project area.

## **Reptiles**

There are six reptile species on the ODFW sensitive species list including two turtles (*Chrysemys picta belii* and *Actinemys marmorata*) and three snakes (*Crotalus oregonus*, *Lampropeltis* spp). These species are either restricted to western or southwestern Oregon, or are locally common (e.g., the western rattlesnake [*Crotalus oregonus*,] which is considered sensitive in the Willamette Valley only). The northern sagebrush lizard (*Sceloporus graciosus graciosus*) is the only ODFW sensitive reptile species with the potential to occur in the Mason Dame project vicinity. This species was addressed in the Combined Report (section 3.3).

## **Birds**

There are 48 sensitive bird species on the ODFW list. Most of these species fall into one of the following categories:

- Addressed in the Combined Report (e.g., white headed woodpecker, *Picoides albolarvatus*),
- Not considered sensitive by ODFW in the Blue Mountain Ecoregion (e.g., white-breasted nuthatch, *Sitta carolinensis aculeata*, or
- TES species that are not considered by the FWS or FS to occur in Baker County or within the Wallowa-Whitman National Forest (e.g., yellow-billed cuckoo [*Coccyzus americanus*], acorn woodpecker [*Melanerpes formicivorus*], red-necked grebe [*Podiceps grisegena*]).

Table 2 provides a summary of which species fall into each of these categories (already addressed in report, not sensitive locally, pre-screened on other agency lists) and which ODFW sensitive species have not been addressed in another fashion. The remaining 15 species are listed in Table 3 according to whether or not their Oregon geographical range overlaps the project vicinity. As noted in Table 3, the arctic peregrine falcon (*Falco peregrinus tundrius*), Cassin's and rhinoceros auklets (*Ptychoramphus aleuticus* and *Cerorhinca monocerata*) and the tufted puffin (*Fratercula cirrhata*) are either boreal forest or coastal species that do not occur in eastern Oregon. The grasshopper sparrow (*Ammodramus savannarum*) is an important indicator species in the Columbia Plateau Ecoregion of Oregon, but does not extend south of this ecoregion. These species are not discussed further. The other ten sensitive bird species listed in Table 3 are discussed individually below.

ECW-4

Table 2. ODFW Sensitive Bird Species.

Species	ODFW Status	Addressed in Study Plan 2/3 Report		Pre-Screened by Agencies- TES Elsewhere but not Locally			Not Previously Addressed
		FWS Baker Co List	WWNF List	Not ODFW Sensitive in EcoRegion	FWS List -elsewhere OR	FS List-elsewhere R6	
Columbian sharp tailed grouse	Critical		X		X		
Red necked grebe	Critical						
Ferruginous hawk	Critical-Columbia Plateau			X			
Yellow Rail	Critical				X		
Upland sandpiper	Critical		X				
Yellowbilled cuckoo	Critical				X		
Burrowing owl	Critical	X					
Common nighthawk	Critical						
Lewis' woodpecker	Critical	X					
White headed woodpecker	Critical	X					
Streaked horned lark	Critical						
Purple martin	Critical				X		
Yellow breasted chat	Critical	X					
Oregon vesper sparrow	Critical				X		
Sage sparrow	Critical						
Western meadowlark	Critical						
Greater sage grouse	Vulnerable	X					
Spruce grouse	Vulnerable						X
Mountain quail	Vulnerable	X				X	
American white pelican	Vulnerable						X
Snowy egret	Vulnerable						
Northern goshawk	Vulnerable	X	X				
Swainson's hawk	Vulnerable						X
Ferruginous hawk	Vulnerable-Blue mts	X	X				
American peregrine falcon	Vulnerable					X	
Arctic peregrine falcon	Vulnerable						X
Greater sandhill crane	Vulnerable						
Black oystercatcher	Vulnerable				X		
Long-billed curlew	Vulnerable						X
Franklin's gull	Vulnerable						X
Cassin's auklet	Vulnerable						X
Rhinoceros auklet	Vulnerable						X
Tufted puffin	Vulnerable						X
Flammeulined owl	Vulnerable						X
Burrowing owl	Vulnerable-Basin/Range						X
Great Gray owl	Vulnerable						
Acorn woodpecker	Vulnerable				X		
American three-toed woodpecker	Vulnerable						X
Pileated woodpecker	Vulnerable						X
Olive sided flycatcher	Vulnerable	X					
Willow flycatcher	Vulnerable	X					
Little willow flycatcher	Vulnerable						X
Loggerhead shrike	Vulnerable						
White breasted nuthatch	Vulnerable						X



<b>Table 3. ODFW Sensitive Bird Species that have Not Been Previously Addressed</b>			
<b>Species</b>	<b>Geographical Range</b>	<b>Habitat</b>	<b>Potential Habitat in Project Vicinity</b>
<b>Geographic Range Includes Eastern Oregon</b>			
Spruce grouse <i>Falcapennis canadensis</i>	Canada and northern US	Spruce-fir, spruce pine forests; dense cover close to ground	No
American white pelican (Breeding population) <i>Pelecanus erythrorhynchos</i>	Breeds in southern Oregon near the CA border; migrant through eastern OR	Open islands/ peninsulas in lakes and rivers; open marshes	No-breeding range is much further south; may occur as a migrant
Swainson's hawk <i>Buteo swainsoni</i>	Western US	Prairies and open arid land	No
Long billed curlew <i>Numenius americanus</i>	Occurs in Baker County	Grassy meadows, herbaceous wetlands	Yes
Franklin's gull <i>Leucophaeus pipixcan</i>	Northern prairies, extends into southeast Oregon	Large marshes, lake edges in sagebrush steppe and prairie	No
Flammulated owl <i>Otus flammeolus</i>	Western US, "ponderosa pine belt"	Ponderosa pine forest	Yes
American three-toed woodpecker <i>Picoides dorsalis</i>	Canada and US; occurs in Baker County	Dense spruce or lodgepole forests	No
Pileated woodpecker <i>Dryocopus pileatus</i>	North America, occurs in Baker Co	Ponderosa pine forest	Yes
Loggerhead shrike <i>Lanius ludovicianus</i>	North America	Open grassland or steppe	No
Bobolink <i>Dolichonyx oryzivorus</i>	Eastern US, extends into small portion of eastern Oregon	Tall grass prairie or agricultural fields	No

ECW-7



<b>Table 3. Continued</b>			
<b>Species</b>	<b>Geographical Range</b>	<b>Habitat</b>	<b>Potential Habitat in Project Vicinity</b>
<b>Geographic Range Does Not Include Eastern Oregon</b>			
Arctic peregrine falcon <i>Falco peregrinus tundrius</i>	Breeds in tundra, winters in Latin and South America	Tundra, cliffs/talus, wetlands, estuaries	No
Cassin's auklet <i>Ptychoramphus aleuticus</i>	Coastal species	Ocean, coastal bluffs, offshore rocks, beaches	No
Rhinoceros auklet <i>Cerorhinca monocerata</i>	Coastal species		No
Tufted puffin <i>Fratercula cirrhata</i>	Coastal species		No
Grasshopper sparrow <i>Ammodramus savannarum</i>	East and Midwest US, small populations in Columbia Plateau	Open grassland	No

***Spruce grouse.*** The spruce grouse occurs in the northern latitudes of the US and Canada with its range extending only slightly into northeast Oregon. The grouse is associated strictly with boreal-type forests (spruce-fir, spruce-lodgepole pine, wet spruce) which do not occur in the Mason Dam project area or vicinity.

***American white pelican.*** The American white pelican migrates through eastern Oregon, but its breeding population (not the migratory) is the population of concern. The pelican breeds in southern Oregon near the California border in Malheur, Harney and Lake counties. It is not known to breed in Baker County. Breeding habitat includes open islands or peninsulas within rivers or lakes, and open marshes. This habitat does not occur in the Mason Dam project area (see section 6.2 of the Combined Report). The pelican may rest in the project vicinity during migration, but there is no breeding habitat for it in the project area.

***Swainson's hawk.*** The Swainson's hawk has a large range throughout the western and midwestern US and is known to occur in Baker County and in the Powder River watershed. Its habitat is similar to that of the ferruginous hawk (described in section 3.3 of the Combined Report), but within moister areas of farmland, sagebrush steppe or prairies. Swainson's hawks nest in wooded groves along streams, windbreaks, or other treed or brushy areas near large areas of open habitat. As described for the ferruginous hawk, these habitats do not occur within the Mason Dam project area.

***Long billed curlew.*** The long billed curlew breeds in eastern Oregon and is known from Baker

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County and the Powder River watershed. Habitat includes grassy meadows near water, generally with short grass. Breeding begins in March and is completed by July. Although an opportunistic feeder, the curlew often feeds on aquatic invertebrates and insect larvae by probing its long bill into the mud or soil. The only grassland in the Mason Dam project area near water is in the recreation area parking lot. This habitat is not suitable for curlew nesting (vegetation too tall, ongoing human and dog disturbance, soil not suitable for probing either in the grassland or the nearby Powder River) and no nest remnants were observed during the July 2009 surveys.

***Franklin's gull.*** Franklin's gull is a northern prairie bird that is not common in Oregon. It breeds within prairie or steppe habitat in extensive marshes or shallow lake edges. Nests are made of grasses and other dead marsh plants and often are floating structures anchored to living plant stems. There is a breeding colony at the Malheur National Wildlife Refuge, but the gull is uncommon elsewhere in Oregon. The extensive marshes required for the colonial-nesting bird do not occur in the Mason Dam project area (see section 6.2 of the Combined Report).

***Flammulated owl.*** The flammulated owl is closely associated with the western "yellow pine belt" which is dominated by ponderosa and Jeffrey pines. The preferred habitat is an open pine stand containing large, mature trees. In northeast Oregon, the average dbh of nest trees is 28 inches, with the nest trees in stands where the average dbh exceeds 20 inches (Bull et al. 1990). The owl is most often found on ridges and upper slopes in Oregon, and absent from warm and humid pine forests and mesic ponderosa pine/Douglas-fir (Bull et al. 1990). The owl occupies similar habitats as the Lewis woodpecker, described in section 3.3 of the Combined Report. As noted in section 4.4.2 of this report, the trees within the Mason Dam project area are mostly small to medium size (10 to 15 inches dbh). Although superficially providing habitat for the ponderosa pine-dependent species, the small tree size and lack of snags limit the habitat value for old growth cavity nesting species such as the flammulated owl.

***American three-toed woodpecker.*** The American three-toed woodpecker is widespread in the US and Canada, and known to occur in Baker County. Nesting occurs in coniferous forest (primarily spruce), and less frequently in mixed forest. The woodpecker is associated with subalpine fir and Engelmann spruce at higher elevations, and lodgepole pine forests or in mixed-conifer forests with a lodgepole component at lower elevations. It prefers trees with thin, flaky bark such as spruce and lodgepole pine. Optimal habitat includes areas with 4.2-5.2 snags per acre, with snags occurring in clumps. Preferred snag size is 12-16 inches dbh and 20-40 feet tall, with bark still present.

The spruce or lodgepole habitat required by the three-toed woodpecker does not occur in the Mason Dam project area or its close vicinity. Additionally, the snag density in the project area is 0 to 0.7 snags/acre (see Combined Report section 6.3.1 and Appendix F), well under the density required by the woodpecker.

***Pileated woodpecker.*** The pileated woodpecker is widely distributed in wooded areas of North America, and known to occur in Baker County. In northeast Oregon, the woodpecker nests are primarily in large ponderosa pine, with a mean dbh of 84 cm (33 inches)(Bull 1987). Nests are in shaded snag cavities, with cavity entrances well above the ground (over 30 feet), and often in trees

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over 100 years old.

The large size, old growth ponderosa pine required by the pileated woodpecker does not occur in the Mason Dam project area (see Combined Report section 6.3.1 and Appendix F). The woodpecker may occur in the project vicinity but there is no habitat for it in the project area.

**Loggerhead shrike.** Loggerhead shrikes historically occurred across North America, breeding in open country, including grasslands and shrub-steppes with scattered trees, tall shrubs, fence posts, utility wires, or other lookout posts. In Oregon, the shrike occurs in relatively undisturbed shrub-steppe or grassland habitat at low to middle elevations. The species is considered to be an important shrub-steppe indicator species. Although occurring in eastern Oregon, the habitats required by the loggerhead strike do not occur in the Mason Dam project area.

**Bobolink.** The bobolink occurs throughout much of the eastern and midwestern US, with a small portion of its range extending into eastern Oregon. It is known to breed in Baker County. Habitats include tall grasslands, croplands (grains) and hayfields with moderate to dense vegetation, moderately deep litter and little bare ground. Where no natural tall-grass prairie occurs, the bobolink is generally associated with irrigated hay fields and other agricultural crops that are similar in structure to tall-grass prairies. Bobolinks are strongly polygamous and nest in small, loose colonies, building loosely woven nests on the ground in dense, high grass. During migration they can be found in freshwater marshes, especially rice fields, and at coastal areas.

The only tall grassland in the Mason Dam project area is in the recreation area parking lot. However, the low vegetation density, lack of litter and degree of bare ground limits its value for bobolink and no nest remnants were observed during the July 2009 surveys.

## **Mammals**

All except four of the mammal species on the ODFW sensitive species list were previously addressed, either in the Combined Report or in other agency screening. The white-tailed jackrabbit (*Lepus townsendii*) is fairly common in the western US, including eastern Oregon, but its range extends to the east of the Mason Dam project area in lower grassland and sagebrush steppe habitats and does not occur in the project vicinity. The ringtail (*Bassariscus astutus*) occurs only in southwest Oregon and its range does not overlap Baker or adjacent counties. The California myotis (*Myotis californicus*) occurs in low elevation habitats of the western US. The bat species roosts in man-made structures, other small crevices, on small desert shrubs or on the ground. It hibernates in caves, mines, tunnels or buildings. Maternity colonies may be formed in rock crevices, or in buildings. The California myotis is known to occur in Baker County near Brownlee Reservoir and similar low elevation habitats, but it is not likely to occur in the Mason Dam project area.

One ODFW sensitive bat species may occur in the project vicinity. The hoary bat (*Lasiurus cinereus*) occurs in forested habitats where it typically roosts in trees (foliage, bark, cavities) and rock crevices.

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Section 4.4.4 of the Combined Report notes that it is likely that sensitive bat species occur in the project vicinity but that roosting, maternity and hibernation habitat is limited within the project area. This is primarily due to human disturbance of the rock outcrops and lack of appropriately-sized trees. It is possible that the hoary bat uses the project area, especially for foraging, but use of the higher quality bat habitat described in section 4.4.4 for roosting is more likely.

### **Summary and Conclusions**

Almost all of the 143 fish, reptile, amphibian, bird and mammal species considered sensitive by ODFW fall into one of the following categories:

- Previously addressed in the Combined Report
- Not considered sensitive by ODFW in the Blue Mountain Ecoregion
- TES species that are not considered by the FWS or FS to occur in Baker County or within the Wallowa-Whitman National Forest
- Range does not include eastern Oregon.

There are a few sensitive wildlife species that were not addressed in the Combined Report and whose range both includes eastern Oregon and whose general habitats (e.g., wetland, river, pine forest) are similar to those in the project area. These species are:

- Northern leopard frog: wetlands/open water habitats
- Western toad: wetlands/open water habitats
- Long-billed curlew: grassy meadows near water
- Flammulated owl: ponderosa pine forest
- Pileated woodpecker: ponderosa pine forest
- Hoary bat: forested habitats

Except for the hoary bat, the specific habitat elements required for these species do not occur within the Mason Dam project area. The wetland-dependent sensitive amphibians require shallow, stable water levels without predatory fish access, which does not occur in the project area (although it occurs in the project vicinity). The curlew requires moist, short grass meadows near water and suitable, soft substrate feeding habitat. The ponderosa-pine dependent species require large, old growth trees with a high snag density, not the smaller trees in the project area. As noted above, it is possible that the hoary bat uses the project area, especially for foraging, but use of the higher quality bat habitat described in section 4.4.4 of the Combined Report for roosting is more likely.

As a result, there are no new ODFW sensitive species/species groups, which haven't already been considered, that would be affected by the Mason Dam project. The avoidance and enhancement measures described in the Combined Report (e.g., existing snag retention, wetland impact

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minimization, weed control, bat habitat enhancement) would serve to protect and enhance habitat for potential future sensitive species occupation and for any existing hoary bat use.

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## **APPENDIX 1**

### **ODFW SENSITIVE WILDLIFE SPECIES LIST**



# Oregon Department of Fish and Wildlife

## SENSITIVE SPECIES LIST

### Organized By Taxa

An asterisk (\*) indicates that the species, Distinct Population Segment (DPS) or Evolutionarily Significant Unit (ESU) is federally listed as threatened or endangered by either NOAA's National Marine Fisheries Service or the U.S. Fish and Wildlife Service. Parenthetical scientific names are proposed taxonomic changes not yet adopted by the American Fisheries Society Committee on Names of Fishes.

### FISH

Sensitive Species: Fish. USGS Hydrologic Unit (HU) distribution is based on current known distribution as described in the ODFW Native Fish Status Report, literature review, or expert information. A species or Species Management Unit (SMU) may be distributed in all or a portion of the HU where appropriate habitat exists. For anadromous species, the distribution does not include migration corridors. Figure 2 displays the location of the hydrologic units in Oregon.

Common Name	Scientific Name	USGS HU distribution (current)
<b>CRITICAL</b>		
Modoc Sucker*	<i>Catostomus microps</i>	Goose Lake (18020001)
Westslope Cutthroat Trout	<i>Oncorhynchus clarki lewisi</i> (Behnke 2002)	Upper John Day (17070201)
Chum Salmon (Columbia River ESU)*	<i>Oncorhynchus keta</i>	Lower Columbia (17080006), Lower Columbia-Clatskanie (17080003), Lower Willamette (17090012), Lower Columbia-Sandy (17080001)
Chum Salmon (Coastal Chum Salmon SMU/Pacific Coast ESU)	<i>Oncorhynchus keta</i>	Nehalem (17100202), Necanicum (17100201), Wilson-Trask-Nestucca (17100203), Yamhill (17090008), Siletz-Yaquina (17100204)
Steelhead (Klamath Mountains Province ESU, Klamath Summer Steelhead SMU)	<i>Oncorhynchus mykiss</i>	Upper Klamath River (18010206)
Steelhead (Lower Columbia River ESU/SMU, winter run)*	<i>Oncorhynchus mykiss</i>	Lower Columbia (17080006), Lower Columbia-Clatskanie (17080003), Lower Willamette (17090012), Lower Columbia-Sandy (17080001), Clackamas (17090011), Middle Columbia-Hood (17070105), Middle Columbia-Hood (17070105)
Steelhead (Lower Columbia River ESU/SMU, summer run)*	<i>Oncorhynchus mykiss</i>	
Steelhead (Middle Columbia River ESU, summer run)*	<i>Oncorhynchus mykiss</i>	Lower Deschutes (17070306), Trout (17070307), Upper Deschutes (17070301), Lower Crooked (17070305), Upper John Day (17070201), North Fork John Day (17070202), Middle Fork John Day (17070203), Lower John Day (17070204), Umatilla (17070103), Walla Walla (17070102)
Great Basin Redband Trout (Catlow Valley Redband Trout SMU)	<i>Oncorhynchus mykiss newberrii</i> (Behnke 2002)	Guano (17120008)

2008 ODFW Sensitive Species List, organized by taxon

Common Name	Scientific Name	USGS HU distribution (current)
Great Basin Redband Trout (Goose Lake Redband Trout SMU)	<i>Oncorhynchus mykiss newberrii</i> (Behnke 2002)	Goose Lake (18020001)
Great Basin Redband Trout (Warner Lakes Redband Trout SMU)	<i>Oncorhynchus mykiss newberrii</i> (Behnke 2002)	Warner Lake (17120007)
Great Basin Redband Trout (Fort Rock Redband Trout SMU)	<i>Oncorhynchus mykiss newberrii</i> (Behnke 2002)	Summer Lake (17120005)
Chinook Salmon (Upper Willamette River ESU, spring run/Willamette Spring Chinook SMU)*	<i>Oncorhynchus tshawytscha</i>	Molalla-Pudding (17090009), North Santiam (17090005), South Santiam (17090006), Mckenzie (17090004), Middle Fork Willamette (17090001), Coast Fork Willamette (17090002), Upper Willamette (17090003)
Chinook Salmon (Coastal Spring Chinook SMU)	<i>Oncorhynchus tshawytscha</i>	Wilson-Trask-Nestucca (17100203), Siletz-Yaquina (17100204), Alosea (17100205), Coquille (17100305), North Umpqua (17100301), South Umpqua (17100302)
Chinook Salmon (Lower Columbia River Chinook ESU/SMU, fall run)*	<i>Oncorhynchus tshawytscha</i>	Lower Columbia (17080006), Lower Columbia-Clatskanie (17080003), Lower Columbia-Sandy (17080001), Clackamas (17090011), Middle Columbia-Hood (17070105), Lower Willamette (17090012)
Chinook Salmon (Lower Columbia River Chinook ESU/SMU, spring run)*	<i>Oncorhynchus tshawytscha</i>	Lower Columbia-Sandy (17080001), Clackamas (17090011)
Oregon Chub*	<i>Oregonichthys crameri</i>	North Santiam (17090005), Upper Willamette (17090003), South Santiam (17090006), Mckenzie (17090004), Middle Fork Willamette (17090001), Coast Fork Willamette (17090002)
Umpqua Chub	<i>Oregonichthys kalawatseti</i>	Umpqua (17100303), North Umpqua (17100301), South Umpqua (17100302)
Bull Trout (Willamette Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Mckenzie (17090004), Middle Fork Willamette (17090001)
Bull Trout (John Day Bull Trout SMU)*	<i>Salvelinus confluentus</i>	North Fork John Day (17070202), Middle Fork John Day (17070203), Upper John Day (17070201)
Bull Trout (Umatilla Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Umatilla (17070103)
Bull Trout (Grande Ronde Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Upper Grande Ronde River (17060104), Wallowa River (17060105), Lower Grande Ronde (17060106)
Bull Trout (Imnaha Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Imnaha River (17060102)
Bull Trout (Hells Canyon Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Brownlee Reservoir (17050201), Powder River (17050203)
Bull Trout (Hood River Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Middle Columbia-Hood (17070105)
Bull Trout (Malheur River Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Upper Malheur (17050116)
Bull Trout (Odell Lake Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Upper Deschutes (17070301)
Bull Trout (Klamath Lake Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Upper Klamath Lake (18010203), Sprague (18010202)

2008 ODFW Sensitive Species List, organized by taxon

Common Name	Scientific Name	USGS HU distribution (current)
<b>VULNERABLE</b>		
Goose Lake Sucker	<i>Catostomus occidentalis lacusanserinus</i> (Moyle 2002)	Goose Lake (18020001)
Alvord Chub	<i>Gila alvordensis</i> ( <i>Siphateles alvordensis</i> )	Alvord Lake (17120009)
Miller Lake Lamprey	<i>Lampetra minima</i> ( <i>Entosphenus minimus</i> )	Williamson (18010201), Sprague (18010202)
Western Brook Lamprey	<i>Lampetra richardsoni</i>	Columbia River system and coastal streams including the Rogue
Pacific Lamprey	<i>Lampetra tridentate</i> ( <i>Entosphenus tridentata</i> )	Columbia River system and coastal streams including the Rogue
Coastal Cutthroat Trout (Lower Columbia Coastal Cutthroat Trout SMU/ Southwestern Washington/Columbia River ESU)	<i>Oncorhynchus clarkii clarkii</i>	Lower Columbia-Clatskanie (17080003), Lower Columbia (17080006), Lower Willamette (17090012), Middle Columbia-Hood (17070105), Lower Columbia-Sandy (17080001), Clackamas (17090011)
Coho Salmon (Coastal Coho Salmon SMU/Oregon Coast ESU)*	<i>Oncorhynchus kisutch</i>	Nehalem (17100202), Necanicum (17100201), Wilson-Trask-Nestucca (17100203), Siletz-Yaquina (17100204), Alsea (17100205), Suslaw (17100206), Siltcoos (17100207), Umpqua (17100303), Coos (17100304), South Umpqua (17100302), Coquille (17100305), Sixes (17100306), North Umpqua (17100301)
Coho Salmon (Southern Oregon/Northern California Coasts ESU/Rogue (and Klamath) Coho SMU)*	<i>Oncorhynchus kisutch</i>	Middle Rogue (17100308), Lower Rogue (17100310), Illinois (17100311), Upper Rogue (17100307), Applegate (17100309)
Inland Columbia Redband Trout	<i>Oncorhynchus mykiss gairdneri</i>	Lower Owyhee (17050110), Jordan (17050108), Middle Owyhee (17050107), South Fork Owyhee (17050105), East Little Owyhee (17050106), Lower Malheur (17050117), Upper Malheur (17050116), Bully (17050118), Willow (17050119), Burnt River (17050202), Lower Snake-Asotin (17060103), Walla Walla (17070102), , Lower Grande Ronde (17060106), Middle Fork John Day (17070203), Lower John Day (17070204), Brownlee Reservoir (17050201), Powder River (17050203), Imnaha River (17060102), North Fork John Day (17070202), Upper Grande Ronde River (17060104), Wallowa River (17060105), Willow (17070104), Umatilla (17070103), South Fork Crooked (17070303), Upper Crooked (17070304), Upper John Day (17070201), Little Deschutes (17070302), , Lower Crooked (17070305), Upper Deschutes (17070301), Trout (17070307), Middle Columbia-Hood (17070105), Lower Deschutes (17070306)
Great Basin Redband Trout (Malheur Lakes Redband SMU)	<i>Oncorhynchus mykiss newberrii</i> (Behnke 2002)	Silvies (17120002), Harney-Malheur Lakes (17120001), Silver (17120004), Donner Und Blitzen (17120003),
Great Basin Redband Trout (Chewaucan Redband Trout SMU)	<i>Oncorhynchus mykiss newberrii</i> (Behnke 2002)	Lake Abert (17120006)
Great Basin Redband Trout (Upper Klamath Basin Redband Trout SMU)	<i>Oncorhynchus mykiss newberrii</i> (Behnke 2002)	Sprague (18010202), Upper Klamath Lake (18010203), Williamson (18010201), Lost River (18010204), Upper Klamath River (18010206)
Steelhead (Upper Willamette River ESU, winter run/Willamette Winter Steelhead SMU)*	<i>Oncorhynchus mykiss</i>	Tualatin (17090010), Yamhill (17090008), Molalla-Pudding (17090009), North Santiam (17090005), South Santiam (17090006), Upper Willamette (17090003), Middle Willamette (17090007)

2008 ODFW Sensitive Species List, organized by taxon

Common Name	Scientific Name	USGS HU distribution (current)
Steelhead (Oregon Coast ESU, summer run/Coastal Summer Steelhead SMU)	<i>Oncorhynchus mykiss</i>	Siletz-Yaquina (17100204), North Umpqua (17100301)
Steelhead (Oregon Coast ESU, winter run/Coastal Winter Steelhead SMU)	<i>Oncorhynchus mykiss</i>	Nehalem (17100202), Necanicum (17100201), Wilson-Trask-Nestucca (17100203), Siletz-Yaquina (17100204), Alsea (17100205), Siuslaw (17100206), Umpqua (17100303), Coos (17100304), North Umpqua (17100301), South Umpqua (17100302), Coquille (17100305), Sixes (17100306)
Steelhead (Klamath Mountains Province ESU, summer run/Rogue Summer Steelhead SMU)	<i>Oncorhynchus mykiss</i>	Upper Rogue (17100307), Middle Rogue (17100308), Applegate (17100309), Lower Rogue (17100310)
Steelhead (Snake River Basin ESU/Snake Summer Steelhead SMU)*	<i>Oncorhynchus mykiss</i>	Imnaha River (17060102), Upper Grande Ronde River (17060104), Wallowa River (17060105), Lower Grande Ronde River (17060106)
Chinook Salmon (Mid-Columbia River ESU/SMU, fall run)	<i>Oncorhynchus tshawytscha</i>	Lower Deschutes (17070306)
Chinook Salmon (Rogue Spring Chinook SMU)	<i>Oncorhynchus tshawytscha</i>	Upper Rogue (17100307), Middle Rogue (17100308)
Chinook Salmon (Middle Columbia Spring Chinook SMU)	<i>Oncorhynchus tshawytscha</i>	Lower Deschutes (17070306), Upper Deschutes (17070301), Lower Crooked (17070305), Upper John Day (17070201), North Fork John Day (17070202), Middle Fork John Day (17070203)
Chinook Salmon (Southern Oregon/Northern California Coast ESU, fall run/Rogue Fall Chinook SMU)	<i>Oncorhynchus tshawytscha</i>	Lower Rogue (17100310), Illinois (17100311), Chetco (17100312), Upper Rogue (17100307), Middle Rogue (17100308), Applegate (17100309), Sixes (17100306)
Millicoma Dace	<i>Rhinichthys cataractae</i> ssp.	Coos (17100304)
Bull Trout (Deschutes Bull Trout SMU)*	<i>Salvelinus confluentus</i>	Lower Deschutes (17070306), Upper Deschutes (17070301)

2008 ODFW Sensitive Species List, organized by taxon



## AMPHIBIANS

Common Name	Scientific Name	Ecoregion
<b>CRITICAL</b>		
Columbia Spotted Frog	<i>Rana luteiventris</i>	Columbia Plateau, Northern Basin and Range
Oregon Spotted Frog	<i>Rana pretiosa</i>	
Foothill Yellow-legged Frog	<i>Rana boylei</i>	Willamette Valley
Northern Leopard Frog	<i>Lithobates pipiens</i>	
<b>VULNERABLE</b>		
Cope's Giant Salamander	<i>Dicamptodon copei</i>	
Columbia Torrent Salamander	<i>Rhyacotriton kezeri</i>	
Southern Torrent Salamander	<i>Rhyacotriton variegatus</i>	
Cascade Torrent Salamander	<i>Rhyacotriton cascadae</i>	
Larch Mountain Salamander	<i>Plethodon larselli</i>	
Del Norte Salamander	<i>Plethodon elongatus</i>	
Siskiyou Mountains Salamander	<i>Plethodon stormi</i>	
Clouded Salamander	<i>Aneides ferreus</i>	
Black Salamander	<i>Aneides flavipunctatus</i>	
Oregon Slender Salamander	<i>Batrachoseps wrightorum</i>	
Rocky Mountain Tailed Frog	<i>Ascaphus montanus</i>	
Coastal Tailed Frog	<i>Ascaphus truei</i>	
Western Toad	<i>Anaxyrus boreas</i>	
Northern Red-legged Frog	<i>Rana aurora</i>	Klamath Mountains, Willamette Valley
Cascades Frog	<i>Rana cascadae</i>	
Columbia Spotted Frog	<i>Rana luteiventris</i>	Blue Mountains, Eastern Cascades Slopes and Foothills
Foothill Yellow-legged Frog	<i>Rana boylei</i>	Coast Range, Klamath Mountains, West Cascades

## REPTILES

Common Name	Scientific Name	Ecoregion
<b>CRITICAL</b>		
Western Painted Turtle	<i>Chrysemys picta bellii</i>	
Western Pond Turtle	<i>Actinemys marmorata</i>	
Western Rattlesnake	<i>Crotalus oregonus</i>	Willamette Valley
<b>VULNERABLE</b>		
Northern Sagebrush Lizard	<i>Sceloporus graciosus graciosus</i>	Columbia Plateau
Common Kingsnake	<i>Lampropeltis getula</i>	
California Mountain Kingsnake	<i>Lampropeltis zonata</i>	

2008 ODFW Sensitive Species List, organized by taxon

# BIRDS

Common Name	Scientific Name	Ecoregion
<b>CRITICAL</b>		
Columbian Sharp-tailed Grouse	<i>Tympanuchus phasianellus columbianus</i>	
Red-necked Grebe	<i>Podiceps grisegena</i>	Breeding Population
Ferruginous Hawk	<i>Buteo regalis</i>	Columbia Plateau
Yellow Rail	<i>Coturnicops noveboracensis</i>	
Upland Sandpiper	<i>Bartramia longicauda</i>	
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	
Burrowing Owl	<i>Athene cunicularia</i>	Blue Mountains, Columbia Plateau, Eastern Cascades Slopes and Foothills, Klamath Mountains, Willamette Valley
Common Nighthawk	<i>Chordeiles minor</i>	Willamette Valley
Lewis's Woodpecker	<i>Melanerpes lewis</i>	
White-headed Woodpecker	<i>Picoides albolarvatus</i>	
Streaked Horned Lark	<i>Eremophila alpestris strigata</i>	Coast Range, Klamath Mountains, Willamette Valley
Purple Martin	<i>Progne subis</i>	
Yellow-breasted Chat	<i>Icteria virens</i>	Willamette Valley
Oregon Vesper Sparrow	<i>Poocetes gramineus affinis</i>	Klamath Mountains, Willamette Valley
Sage Sparrow	<i>Amphispiza belli</i>	Columbia Plateau
Western Meadowlark	<i>Sturnella neglecta</i>	Willamette Valley
<b>VULNERABLE</b>		
Greater Sage-Grouse	<i>Centrocercus urophasianus</i>	Blue Mountains, Columbia Plateau, Eastern Cascades Slopes and Foothills
Spruce Grouse	<i>Falciennis canadensis</i>	
Mountain Quail	<i>Oreortyx pictus</i>	Northern Basin and Range
American White Pelican	<i>Pelecanus erythrorhynchos</i>	Breeding Population
Snowy Egret	<i>Egretta thula</i>	Breeding Population
Northern Goshawk	<i>Accipiter gentilis</i>	
Swainson's Hawk	<i>Buteo swainsoni</i>	
Ferruginous Hawk	<i>Buteo regalis</i>	Blue Mountains, Eastern Cascades Slopes and Foothills
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	
Arctic Peregrine Falcon	<i>Falco peregrinus tundrius</i>	
Greater Sandhill Crane	<i>Grus canadensis tabida</i>	Central Valley Population (Oregon Breeding Population)
Black Oystercatcher	<i>Haematopus bachmani</i>	
Long-billed Curlew	<i>Numenius americanus</i>	Blue Mountains, Columbia Plateau, Eastern Cascades Slopes and Foothills
Franklin's Gull	<i>Larus pipixcan</i>	
Cassin's Auklet	<i>Ptychoramphus aleuticus</i>	
Rhinoceros Auklet	<i>Cerorhinca monocerata</i>	
Tufted Puffin	<i>Fratercula cirrhata</i>	
Flammulated Owl	<i>Otus flammeolus</i>	
Burrowing Owl	<i>Athene cunicularia</i>	Northern Basin and Range
Great Gray Owl	<i>Strix nebulosa</i>	

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## BIRDS Continued

Common Name	Scientific Name	Ecoregion
<b>VULNERABLE continued</b>		
Acorn Woodpecker	<i>Melanerpes formicivorus</i>	Willamette Valley
American Three-toed Woodpecker	<i>Picoides dorsalis</i>	
Black-backed Woodpecker	<i>Picoides arcticus</i>	
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Blue Mountains, Eastern Cascades Slopes and Foothills, Klamath Mountains
Olive-sided Flycatcher	<i>Contopus cooperi</i>	
Willow Flycatcher	<i>Empidonax traillii adastus</i>	Blue Mountains, Columbia Plateau, Eastern Cascades Slopes and Foothills, Northern Basin and Range
Little Willow Flycatcher	<i>Empidonax traillii brewsteri</i>	Coast Range, Klamath Mountains, West Cascades, Willamette Valley
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Blue Mountains, Columbia Plateau, Eastern Cascades Slopes and Foothills
White-breasted Nuthatch (=Slender-billed Nuthatch)	<i>Sitta carolinensis aculeata</i>	Coast Range, Klamath Mountains, West Cascades, Willamette Valley
Western Bluebird	<i>Sialia mexicana</i>	Coast Range, Klamath Mountains, West Cascades, Willamette Valley
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	
Bobolink	<i>Dolichonyx oryzivorus</i>	

## MAMMALS

Common Name	Scientific Name	Ecoregion
<b>CRITICAL</b>		
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	
Fisher	<i>Martes pennanti</i>	
<b>VULNERABLE</b>		
California Myotis	<i>Myotis californicus</i>	
Fringed Myotis	<i>Myotis thysanodes</i>	
Long-legged Myotis	<i>Myotis volans</i>	
Hoary Bat	<i>Lasiurus cinereus</i>	
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	
Spotted Bat	<i>Euderma maculatum</i>	
Pallid Bat	<i>Antrozous pallidus</i>	
Pygmy Rabbit	<i>Brachylagus idahoensis</i>	Willamette Valley
Black-tailed Jackrabbit	<i>Lepus californicus</i>	
White-tailed Jackrabbit	<i>Lepus townsendii</i>	Willamette Valley
Western Gray Squirrel	<i>Sciurus griseus</i>	Willamette Valley
Red Tree Vole	<i>Arborimus longicaudus</i>	Coast Range
Ringtail	<i>Bassariscus astutus</i>	
American Marten	<i>Martes americana</i>	Blue Mountains, Coast Range
Columbian White-tailed Deer*	<i>Odocoileus virginianus leucurus</i>	Coast Range (Columbia River Population)

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