APPENDIX A: SITE VISIT SUMMARY

Dear [Landowner],

Thank you for inviting JSWCD staff to your property. We are looking forward to assisting you in achieving your natural resource goals. The following is a summary of our recommendations based on the site visit conducted on October [date], at [time].

**Current Natural Resource Concerns and Goals**

Primary Concern: Wildfire recovery, specifically:

- Erosion control, especially on steeper slopes. These areas that have lost all vegetation during the fire will be at increased risk of erosion. Re-seed for both wildlife habitat/forage and dryland feed for cattle.
- Hazard tree treatment: trees that burned more severely into the base and root systems may pose a safety concern in moving around your property. None are close to structures, but still could be a threat as you work to re-seed and do other restoration work across the property.
- Replanting/Reforestation: Some potential for salvage logging of burned conifers that are not likely to re-grow; replanting shrubs and trees to replace understory and eventually upper canopy, to protect against continued erosion, provide wildlife habitat, and possibly for future timber harvest.
- Noxious weed management in burned areas: we saw plants like yellow starthistle, turkey mullein, and medusahead rye on the unburned areas of your property, so these are likely to be what starts to colonize the burned areas.

**Current Resource Management Recommendation:**

<u>Erosion Control:</u> This will be especially critical on the severely burned, steeper hillsides, like the upper bowl that was already more open, as well as the lower bowl near the road, that leads into the large metal culvert.

- Seeding: seeding now will help establish vegetation for future-season erosion control and is absolutely critical to reduce future noxious weed pressure. Seed the wildlife forage mix that you got from ODFW as soon as possible on the more sensitive slopes. The recommended seeding rate for this mix is 25 lbs/acre.
    - On the less-steep slopes where you anticipate grazing cattle, we recommend a dryland pasture mixture. Look for mixes that contain sterilized annual rye; subterranean clover or crimson clover; and perennial rye, sheep fescue/Idaho fescue, intermediate wheatgrass, and wildrye. Because of your site conditions you will need to broadcast seed, so seed these at a higher-than recommended rate.
    - Contact us for more wildlife forage mix; we have access to more of what ODFW is distributing.
    - See resource list at the bottom of this document for list of seed sources
- Straw mulch: It is important to cover the newly seeded areas as well as any other burned

areas with a straw mulch or other type of soil covering, to protect against erosion. We are late enough in the growing season that the seed that does germinate is highly unlikely to establish a root system strong enough to hold soil, and a heavy rain event may wash the plants themselves away. Covering seeded areas and sensitive slopes with straw will protect soil from the forces of heavy rain, help keep soil on the hillsides, and increase probability of a successful seeding. Cover with a straw layer about 2" thick, and try to punch the straw layer into the soil with a shovel every foot or so.

  - Look for weed-free straw, weed-free waste hay, or woody mulch. You could consider mulching some of the burned trees on-site, after determining salvage value and leaving some as snags for wildlife habitat. We recommend weed-free material so that you don't introduce a new, worse problem onto your property.

- As a general note on re-seeding and re-planting, we recommend that you wait for at least two full growing seasons before grazing any livestock. This will give perennial grasses a chance to establish strong root systems and withstand the grazing pressure.
- Log checks: As you work to fall hazard trees, many of these logs can be used as water bars/erosion checks across hillsides. Fall or place them perpendicular to the slope, and either use existing stumps or stakes to hold them in place; or dig them into the slope to keep them from washing downhill. See attached drawing.
  - Straw wattles can also be used in addition to or in lieu of logs to check water sheet flow. Stake them into the ground perpendicular to the slope, in areas that are steeper and where straw mulch is likely to get washed away.
- Erosion control around culvert inlets, outlets, and other drainages: these are spots that are particularly vulnerable to erosion and forming rills or gullies that can become extremely difficult to recover. Work to place larger rocks leading up to the inlets and outlets of culverts to armor these sensitive areas against erosion threat. In drainages or draws that burned more severely, and have little vegetation to hold soil, do the same, especially if you see any sign that water is starting to down-cut in those spots.

<u>Hazard tree treatment</u>

- Some of the fire-damaged trees will need to be taken down, as they may pose a safety risk to you and those working on your property, even if not threatening infrastructure close to your home. Look for trees that have been burned severely at the base and into the roots, as ones to take down first. Leave trees that have not been compromised at the base as wildlife trees; even if dead, these snags are important habitat for native bird species.
  - As you treat standing dead, use these hazard trees that you remove as log checks for erosion, as described above.
  - We recommend leaving 1-2 standing dead snags per acre for wildlife habitat
- See the attached contractor list for arborists and foresters, both of whom can assess the integrity of trees and provide further recommendations about what trees to remove.
  - ODF's stewardship foresters can also advise on this. See contact info below.

<u>Salvage Logging</u>

- There may be some conifers that burned hot/severely enough to kill the tree, but not so extensively that the wood is unusable. Based on the stands on your property alone, you have limited potential for salvage logging to be worthwhile for harvest. However, organizing with some of your neighbors along Butte Falls Highway may generate enough work and timber for a logger to harvest. Contact your closest neighbors who also have

conifer stands to discuss and plan.

  - If you do remove trees for timber, work with the faller to leave some trees as wildlife habitat snags.
  - We recommend working with ODF's stewardship foresters or OSU Extension to determine timber value and to develop a more thorough plan. Contact Nick Haile or Steve Wetmore at ODF (nick.haile@oregon.gov; swetmore@odf.state.or.us, 541-664-3328)
  - See attached Contractor List for a list of foresters and fellers in the valley.

- Some of the conifers, particularly the ponderosa pine, that are scorched on the trunk (bole) but still have crown needles remaining (with the light-green needle cast we described) may likely recover in the spring. For those that do remain, you may want to protect them against beetle damage, which can easily kill a tree that is stressed by fire. You can do this by attaching hormone packets to the trunk, which drives beetles away from those trees.
  - Hormone packets are available directly from vendors, they can recommend what would work best for ponderosas on your site based on what beetles they are seeing emerge each year. See attached vendor list.

<u>Replanting/Reforestation</u>

- Re-establishing native trees and shrubs will be important to mid- to long-term recovery on your property. Some areas will regenerate naturally, but the areas of higher burn severity will need some intervention. We recommend waiting until next fall to begin replanting, to see what regenerates on its own and because it is likely that a lot of damaged trees will continue to fall in winter storms this year, and could damage your plantings. Check back with us in spring or early summer, as it is likely that we will have some more funding resources or recommendations about plant sources for revegetation.
  - Re-plant with similar shrub species that were growing in the area before the fire: manzanita, ceanothus (buckbrush), and mountain mahogany. Tree species to plant would include madrone, oak (can plant acorns or dig up sprouts from the unburned areas of your property), and ponderosa pine. Given the water limitations and likely future precipitation changes in our region, we recommend avoiding planting Douglas fir or true fir, as they likely won't grow as well as pine.
  - Plant sources: There are somewhat limited sources for native plants in the valley, but there are some excellent places locally to source native species:
    - Rogue Native Plant Partnership: hosts a spring plant sale
    - Plant Oregon: excellent quality bare root seedlings and potted plants
    - Shooting Star Nursery
    - The Plant Connection
- Future grazing and livestock: We discussed this at length after our site visit, and based on the steep slopes and likely low productivity of your soils (as designated by the NRCS site description), the grazing potential of the property is quite limited. We recommend that if you do decide to eventually put cattle on the property, you do so only for a very limited time in the early spring in order to protect your soil quality and health of perennial vegetation that establishes during this post-fire recovery period.

Please contact us with any further questions, clarification or details regarding the

concerns and recommendations summarized. If you are interested in pursuing funding for any of the above projects, please give us a call soon.

Thank you, and we look forward to working with you,
Meghan Montgomery and Clint Nichols

Attached References

- Contractor list
- Seed companies
    - Grange Coop: Good local source for seed, immediately available
    - Silver Falls Seed, 503-874-8221, www.silverfallsseed.com
    - Ioka Seed, 503-873-8948, www.iokamarketing.com
- Soil Erosion Control Factsheet
- Vendor list for beetle hormone packets:

http://www.forestrydistributing.com/en/spruce-beetle-products-including-mch-and-odc?pagesize=12
http://www.semiochemical.com/
http://www.agbio-inc.com/beetleblock-verbenone.html
http://www.westgreenglobaltechnologies.com/