BAKER RIVER PROJECT RELICENSE

Terrestrial Resources Implementation Group
Botanical Teamlet Meeting

Wednesday, February 3, 2010
(9:00 am to 12:00 pm)

PSE Skagit Service Center
Cascade Room
1660 Park Lane
Burlington, Washington 98233

FINAL MEETING NOTES

Team Leader: Scott Heller (PSE) 425-457-5578, 206-437-6042 (cell), scott.heller@pse.com
Meeting attendees: Laura Potash Martin (USFS), Ann Risvold (USFS), Brock Applegate (WDFW), Tony Fuchs and Jason Schmidt (PSE), Kathy Smayda (Smayda Environmental)

1. Welcome, introductions, review notes, agenda
2. 2010 Management of *Phalaris arundinacea* in the 7 selected wetlands (WB- 17, 20, 21, 25, 28, 29, and 30)
3. Revegetation of the 7 selected wetlands
4. Other weeds: HEHE, SEJA, Cirsium sp., etc. Review priority sites, methods, revegetation
5. Evaluate meeting, set date, and agenda for next meeting

New Action Items:

- Scott will review current herbicide literature and recommend a list of formulations for the Forest Service to evaluate in their next NEPA invasive species/herbicide update. Currently, three herbicides are approved for use on NFS lands: glyphosate, imazapyr, and clopyralid, and aminopyralid is expected to be evaluated in the next NEPA process. Scott's review will focus on those formulations most effective against weeds occurring at the Project, and with the lowest environmental effects.
- Scott will contact Tim Miller of WSU Extension regarding reed canarygrass management and monitoring methods, and regarding participation in a site visit to WB-17 in the near future.
- Scott and Kathy will determine the approximate square-footage of the old spawning beaches English ivy site and number of sword fern needed to revegetate the site at 4' spacing; this information will be passed on to Ann Risvold.

- Kathy and Scott will send Ann a GIS shapefile of the current noxious weed 'Plan Area' boundary.
- Ann will pass on any new weed sites in the plan area after checking them against the plan area shapefile that will be given to her by Kathy/Scott
- Kathy and Scott will update the draft weed management plans to reflect the FS approval of two additional herbicides.
- Ann will discuss the possibility of harvesting sword fern for transplanting at the old spawning beach site with Lee Redmond at North Bend; PSE expects to clear the ivy this spring.
- Ann will check on whether the T16 Study (Rare Plant) species lists can be downloaded in electronic format from the NRIS database; if so, Kathy will use the FS file to incorporate the species lists into the data summary for each of the seven reed canarygrass wetlands.
- Ann will send Scott the Forest Service supplement to the standard state spray records form; PSE will need to complete this form for any herbicide application on NFS lands.
- Ann will send FS weed contractor specifications with regard to herbicide application, and the associated cultural resources packet.

Ongoing Action Items:
Not reported during meeting. Summary below has been updated from the November 13, 2009 list:

- Scott and/or Tony will investigate opportunities for low elevation orthophotography of the *Carex flava* site at Baker Lake. This may be expanded to include the seven reed canarygrass wetlands and the newly acquired Alder Creek property.
- Laura and Ann will provide PSE contact information for weed management contractors that they have used and/or would recommend for work in the Baker basin.
- Tony will investigate whether a Terrestrial folder can be established on PSE's ftp site for future use in exchanging large documents.

1. 2010 Management of *Phalaris arundinacea* in the 7 wetlands (WB- 17, 20, 21, 25, 28, 29, and 30)
The draft site-specific management plan for reed canarygrass (revision date 01-24-10) was reviewed. Several points were clarified:

- The seven wetlands were selected during the relicensing process based on their relatively high values (habitat complexity, vegetation classes, sphagnum presence, etc.) and moderately low reed canarygrass infestations.
- The wetland polygon boundaries reflect the Cowardin wetland types, not discrete, delineated wetland edges. Many of them are connected and contiguous with adjacent polygons of different cover type. (For example WB-29, a palustrine forested wetland, is hydrologically contiguous along one border with WB-30, which is palustrine emergent.)
- Appendix A-1 of the Settlement Agreement and the License refers to 'seven wetlands listed below'; the wetlands are not listed. This is an error in the SA that was repeated in the License. It's not possible to reword the section, as it is now part of the formal record.

Scott provided a brief recap of funding available to manage reed canarygrass in the seven wetlands—$25,000 per year for years 1-5, with excess funds from one year carried over. He summarized the constraints of the sites: wetland habitat with very limited large vehicle access, little opportunity to

excavate soil, no opportunity to control hydrology. The most promising options for management may be wick-wiping (localized herbicide application) and live staking to shade out reed canarygrass.

Herbicides currently available for use on National Forest System lands include glyphosate, imazapyr, and clopyralid. The FS will update its NEPA review of invasive species management including herbicides in approximately 2011. They will be reviewing aminopyralid in the update. If there are other herbicides that look useful for the Project site, they could be submitted to the FS for consideration. The FS has hired a new invasive species coordinator, Sarah Prince.

The teamlet agreed to alternate wording for several statements in the draft plan; these will be corrected and shown as track changes in the draft. The use of the 'Species Management Priority' heading in the intro to the plan will be reconsidered, as it may be misleading.

Scott reviewed the types of data that may be collected at each of the seven wetlands:

- Map reed canarygrass patches in each wetland using sub-meter GPS or other method
- Determine relative density of reed canarygrass in each patch including species within patch, size of patch, elevation, amount of native plant species interspersion, etc.
- Map elevations; 5' contour data available from relicensing (Walker and Associates); needs to be adjusted to revised NAV datum (Joetta will do this).
- Relate elevation to reed canarygrass infestations and cover of other dominant species
- Establish long-term monitoring to determine reed canarygrass trends
- Compile species list (primarily from existing data)
- Assess soil types, pond depths
- Establish permanent photopoints; most likely will occur near the "line" we eventually digitize in GIS where we do not want reed canarygrass to cross into. Also a couple photopoints at each patch.
- Evaluate the cost of acquiring low elevation aerial photography of the wetlands
- Identify high value elements of each wetland, including state wetland rating system, native plant diversity, unique plant communities, pond-breeding amphibian habitat

Two major questions to be answered initially are how best to measure density of reed canarygrass and which herbicides and treatment prescriptions are most effective? Scott will contact Tim Miller of WSU Extension to get his input on these points.

A site visit to WB-17 was tentatively scheduled for early March to examine site conditions, reed canarygrass extent, wetland values, consider possible treatments, and do a quick run-through of potential methods. Scott will contact Tim Miller first to determine his interest and availability, then will schedule with remaining teamlet members.

It was agreed that the general goal for this year, with regard to the seven reed canarygrass wetlands, is to establish the baseline conditions including high value elements of the wetlands and extent of reed canarygrass and to develop a preliminary set of goals, treatment plan, and revegetation plan for each wetland.

2. Revegetation of the seven selected wetlands

Although specific treatment prescriptions won't be developed for some time, it was agreed that treatment could result in a need for revegetation of treated areas. It was agreed that PSE will lay out a plan for the revegetation, including specific 'zones' and workhorse species that could be used. It is anticipated that herbaceous emergent wetland species will be ordered through contract growers this year to be available for planting as early as fall 2011. No shrub species will be ordered until the objectives for each site have been developed in more detail. Livestakes could be acquired on short notice if needed.

PSE is continuing to investigate the possibility of constructing a capillary bed so that bare root plants acquired in spring could be maintained over the summer (2011 or later).

Collecting wetland emergent wildlings for transplant was discussed as an option. A FS special forest products permit would be needed from the District in order to harvest plants on NFS lands. This might be appropriate for some sites. Several possible donor sites for wetland species have been identified and can be confirmed during this summer's fieldwork.

Laura reported that she is pursuing a decision on acceptable seed zones for revegetation materials. Laura and Ann will be meeting with the Area Geneticist, Assistant Area Geneticist, and the Olympic National Forest Botanist on February 19th. At a minimum, Laura expects a decision on approved seed zones for this fiscal year. She is also seeking an answer to whether the WACD PMC materials sourced from eastern Vancouver Island would be appropriate to use at the Project.

3. Other weeds: HEHE, SEJA, Cirsium sp., etc. Review priority sites, methods, revegetation

It was agreed that English ivy at the old spawning beaches (Beach 1, 2,and 3 area) and tansy ragwort sites at Welker and Anderson creeks on Baker Lake are the highest priority for treatment this year, followed by sites of the same species near Lake Shannon and Concrete (2 ivy, 1 tansy ragwort).

Scott and Jason anticipate that the ivy site at the old spawning beaches will be cleared this spring. Laura recommended heavy mulch and installation of sword fern at the site after treatment. Local harvest of sword fern will be considered for use in revegetating that site (refer to action items).

Scott will revisit the tansy ragwort sites at Anderson and Welker Creeks by boat in the spring. The plants at Anderson Creek were not pulled during the survey, and there is concern that this infestation may have spread. Scott will report if the infestation is larger than can be effectively treated by handpulling, so that possible herbicide application can be considered.

Ann reported that she has observed new weed infestations along the 1106 Road near Baker Lake Highway. PSE will provide a GIS shapefile of the weed 'Plan Area' so that Ann can report new infestations in the Plan Area to PSE. The Resort area is not considered part of the Plan Area any longer, as the site has been returned to FS management.

Additional detail on future year treatment schedules has yet to be developed, but should include consideration of the geographic location of weed species and efficient sequencing of treatment activity.

***Procedures*:** At this time, the weed sites documented in the T6 Survey that are on NFS lands have been cleared through the NEPA process as part of relicensing. New herbicides can be added to that clearance when the FS approves their use. New weed sites, however, need to be cleared through the FS for possible cultural sites before they can be treated. This process occurs once per year; PSE should provide information on new NFS land sites to the FS as early in the year as possible.

If herbicide is applied to NFS lands, PSE must follow the FS guidelines; Ann will provide the weed contractor specifications. Spray records must be provided to the FS at the end of each season. The FS requires certain information in addition to the standard state form, such as individual site records, with each species listed, and square footage and volume estimates. Ann will provide the form to be used to supplement the state form.

Next Meeting. (To be determined)