

Appendix D – Botany Biological Evaluation



Date: 9 April 2004

File Code: 2670 Botany
Subject: BE for Boat Launch Reconstruction

I. Introduction

Purpose:

The purpose of this Biological Evaluation is to review the Boat Launch Reconstruction project in sufficient detail as to determine whether the proposed action will result in a trend toward Federal listing of any sensitive plant species.

Plant Species of Concern:

Current management direction mandates conservation of several categories of rare plants on the Willamette National Forest. Protection of Federally listed Threatened and Endangered species is mandated by the Endangered Species Act. No federally listed Threatened and Endangered, or Proposed plants, nor suitable habitat for these listed plants are known to occur in the project area. Sensitive species are protected by USDA Forest Service regulations and manual direction (FSM 2672.4).

Prefield reviews are conducted to determine which species from the Regional Foresters 2003 Sensitive Species List for the Willamette National Forest are known from the project area or have suitable habitat present and potentially occur in the project area. Results shown no known occurrences of sensitive plant species within the project area. There is potential habitat for three sensitive species in the project area (see Appendix A).

II. Description of the Proposed Project

Location:

This project is located on the McKenzie River Ranger District, Willamette National Forest. The boat launch locations are Frissell T16S, R6E, Sec 1, Paradise T16S, R6E, Sec 9, and Bruckart T16S, R5E, Sec 19.

Proposed Action and Purpose:

The McKenzie River Ranger District proposes to reconstruct boat launches at the Frissell, Paradise, and Bruckart launch sites. Currently, public launch facilities on the upper McKenzie River at Frissell, Paradise, and Bruckart sites are poorly designed and do not meet current and increasing demand for recreation access. Facilities are mostly compacted gravel and have slopes in excess of 15%, creating unstable conditions for pedestrians and vehicles. Due to deteriorating conditions there is a need to provide improved access, eliminate safety hazards, and minimize sediment delivery to the river.

III. Existing Environment

Survey Results:

A survey of the proposed project area for sensitive plants was conducted on June 9, 2003 and



July 9, 2003 by Susan Stearns. No sensitive plants were observed during the survey.

IV. Impacts of the Proposed Project

Direct and Indirect Impacts:

Implementation of this project will have no direct or indirect effect on sensitive plant species or their occupied habitat because they are not present in the project area.

Cumulative Effects:

The proposed action will have no cumulative effects on sensitive plant species or their occupied habitat because no sensitive plants are located within the project area.

V. Determination

It is my determination that implementation of this project will have no effect on sensitive plant species because no sensitive plants are located in the project area.

Prepared by: /s/Susan Stearns Date: 9 April 2004
Susan Stearns, Botanist
McKenzie River Ranger District

Appendix A: Willamette National Forest 2003 Sensitive Plant Species List

Species	Habitat Present in Project Area	Species Present in Project Area
<i>Agoseris elata</i>	N	N
<i>Arabis hastatula</i>	N	N
<i>Arnica viscosa</i>	N	N
<i>Asplenium septentrionale</i>	N	N
<i>Aster gormanii</i>	N	N
<i>Aster vialis</i>	N	N
<i>Botrychium minganense</i>	N	N
<i>Botrychium montanum</i>	N	N
<i>Botrychium pumicola</i>	N	N
<i>Calamagostis breweri</i>	N	N
<i>Carex livida</i>	N	N
<i>Carex scirpoidea var. stenochlaena</i>	N	N
<i>Cimicifuga elata</i>	Y	N
<i>Coptis trifolia</i>	N	N
<i>Corydalis aqua-gelidae</i>	Y	N
<i>Frasera umpquaensis</i>	N	N
<i>Gentiana newberryi</i>	N	N
<i>Iliamna latibracteata</i>	Y	N
<i>Lewisia columbiana var. columbiana</i>	N	N
<i>Lycopodiella inundata</i>	N	N
<i>Montia howellii</i>	N	N
<i>Ophioglossum pusillum</i>	N	N
<i>Pellaea andromedaefolia</i>	N	N
<i>Polystichum californicum</i>	N	N
<i>Potentilla villosa</i>	N	N
<i>Romanzoffia thompsonii</i>	N	N
<i>Scheuchzeria palustris var. americana</i>	N	N
<i>Sisyrinchium sarmentosum</i>	N	N
<i>Utricularia minor</i>	N	N
<i>Wolffia borealis</i>	N	N
<i>Wolffia columbiana</i>	N	N



Date: 9 April 2004

File Code: 2670 Plants
Subject: Supplemental Botany Report for Boat
Launch Reconstruction

This document serves as the Botanical Resource Report for the Boat Launch Reconstruction project on the McKenzie River Ranger District, Willamette National Forest. The boat launch locations are: Frissell T16S R6E Sec 1, Paradise T16S R6E Sec 9, and Bruckart T16S R5E Sec 19.

Sensitive Plants

A prefield review showed no known sensitive plant species in the project area. There is potential habitat for three sensitive plants. A survey of the project area was conducted by Susan Stearns on June 9, 2003 and July 9, 2003, no sensitive plant species were observed. Implementation of this project will have no effect on sensitive plant species or their habitat because no sensitive plant species are present in the project area.

Survey and Manage

This project is located within old-growth/late-successional habitat. There is potential habitat for survey and manage vascular plants, bryophytes, lichens or the fungus *Bridgeoporus nobilissimus*. The project areas was surveyed for S&M species at the same time as the sensitive plant surveys. No S&M vascular plants, lichens, bryophytes, or fungi were observed during the survey.

Noxious Weeds

This project poses a concern for the introduction of noxious weeds due to the ground disturbing nature of the project. The following measures will be used to mitigate the potential introduction of noxious weeds.

- Off road or ground disturbing equipment will be washed prior to entering National Forest land. Equipment will be free of all seed and debris that may contain plant seeds such as soil and vegetation.
- Material brought in to reconstruct the boat launches, such as fill soil and gravel, will be free of weeds and weed seed.

Revegetation

Ground that is adjacent to boat launches and is disturbed during implementation of this project will be planted with native vegetation to reduce the spread and introduction of noxious weeds. All plant material used for revegetation in the project will be native.

Prepared by: /s/Susan Stearns
Susan Stearns, District Botanist
McKenzie River Ranger District

Date: 9 April 2004





United States
Department of
Agriculture

Forest
Service

Willamette National Forest
McKenzie River
Ranger District

57600 McKenzie Highway
McKenzie Bridge, OR 97413
Tel (541) 822-3381
FAX (541) 822-7254_

File Code: 2670 Plants
Route To: Project Files

Date: February 9, 2007

Subject: Biological Evaluation Addendumem-Boat Launch Reconstruction

To: Ray Rivera Team Leader

Introduction

This report serves to supplement the April 9, 2004 Biological Evaluation prepared for Boat Launch Reconstruction Environmental Assessment.

This project is located on the McKenzie River Ranger District, Willamette National Forest. The boat launch locations are Frissell (T. 16 S, R. 6 E, Sec.1), Bruckart (T. 16 S, R. 5 E, Sec. 19) and Paradise (T. 16 S, R. 6 E, Sec. 9).

Prefield Review

A prefield review of the proposed project area for plant species listed on the Regional Foresters list for the Willamette National Forest was conducted in April 2004 and June 2006. No known sensitive plant populations were found during the prefield review. There is potential habitat for a number of plant species in the areas proposed for development. Attached is a copy of the sensitive plant list.

Survey Results

An intuitive controlled survey of the proposed project area for sensitive plants was conducted in April 2004. No sensitive plants were observed during the survey.

The project area was surveyed again in June 2006. No sensitive plants were found.

Effects Analysis

Implementation of this project will have no direct or indirect effect on sensitive plant species or their habitat because they are not present in the project area. The proposed action will have no cumulative effects on sensitive plant species or their habitat because no sensitive plants are located within the project area.

Determination

It is my determination that implementation of this project will have no effect on sensitive plant species because no sensitive plants are located in the project area.

Prepared by: _____
Burtchell Thomas, Botanist
McKenzie River Ranger District

Date: _____
February 9, 2007



Table 1: Summary of Potential Habitat and Presence for Sensitive Botanical Species

Species	Prefield Review	Species Presence
<i>Agoseris elata</i>	habitat not present	No
<i>Arabis hastatula</i>	habitat not present	No
<i>Arnica viscosa</i>	habitat not present	No
<i>Asplenium septentrionale</i>	habitat not present	No
<i>Aster gormanii</i>	habitat not present	No
<i>Boletus pulcherrimus</i>	habitat not present	No
<i>Botrychium minganense</i>	habitat not present	No
<i>Botrychium montanum</i>	habitat not present	No
<i>Botrychium pumicola</i>	habitat not present	No
<i>Bridgeoporus nobilissimus</i>	habitat not present	No
<i>Calamagrostis breweri</i>	habitat not present	No
<i>Carex livida</i>	habitat not present	No
<i>Carex scirpoidea</i> var. <i>stenochlaena</i>	habitat not present	No
<i>Castilleja rupicola</i>	habitat not present	No
<i>Chaenotheca subroscida</i>	habitat not present	No
<i>Cimicifuga elata</i>	habitat present	No
<i>Coptis trifolia</i>	habitat not present	No
<i>Cordyceps capitata</i>	habitat not present	No
<i>Cortinarius barlowensis</i>	habitat not present	No
<i>Corydalis aqua-gelidae</i>	habitat present	No
<i>Cudonia monticola</i>	habitat not present	No
<i>Dermatocarpon luridum</i>	habitat not present	No
<i>Eucephalis</i> (<i>Aster</i>) <i>vialis</i>	habitat not present	No
<i>Frasera umpquaensis</i>	habitat not present	No
<i>Gentiana newberryi</i>	habitat not present	No
<i>Gomphus kaufmanii</i>	habitat not present	No
<i>Gyromitra californica</i>	habitat not present	No
<i>Hypogymnia duplicata</i>	habitat not present	No
<i>Iliamna latibracteata</i>	habitat present	No
<i>Leptogium burnetiae</i> var. <i>hirsutum</i>	habitat not present	No
<i>Leptogium cyanescens</i>	habitat not present	No
<i>Leucogaster citrinus</i>	habitat not present	No
<i>Lewisia columbiana</i> var. <i>columbiana</i>	habitat not present	No
<i>Lobaria linita</i>	habitat not present	No
<i>Lupinus sulphureus</i> var. <i>kincaidii</i>	habitat not present	
<i>Lycopodiella inundata</i>	habitat not present	No
<i>Montia howellii</i>	habitat not present	No
<i>Mycenia monticola</i>	habitat not present	No

<i>Nephroma occultum</i>	habitat present	No
<i>Ophioglossum pusillum</i>	habitat not present	No
<i>Pannaria rubiginosa</i>	habitat not present	No
<i>Pellaea andromedaefolia</i>	habitat not present	No
<i>Peltigera neckeri</i>	habitat not present	No
<i>Peltigera pacifica</i>	habitat not present	No
<i>Phaeocollybia attenuata</i>	habitat not present	No
<i>Phaeocollybia dissiliens</i>	habitat not present	No
<i>Phaeocollybia pseudofestiva</i>	habitat not present	No
<i>Phaeocollybia sipei</i>	habitat not present	No
<i>Pilophorus nigricaulis</i>	habitat not present	No
<i>Polystichum californicum</i>	habitat not present	No
<i>Potentilla villosa</i>	habitat not present	No
<i>Pseudocyphellaria rainierensis</i>	habitat present	No
<i>Ramalina pollinaria</i>	habitat not present	No
<i>Ramaria amyloidea</i>	habitat not present	No
<i>Ramaria aurantiisiccescens</i>	habitat not present	No
<i>Ramaria largentii</i>	habitat not present	No
<i>Rhizomnium nudum</i>	habitat not present	No
<i>Romanzoffia thompsonii</i>	habitat not present	No
<i>Scheuchzeria palustris</i> var. <i>americana</i>	habitat not present	No
<i>Schistostega pennata</i>	habitat not present	No
<i>Scouleria marginata</i>	habitat present	No
<i>Sisyinchium sarmmentosum</i>	habitat not present	No
<i>Sowerbyella rhenana</i>	habitat not present	No
<i>Tetraphis geniculata</i>	habitat not present	No
<i>Tholurna disimilis</i>	habitat not present	No
<i>Usnea longissima</i>	habitat present	No
<i>Utricularia minor</i>	habitat not present	No
<i>Wolffia borealis</i>	habitat not present	No
<i>Wolffia columbiana</i>	habitat not present	No

ATTACHMENT 1: **Regional Forester's Sensitive Botanical Species List for the Willamette National Forest 2007.** Species of federal, state and local importance are included on the R-6 list.

Species	Occurrence on WNF	ONHP Status	State Status	Federal Status	Habitat Types
<i>Agoseris elata</i>	S	2			MM,DM
<i>Arabis hastatula</i>	D	1		SofC	RO
<i>Arnica viscosa</i>	S	2			RS
<i>Asplenium septentrionale</i>	S	2			RO
<i>Aster gormanii</i>	D	1			RS
<i>Boletus pulcherrimus</i>	D	1			CF
<i>Botrychium minganense</i>	D	2			RZ,CF
<i>Botrychium montanum</i>	D	2			RZ,CF
<i>Botrychium pumicola</i>	S	1	LT		HV
<i>Bridgeoporus nobilissimus</i>	D	1			CF
<i>Calamagrostis breweri</i>	D	2			MM,RZ
<i>Carex livida</i>	S	2			WM
<i>Carex scirpoidea</i>	D	2			RO
<i>var. stenochlaena</i>					
<i>Castilleja rupicola</i>	D	2			RO
<i>Chaenotheca subroscida</i>	D	3			CF
<i>Cimicifuga elata</i>	D	1	C		CF
<i>Coptis trifolia</i>	S	2			WM,CF
<i>Cordyceps capitata</i>	D	unlisted			CF
<i>Corydalis aqua-gelidae</i>	D	1	C		RZ,CF
<i>Cudonia monticola</i>	D	not listed			CF
<i>Dermatocarpon luridum</i>	S	3			RZ on rock
<i>Eucephalis (Aster) vialis</i>	S	1	LT	SofC	CF
<i>Frasera umpquaensis</i>	D	1	C		MM
<i>Gentiana newberryi</i>	D	2			MM
<i>Gomphus kaufmanii</i>	D	3			CF
<i>Gyromitra californica</i>	D	2			CF
<i>Hypogymnia duplicata</i>	S	3			CF
<i>Iliamna latibracteata</i>	S	2			CF,RZ
<i>Leptogium burnetiae</i>					
<i>var. hirsutum</i>	S	3			CF
<i>Leptogium cyanescens</i>	D	3			CF
<i>Leucogaster citrinus</i>	D	3			CF
<i>Lewisia columbiana</i>	D	2			RS
<i>var. columbiana</i>					
<i>Lobaria linita</i>	D	2			RO
<i>Lupinus sulphureus</i>					
<i>var. kincaidii</i>	S	1	LT	LT	MM,DM
<i>Lycopodiella inundata</i>	D	2			WM
<i>Lycopodium complanatum</i>	D	2			CF
Species	Occurrence on WNF	ONHP Status	State Status	Federal Status	Habitat Types
<i>Montia howellii</i>	D	4	C		RZ
<i>Mycenia monticola</i>	D	not listed			CF

<i>Nephroma occultum</i>	D	4			CF
<i>Ophioglossum pusillum</i>	D	2			WM
<i>Pannaria rubiginosa</i>	D	2			CF
<i>Pellaea andromedaefolia</i>	S	2			RO
<i>Peltigera neckeri</i>	D	not listed			CF
<i>Peltigera pacifica</i>	D	not listed			CF
<i>Phaeocollybia attenuata</i>	D	4			CF
<i>P. dissiliens</i>	D	3			CF
<i>P. pseudofestiva</i>	D	3			CF
<i>P. sipei</i>	D	3			CF
<i>Pilophorus nigricaulis</i>	D	2			RO
<i>Polystichum californicum</i>	D	2			RO
<i>Potentilla villosa</i>	D	2			RS, RO
<i>Pseudocyphellaria</i>					
<i>rainierensis</i>	D	4			CF,RZ
<i>Ramalina pollinaria</i>	D	2			CF, RZ
<i>Ramaria amyloidea</i>	D	2			CF
<i>R. aurantiiscescens</i>	D	4			CF
<i>R. largentii</i>	D	3			CF
<i>Rhizomnium nudum</i>	D	2			CF
<i>Romanzoffia thompsonii</i>	D	1			RS
<i>Scheuchzeria palustris</i>	D	2			WM
<i>var. americana</i>					
<i>Schistostega pennata</i>	D	2			CF
<i>Sisyrrinchium sarmentosum</i>	S	1	C	SofC	MM,DM
<i>Sowerbyella rhenana</i>	D	3			CF
<i>Tetraphis geniculata</i>	S	2			CF
<i>Tholurna disimilis</i>	D	2			CF
<i>Usnea longissima</i>	D	3			CF,RZ
<i>Utricularia minor</i>	D	2			SW
<i>Wolffia borealis</i>	S	2			SW
<i>Wolffia columbiana</i>	S	2			SW

Occurrence on Willamette National Forest:

- S = Suspected
- D = Documented

Oregon Natural Heritage Program (ORNHP):

- 1 = Taxa threatened or endangered throughout range.
- 2 = Taxa threatened or endangered in Oregon but more common or stable elsewhere.
- 3 = Species for which more information is needed before status can be determined, but which may be threatened or endangered (Review).
- 4 = Species of concern not currently threatened or endangered (Watch).

Oregon State Status:

- LT = Threatened
- LE = Endangered
- C = Candidate

Federal Status: These plant species were originally published as CANDIDATE THREATENED (CT) in the Smithsonian Report, **Federal Register**, July 1, 1975, or as PROPOSED ENDANGERED (PE) in a later report, **Federal Register**, June 16, 1976. The latest **Federal Register** consulted was dated September 30, 1993. Updated listings appear periodically in the Notice of Review (USFWS); the status of several species is categorized as follows:

- LE = Listed as an Endangered Species
- LT = Listed as a Threatened Species
- PE = Proposed as an Endangered Species
- PT = Proposed as a Threatened Species
- C = Candidate for Listing as Threatened or Endangered
- Sof C = Species of Concern; taxa for which additional information is needed to support proposal to list under the ESA.

Habitat Types:

- | | |
|----------------------------------|----------------------------|
| MM = Mesic meadows | RS = Rocky slopes, scree |
| WM = Wet meadows | RO = Rock outcrops, cliffs |
| DM = Dry meadows | DW = Dry open woods |
| RZ = Riparian zones, floodplains | HV = High volcanic areas |
| CF = Coniferous forest | SW = Standing water |

ATTACHMENT 2: Field reconnaissance survey levels for determining presence potential for TES species.

Level A:	Aerial photo interpretation and review of existing site records. Determination of the potential for a listed species to occur within the proposed project area. No field surveys completed.	
	Low potential:	Less than 40% potential for listed species inhabiting the project area.
	Moderate potential:	40-60% potential for a listed species inhabiting the proposed project area.
	High potential:	Greater than 60% potential for listed species inhabiting the proposed project area.
Level B:	Single entry survey of probable habitats. Areas are identified by photos and existing field knowledge. Field surveys are conducted during the season most favorable for species identification.	
	Low intensity:	Selected habitat surveys (approximately 5-10% of area) are conducted with a single entry for listed species inhabiting the proposed project area.
	Moderate intensity:	Selected habitat surveys (approximately 10-40% of area) are conducted with a single entry for listed species inhabiting the proposed project area.
	High intensity:	Selected habitat surveys (approximately 40-60% of area) are conducted with a single entry for listed species inhabiting the proposed project area.
Level C:	Multiple entry surveys are conducted for listed species likely to inhabit the proposed project area.	
	Low intensity:	Selected habitat surveys (approximately 5-10% of area) are conducted with repeated entries for listed species inhabiting the proposed project area.
	Moderate intensity:	Selected habitat surveys (approximately 10-60% of area) are conducted with repeated entries for listed species inhabiting the proposed project area.

High intensity:

Selected habitat surveys (approximately 60-80% of area) are conducted with repeated entries for listed species inhabiting the proposed project area.

ATTACHMENT 3:

**Conclusions Of Effects For Use In Biological Evaluations and Assessments
USDA Forest Service - Regions 1, 4, and 6
August, 1995**

Listed Species:

1. No Effect

Occurs when a project or activity will not have any “effect”, on a listed species, or critical habitat.

2. May Affect - Likely to Adversely Affect (LAA)

If the determination in the biological assessment is that the project May Affect - Likely to Adversely Affect a listed species or critical habitat, formal consultation must be initiated (50 CFR 402.12). Formal consultation must be requested in writing through the Forest Supervisor (FSM 2670.44) to the appropriate FWS Field Supervisor, or NOAA Fisheries office.

3. May Affect - Not Likely to Adversely Affect (NLAA)

If it is determined in the biological assessment that there are “effects” to a listed species or critical habitat, but that those effects are not likely to adversely affect listed species or critical habitat, then written concurrence by the FWS or NOAA Fisheries is required to conclude informal consultation (50 CFR 402.13).

4. Beneficial Effect

Written concurrence is also required from the FWS or NOAA Fisheries if a beneficial effect determination is made.

Requests for written concurrence must be initiated in writing from the Forest Supervisor to the State Field Supervisor (FWS or NOAA).

Proposed Species:

Whenever serious adverse effects are predicted for a proposed species or proposed critical habitat, conferencing is required with the FWS or NOAA Fisheries.

1. No Effect

When there are “no effects” to proposed species, conferencing is not required with FWS or NOAA.

2. Not Likely to Jeopardize the Continued Existence of the Species or Result in Destruction or Adverse Modification of Proposed Critical Habitat

This conclusion is used where there are effects or cumulative effects, but where such effects would not have the consequence of losing key populations or adversely affecting “proposed critical habitat”. No conferencing is required with FWS or NOAA if this conclusion is made. However, for any proposed activity that would receive a “Likely To Adversely Affect” conclusion if the species were to be listed, conferencing may be initiated.

3. Likely to Jeopardize the Continued Existence of the Species or Result in Destruction or Adverse Modification of Proposed Critical Habitat

This conclusion must be determined if there are significant effects that could jeopardize the continued existence of the species, result in adverse modification

or destruction of proposed critical habitat, and/or result in irreversible or irretrievable commitments of resources that could foreclose options to avoid jeopardy, should the species be listed. If this is the conclusion, conferencing with FWS or NMFS is required.

Sensitive Species:

1. No Impact (NI)

A determination of “No Impact” for sensitive species occurs when a project or activity will have no environmental effects on habitat, individuals, a population or a species.

2. May Impact Individuals or Habitat, But Will Not Likely Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species (MIIH)

Activities or actions that have effects that are immeasurable, minor or are consistent with Conservation Strategies would receive this conclusion. For populations that are small - or vulnerable - each individual may be important for short and long-term viability.

3. Will Impact Individuals or Habitat With a Consequence That the Action May Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species (WIFV)

Loss of individuals or habitat can be considered significant when the potential effect may be:

1. Contributing to a trend toward Federal listing (C-1 or C-2 species);
2. Results in a significantly increased risk of loss of viability for a species;
or,
3. Results in a significantly increased risk of loss of viability for a significant population (stock).

4. Beneficial Impact (BI)

Projects or activities that are designed to benefit, or that measurably benefit a sensitive species should receive this conclusion.