

# Willamette Valley Oak and Prairie Cooperative Strategic Action Planning Process

## Summary of Working Group Meeting #1



Post-meeting tour of Bald Hill Farm

Draft: May 6, 2018

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## Summary Report Purpose and Working Group/Steering Committee Rosters

This report is a summary of the first meeting of the Willamette Valley Oak and Prairie Working Group held on April 24, 2017 and responses from a pre-meeting questionnaire that went out to all Working Group members and the project Steering Committee. The Working Group serves as a panel of technical experts assembled to provide input and feedback in support of the development of the Willamette Valley Oak-Prairie Strategic Action Plan.

### Working Group

- Bob Altman American Bird Conservancy
- Ed Alverson Lane County Parks
- Andrea Berkley Oregon Parks and Recreation Department
- Jason Blazar Friends of Buford Park & Mt. Pisgah
- Lynda Boyer Heritage Seedlings
- Joe Buttafuco The Nature Conservancy
- Mikki Collins U.S. Fish & Wildlife Service
- Sarah Deumling Zena Forest
- Daniel Dietz McKenzie River Trust
- Sarah Dyrhdal Middle Fork Willamette Watershed Council
- Matt Gibbons The Nature Conservancy
- Lauren Grand Oregon State University Extension Service
- Jarod Jebousek U.S. Fish & Wildlife Service
- Bart Johnson University of Oregon, Department of Landscape Architecture
- Pat Johnston U.S. Bureau of Land Management
- Ann Kreager Oregon Department of Fish and Wildlife
- Katie Mackendrick Long Tom Watershed Council
- Mark Miller Trout Mountain Forestry
- Will Neuhauser Yamhill Partners for Land and Water
- Kevin O'Hara U.S. Fish & Wildlife Service
- Sean Prive Lomakatsi Restoration Project
- Lawrence Schwabe Confederated Tribes of Grand Ronde
- Chris Seal U.S. Fish & Wildlife Service
- Steve Smith Retired U.S. Fish & Wildlife Service
- Tom Snyder NRCS Benton/Linn County
- Audrey Squires Middle Fork Willamette Watershed Council
- Diane Steeck City of Eugene
- Emily Steel City of Eugene
- David Stroppel Oregon Department of Fish and Wildlife
- Laura Tesler Oregon Department of Fish and Wildlife
- Megan Zarzycki Confederated Tribes of Siletz Indians
- Chris Vogel Oregon Department of Fish and Wildlife
- Matt Blakeley-Smith Greenbelt Land Trust
- Amy Loop-Frison Yamhill SWCD

### Steering Committee

- Clinton Begley Long Tom Watershed Council
- Sara Evans-Peters Pacific Birds Habitat Joint Venture
- Tom Kaye Institute for Applied Ecology
- Nicole Maness Willamette Partnership
- Shelly Miller City of Eugene
- Michael Pope Greenbelt Land Trust
- Bruce Taylor Pacific Birds Habitat Joint Venture
- Kelly Confederated Tribes of Warm Springs
- Jeff Krueger JK Environments (project contractor)
- Carolyn Menke Institute for Applied Ecology (project contractor)

# Working Group Meeting #1 Agenda

<b>Meeting:</b>	<b>Willamette Valley Oak and Prairie Cooperative WORKING GROUP</b>
<b>Date and Time:</b>	Tuesday, April 24, 2018 from 9:30 a.m. – 12:30 p.m.
<b>Location:</b>	Scott Zimbrick Memorial Fire Station #5 - Walnut Community Room, 4950 NW Fair Oaks Drive, Corvallis, OR

**10 minutes**

## **1. Welcome and Agenda Overview**

- Welcome
- Introductions: Name, affiliation, and areas of expertise

**35 minutes**

## **2. WVOPC Background and Overview of Strategic Action Plan Process - Jeff**

- Purpose of WVOPC and Strategic Action Plan
- SAP process, product, and planning structure
- Timeline and completed tasks
- Defining our target habitat: oak-prairie spectrum (fire dependent ecosystems)
- Quick overview of planning area (including a few factoids)
- Report back on vision survey results
- **Questions and Comments**

**25 minutes**

## **3. Targets, Stresses, Threats Overview – Carolyn and Sara**

- Open standards process overview
- Defined target habitat (oak and prairie)
- Identified stresses and threats
- Report back on threat assessment survey results – Scope, Severity, Irreversibility
- **Questions and Comments**

**90 minutes**

## **5. Work Session with Small Groups**

- Strategies brainstorm by threat category
- Report back between categories

**20 minutes**

## **6. Next Steps and Closing Thoughts**

- Overview of next steps
- Closing thoughts

**---Optional Site Tour to Bald Hill Farm Starting at 1:00---**

## Pre-Meeting Questionnaire Responses

### Visioning Scenario

The Working Group and Steering Committee were asked to describe this ideal future Willamette Valley oak and prairie system you are envisioning and the mechanisms that were used to achieve this success. Responses were limited to 150 words or less. Responses listed below are verbatim.

**Visioning Scenario:** Imagine you're able to time travel to 30 years into the future. When you arrive, you spend several days touring the Willamette Valley (perhaps by flying car) and are overcome by the quality and extent of the oak and prairie habitats you are seeing. You also spend a day with members of the Willamette Valley Oak and Prairie Cooperative, and they explain to you how this on-the-ground success was achieved. Please describe this ideal future Willamette Valley oak and prairie system you are envisioning and the mechanisms that were used to achieve this success. Please try to be visionary and as concise as possible in your description.

- I'll say, "Wow, I can't go anywhere without seeing acorn woodpeckers." while on my way to a site that has breeding Lewis's woodpeckers and ash-throated flycatchers. Short-eared owls will breed here again as well. I'll be pleased to see that ranching has made a comeback in the Willamette Valley. I'll be impressed by how much the TNC/CNLM/USFWS/(and others) fire partnership has grown. ODF will be working with lots of landowners through partnerships and incentive programs to create open oak woodlands in an effort to reduce catastrophic wildfire risk. Mature oak trees will be a common component of woodland owners' forest management plans through various incentive programs. There are no federally listed species in the Willamette Valley. There will be a valley-wide network of conservation easements, NGO, and public lands that have high-quality plant communities with funding streams to ensure long term management. – **Jarod Jebousek**
- Ideally the system would prevent further loss of Oak habitats (oak savanna and woodland). Would manage and restore oak habitats to intact native habitats that achieve high function for the Willamette Valleys wildlife. It was achieved by cooperative partnerships, funding, and a shared well thought out vision. – **Kelly Warren**
- Ideally the system would prevent further loss of Oak habitats (oak savanna and woodland). Would manage and restore oak habitats to intact native habitats that achieve high function for the Willamette Valleys wildlife. It was achieved by cooperative partnerships, funding, and a shared well thought out vision. – **Matt Blakely-Smith**
- I was impressed how traveling from Seattle to Portland I could always spot scattered oaks with native wildflowers, or an oak grove. The foothills although used predominantly for grape production, were interspersed with patches of magnificent oak and patches of native prairie. The extent of historic oak savanna & oak woodland has been reduced but new habitats are being restored and small oak trees are now visible within the restored upland prairie habitats. When I stopped to meet up with the tour the first bird I heard was a western meadowlark and bumble bees were a hummin. – **Steve Smith**
- The valley's native wildlife and plants are thriving, anchored by a linked network of lands managed primarily for their habitat and wildlife values. To accomplish this, the WVOPC followed a spatially explicit plan that focused efforts to build the network in agreed upon areas; adapted as necessary, but stuck with it. The WVOPC created the WV Oak and Prairie Initiative that was funded by the National Fish and Wildlife Foundation. The Initiative, governed by the WVOPC, prioritized actions and directed the funding. As part of the Initiative, WVOPC engaged partners and landowners in developing a working lands program that encouraged and incentivized landowners to contribute meaningfully to the network. The Willamette Wildlife Mitigation Program, in collaboration with the WVOPC, invested in areas identified by the plan. Meadowlark populations rebounded dramatically and are now regularly seen. Their robust songs drowning-out any effort to de-designate them as our state bird. – **Kevin O'Hara**

- Partners are working together as a seamless team, unified under a single mission in the restoration of WVOP habitats. administrative boundaries are not apparent as contiguous habitat is restored on a landscape scale. Partners support one another, leverage resources, coordinate closed to maximize efficiencies. Partners celebrate their successes together. My vision is not any different than how the West Eugene Wetlands Partnership looked in early 2000s - in particular 2004-2007. The land benefits from the human relationships. – **Pat Johnson**
- I would think self-driving car in this scenario.... in any case- I would see all the WWMP sites first and I would expect recovery to be fastest on these pieces due to partners who worked tirelessly to achieve restoration funding for them. All sites that had existing agriculture are now being returned to a natural state, without agriculture, and with very little forestry as all conifer has been removed from oak stands. Very limited controlled grazing might be done to assist with weeds management. All the areas that were established as high priority for wildlife connection have been successfully linked and there is a good amount of wildlife utilizing these corridors with very few negative interactions between them and humans. We also see good populations of OCS species such as vesper sparrow using these habitats efficiently. Trails have been thoughtfully planned to allow humans the chance to interact with the land and not disturb wildlife. Land use planning is still in place to protect from urban sprawl. – **Laura Tesler**
- Large expanses of oak and prairie are connected along the base of the Coast and Cascade ranges. Not all parcels are large and not all are connected, but overall, species that use this habitat are able to travel from one to another within a day. This was achieved through educating the public on how important this habitat is and how quickly it was disappearing. Some landowners were compensated for permanently protecting their properties and others were able to find compromises in land use that enabled them to continue to earn income off of the property (such as grazing). This landscape became very enticing to tourists and therefore increased this industry, bringing much needed tourism dollars into rural communities. Businesses dependent upon this tourism were willing to donate money towards this cause as it would end up generating money for them in the future. – **Annie Loop-Frison**
- Hopefully seeing a more robust/expanded version of the type of cost leveraged, voluntary, conservation partnerships we have now but more readily visible on the landscape and better known to area residents and landowners. Using 2000 as the dividing line, we'd be ~50 years into pushing back on the previous 150 years of intensive modification to this landscape. So, we might just be starting to reap the benefits of the approach stated above (e.g. ESA recovery, etc). – **Chris Seal**
- The Future Willamette Valley Oak and Prairie system would be the inclusion of several large blocks (2,000 acres +) of restored oak and prairie habitats throughout the valley with smaller connector oak parcels that serve as ecological corridors, interlinking these larger conservation parcels. The WWMP could have very well brought in 10,000 acres of prairie and oak habitat, with a variation of some properties with a relatively low restoration need to some that need total restoration. The Oak Cooperative is an alliance of oak and prairie conservation entities and organizations that collaborate together to draw in funding partnerships to make full restoration of protected lands possible. – **Lawrence Schwabe**
- In this future WV scenario, the majority of the present remnant oak/prairie sites have been protected and restored/enhanced through a variety of mechanisms-fee land acquisition, conservation easements, WRPs, and a number of agency programs working with private landowners. In addition, a growing number of farm fields in the historic Willamette and tributary floodplains have been converted to habitat. This was accomplished through floodplain reconnection projects, increasing riparian buffers, wetland prairie restoration and other activities. There remains much to be done, but key anchor habitats have been expanded and corridors connecting them are being developed. In addition, the existing prescribed fire program has been expanded to include new partners, such as the tribes, USFS district staff, and CNLM. The amount of habitat burned has quadrupled over the last 30 years and Willamette residents better understand the role and benefits of controlled burning. – **Joe Buttafuoco**

- 30 years isn't much time for an oak to grow but I would hope that most, nearly all, of the oak acreage existing today would still be here and significant new areas converted back to oak. A high portion of the oak that is currently threatened by conifers would be free, partly from active removal of the conifers, partly because on many sites able to sustain oak the fir has died due to climate induced drought stress. Altered moisture and temperature regimes will have affected which areas will sustain which plant communities. The invasive problem will not be gone but perhaps altered plant communities will have formed under the resilient oaks which will store carbon as well as the former plant communities. At the present time some folks at ODF are actually suggesting planting oak in the areas where firs are dying which should help increase the overall acreage of oak in the valley. – **Sarah Deumling**
- At least 10% of the historic extent of each major habitat type in the WV has been conserved or restored. This would mean about 100k acres of prairie and 50k acres of savanna, with lesser acreages of oak woodland and mixed oak-conifer types. Conserved/restored lands will be in blocks of varying sizes, but each county will have at least one block of conservation lands at least 10k acres in size (it will probably include other WV habitats in a mosaic). Most public lands will be available for hiking, camping, fishing, and hunting, but at least 1/2 of this conserved/restored landscape will be on private lands. Most agricultural lands will be used for growing food, and will include continuous buffers of native prairie and oak species as corridors and around the edges. Funding will come from public and private sources, because of a high level of public awareness and support for native habitat conservation on this close-to-home landscape. – **Ed Alverson**
- Currently, conservation is opportunistic. Strong land use laws and regulatory requirements may be the only way to achieve meaningful large-scale conservation of these systems. Voluntary conservation is piecemeal, not necessarily perpetual, and dependent on too many extraneous factors (availability, funding, economic influences, personal values, changing circumstances, etc) to count on with any great certainty. An overarching strategy on a landscape scale that requires state agencies and local governmental jurisdictions to participate is necessary. Just as we regulate water rights, wetland impacts, housing development, infrastructure, etc, natural resources need to be assessed, impacts quantified and mitigated, and cared for in perpetuity. – **Ann Kreager**
- I discover 100,000 acres of land conserved across private and public ownership from Cottage Grove to Portland. The portfolio features seventeen anchor properties each featuring 5,000 acres of oak-prairie habitat (often within a larger conservation area). The balance of the portfolio is comprised of sites ranging from 25 acres to 1,000 acres in size. This landscape defines the culture of the people of the Willamette Valley and informs the way they live within this place. One sustains the other. The mechanisms to realize this vision: Ample financial resources (including funds derived from a Willamette Valley System Development Tax) sufficient to support restoration projects and stewardship practices. A workforce outfitted with the skills, equipment (including a fleet of hover tractors), and relationships to implement projects and nurture habitat. Locally sourced, genetically appropriate plant materials. A robust ecological burning program with capacity to implement burns across 30,000 acres annually. – **Jason Blazar**
- Even with the massive increase in the human population in the WV by 2050 (now that coastal cities are inundated), the Coop has been able to conserve tens of thousands of acres of prairie and oak communities, begin restoring oak savannah from agricultural lands and continue restoring wet prairie. The Coop recognized the need to prioritize purchase of high quality prairie and oak remnants, creating core connected preserves of 5000- 25,000 acres, away from urban regions, where land was still affordable and remnants sustaining native species still occurred. The Coop gained the interest of a few massive donors/funders and provided 'destination' oak/prairie sites easily access from cities by bike, tourism-trail, and solar shuttle. This generated support from city dwellers that lacked preserves nearby. Funding likewise supported local rural economies, somewhat like UNESCO's Biosphere reserve project w/core, buffer, and transition areas. Smaller near/in-city oak savannah preserves provides nature-based hiking and education, which further generates support. – **Diane Steck**

- Farmland with oak and prairie habitat corridors between them reducing the island affect. Hedgerows planted to native prairie species to attract native pollinators and beneficial insects and “marginal” lands restored to upland and wetland prairies. Working with the Oregon Association of Nurseries and ODA, the WVOPC was able to map areas of potential habitat using drones and satellite images. For example, swaths of bright yellow (Western buttercup) and deep pink (Rose checkermallow) led to discoveries of new upland prairie sites on private land. Next, the same partnership along with private landowners already restoring habitat on their lands led to outreach to these new landowners as to the value of their “back-40’s” and introduction to federal, state, and local funding to help maintain and restore that habitat. The Willamette Partnership Oak Accord Program was also a key component of outreach to businesses and private landowners showing the value of bottom-up volunteer protection versus mandated protection. Cities have grown up rather than out allowing for the optimal use of open space for habitats. Cities have converted more lawn areas to native prairie (a leading example was the conversion of the open space surrounding Oregon State Hospital and Penitentiary grounds in Salem). These efforts came about by new City ordinances and local groups encouraging natives be the first to be considered on new projects and be added to existing fallow lands owned by the City. – **Lynda Boyer**
- As I fly over the valley, I am seeing numerous large patches (1,000 acres and larger) of conserved oak and prairie habitat, with clearly visible corridors of oak and prairie meandering through the valley, making connections between these large core habitats. School buses can be seen at some of these conservation sites with students and their teachers out in the field conducting nature study and research. Consistent signage identified these properties as being part of the "Oak and Prairie Heritage Conservation Network". I also see that many vineyards, orchards, and farms contain large heritage oaks, and areas of newly planted patches of oaks and prairie integrated. The WVOPC members I have met with tell the tale of how the 50 partner organizations have banded together to implement this coordinated strategy. There is a bright and dedicated coordinator that holds the partnership together and inspires enthusiastic participation. – **Jeff Krueger**
- In the south valley, I would like drive up the I-5 corridor and see a sea of yellows, blues, whites and purples on both sides rather than a green grass seed wasteland. I would enjoy seeing oak woodlands and savannas from the hills of the Coburg Preserve north along the Coburg Ridge to Brownsville intact with large oaks with working ranches. In the mid Valley, I would like to see an extension of the national wildlife system. In the north valley, the remnant oak savannas and prairies will be protected and guarded from population explosion and conversion to hobby farms and vineyards. Acquiring properties fee title and through conservation easements is a primary tool for this vision. – **Chris Vogel**
- Vision was: A spatially interconnected network of well-functioning oak and prairie habitats consisting of protected public lands, mixed use working landscapes, tribal lands, and conservation directed private ownerships. This network functions as wildlife habitat, recreation areas, open space, and functioning farms. How was achieved: Consistent and substantial funding sources from state, federal, and private orgs that brings \$ to table for protection and restoration; State and federal policies that help increase protection and restoration of prairie and oak habitat (an oak and prairie reserve program?); Outreach, education, and marketing efforts that change the way Willamette Basin Populace thinks about and appreciates oak and prairie systems (akin to pacNW cultural concepts around old growth and salmon); Tying First Oregonians (Native Americans) foodways and eco-cultural concepts to preservation of landscape. Increasing tribal ownership and rights in landscape; Slowing suburban and viticulture expansion in prime oak and prairie habitats (i.e., not allow Yamhill County to turn into another Napa county); Aggressive expansion of existing protected area networks; Expansion of USFWS NWR system; better knowledge around restoring oak and prairie systems - how to do it; Better "restoration economy" (i.e., knowledgeable practitioners, reliable markets); More fire, everywhere; and a really good map. – **Matt Gibbons**
- A matrix of large connected prairie patches with transition to oak savannah and oak woodland. Protection and restoration was achieved through a collaboration of partners sharing information about effective methods, and working to secure funds and other resources to provide adequate long-term maintenance. – **Mikki Collins**



- For days we have been wandering among blossoming wildflowers and native grass pedestals, in some places stretching as far as the eye can see. Butterflies, bumblebees and frogs cross our path. Our feet, occasionally wetted through in the vernal low prairies, now bring us into the oaks and junegrass. We flop down in the shade and look up. An acorn, diligently tended, is tightly wedged in a hole in a snag. Zoom out to the tree and the granary reveals itself, thousands of holes in dead branches of a gnarled old savanna oak at the bottom of a foothill slope. A colony of acorn woodpeckers lives here, foraging on the heavy mast produced by the surrounding legacy Oregon white oaks. Like the prairies, the savannas and woodlands provide for their bird brethren – homes, food, places to sing. Perched at the top, one bird can see far in all directions, a network of ancient oak trees, their grandchildren colonizing a restored and protected landscape where people and animals alike can roam, refuges of prairie and oak connected like ribbons among the farm fields and up to the edges of neighborhoods. – **Emily Steel**
- In 30 years, I'd hope to see a landscape with sweeping mosaics of wet and upland prairie punctuated by large savanna oaks merging with higher density oak woodlands and forests. Wildlife is abundant and diverse. Peppered amongst these natural landscapes are functioning, profitable, and sustainable farm, orchards and vineyards. The people of the Willamette Valley value oaks and prairies as much as they value old growth Douglas-fir and southern coastal redwoods. This vision was realized through a collaborative, multi-pronged approach bringing together urban and rural communities, businesses and government agencies and non-profits. This collaboration resulted in increased resources for acquisition, restoration, and long-term management on private and public land. – **Shelly Miller**
- I'd like to see a high degree of connectivity along crucial environmental gradients (i.e. riparian woodlands on the valley bottom to mixed oak-conifer higher on the landscape). Also, human interaction that is more participatory, such as gathering food and materials and setting fires. – **Sean Prive**
- Strategic targeted focus placed on mostly private, but also public, lands has resulted in the restoration of thousands of acres of oak and prairie plant communities. Much of this area is in permanent conversation achieved using a variety of mechanisms (e.g. conservation purchase, easements). Species dependent on these habitats are increasing in number dramatically as they are able to move through the landscape and find an interconnected network of large expanses of prairie and oak habitat. Some species in the Prairie Species Recovery Plan are approaching recovery. Mature oaks are protected and new cohorts of young oaks comprise the next generations of oaks, allowed to naturally establish through targeted invasive species control, as well as intentionally planted in key areas. – **Andrea Berkley**
- The valley bottoms along with west and south-facing slopes and numerous butte and ridge tops support an equal or greater amount of healthy, functioning oak-prairie habitat than other single land uses (housing, urban development, monoculture crops: hazelnuts, vineyards, grass seed, input-intensive hay, etc.). Landowners value oak-prairie habitat as an integral part of the landscape, their land, their livelihood, and their culture. Indigenous voices lead habitat restoration and stewardship efforts, and usual and accustomed gathering places are acknowledged across the landscape and across landownership lines. Policies support the protection and expansion of oak-prairie habitat and limit further habitat reduction for single land uses. Agroforestry and polyculture principles guide food systems practices that integrate native, culturally important species and introduced food and fiber species, and uphold and support healthy, functioning habitat. Policies support and encourage fire as a key management tool, and community members actively participate in habitat stewardship activities from prescribed burns to planting and seeding and brush cutting and much more. Social, cultural, and environmental values are as much or more important than economic values. – **Katie MacKendrick**
- I would envision a landscape with large connected blocks of oak (combination of savanna and woodland) and prairies that included complex and highly functional understories of native species. – **Michael Pope**

- Protect the best. Restore the rest. Hard to put a vision into 150 words. From the air, the valley still looks green - both from natural areas and vibrant farms. Big, charismatic oaks are still prominent in the valley foothills. Seas of purple camas can be seen from throughout the valley in spring. Development - both for agriculture and housing/industry - is smart, and protects the highest quality habitats. Restoration practitioners have developed trusting relationships with the agricultural industry allowing farmers to be farmers, but also empower and help them be good stewards of their natural resources. The Willamette Valley DOESN'T look like California's central valley. – **Sarah Dyrdaahl**
- Across the valley floor, up lower slopes, and along valleys reaching high into the Cascades, oak savanna and prairies are visible from almost any vantage point. Less apparent, the Willamette Valley is interwoven with oak and prairie grassland functions across all land uses, from agriculture to urban and even forestry. Vineyards and pastures sport large open-grown oaks as habitat islands; savanna and prairie parks bloom in the cities, and residential streets are lined with interlocking canopies of twisted-branch Garry oaks. Within forest lands, grassland openings serve as stepping-stone refugia for savanna species, while in some very productive areas of former savanna, planted oaks grow quickly in full sun to become the next generation of “old growth” savanna oaks. The revived savanna landscape stores carbon safely belowground, and breaks up the spread of crown fires in increasingly hot, dry summers. People and oaks once again form a synergy for life. – **Bart Johnson**
- There are a handful of 10,000+ oak and prairie preserves with wildlife corridors connecting them. Pollinators and birds have an even easier time as even the urbanites and small farms are planting/leaving native habitat/plants in areas not growing food or commodities. Prescribed fire is considered the norm, and a state-federal partnership has more capacity to burn than there are places to burn. I look up and say "thank you, robots" – **Daniel Dietz**
- High quality oak and prairie habitats are abundant on public and private lands. People take it for granted that these features of the Willamette Valley landscape will always be protected and maintained because of the broad public consensus around the importance and value of oak and prairie habitats. Agricultural land owners have found ways to integrate habitat conservation into their operations, and Farm Bill programs provide incentives for sound stewardship. Former oak habitats with marginal value for commercial timber production have been restored. Members of the WVOPC have developed a valley-wide network of organizations and businesses with the technical expertise and work force to manage oak and prairie habitats effectively and efficiently. Voters regularly register their support for conservation funding, a product of three decades of outreach, education, and advocacy that have transformed oak and prairie conservation into a shared cultural value. The WVOPC has continued to evolve and adapt to changing needs and opportunities. Participation in the WVOPC is viewed as an honor and members are community leaders. – **Bruce Taylor**
- collaboration among many agencies that could do a needs assessment to see the state at present, evaluate techniques currently working and those that have not. Teamwork to provide good examples with before and after data. This would provide a how-to guide that can be used in an outreach and education campaign to encourage private landowners to complete the work too. I envision the work to be done on most public lands connected by small private entities. – **Lauren Grand**

## Threats Ranking Exercise

Through the pre-meeting questionnaire, the Working Group and Steering Committee members were asked to rank threat categories based on Scope, Severity, and Irreversibility. Responses were then tabulated and scored using Miradi Adaptive Management software.

**Questionnaire Prompt:** Threats to the ecological integrity of oak and prairie habitats in the Willamette Valley have been well documented in numerous plans and studies. We would like your help in ranking the **scope, severity, and irreversibility** of these threats. Please use the definitions below the table and rank each listed threat on a scale from low to very high. We will present preliminary results at our meeting.

### Scoring Definitions

**SCOPE** - Most commonly defined spatially as the geographic scope of impact on the conservation target at the site that can reasonably be expected within ten years under current circumstances (i.e., given the continuation of the existing situation).

- Very High: The threat is likely to be very widespread or pervasive in its scope, and affect the conservation target throughout the target's occurrences at the site.
- High: The threat is likely to be widespread in its scope, and affect the conservation target at many of its locations at the site.
- Medium: The threat is likely to be localized in its scope, and affect the conservation target at some of the target's locations at the site.
- Low: The threat is likely to be very localized in its scope, and affect the conservation target at a limited portion of the target's location at the site.

**SEVERITY** - The level of damage to the conservation target that can reasonably be expected within ten years under current circumstances (i.e., given the continuation of the existing situation).

- Very High: The threat is likely to destroy or eliminate the conservation target over some portion of the target's occurrence at the site.
- High: The threat is likely to seriously degrade the conservation target over some portion of the target's occurrence at the site.
- Medium: The threat is likely to moderately degrade the conservation target over some portion of the target's occurrence at the site.
- Low: The threat is likely to only slightly impair the conservation target over some portion of the target's occurrence at the site.

**IRREVERSIBILITY** - The degree to which the effects of a threat can be undone.

- Very High: The effects of the threat are not reversible (e.g., wetlands converted to a shopping center).
- High: The effects of the threat are technically reversible, but not practically affordable (e.g., wetland converted to agriculture).
- Medium: The effects of the threat are reversible with a reasonable commitment of resources (e.g., ditching and draining of wetland).
- Low: The effects of the threat are easily reversible at relatively low cost (e.g., off-road vehicles trespassing in wetland).

## Threats Ranking Results

Threat	Scope	Severity	Irreversibility	Final Ranking
Rural & Urban Development	High	High	Very High	Very High
Conversion to Agriculture	High	High	High	High
Fire Suppression	High	High	Medium	High
Non-Native Species Invasions	Very High	High	Medium	High
Woody Encroachment	High	High	Medium	High
Human Intrusion and Disturbance	Medium	Medium	Medium	Medium
Transportation and Utilities	Low	Medium	Very High	Medium
Agriculture Management	Medium	High	Medium	Medium
Incompatible Water Management	Medium	Medium	Medium	Medium

## Additional Threats

The questionnaire also asked if there are any additional threats beyond those listed. Responses included:

- If forest management is included in agriculture, then no. If forestry is not included, then it was a big miss. Catastrophic wildfire might be another one.
- Include conversion to timber under agriculture.
- Lack of education
- Forestry
- Property taxation rules
- Inability to pay "market" value of environmental services provided for protection of existing stands
- While a consequence of habitat loss and fragmentation, the small and disjunct population structure of wildlife itself should be thought of as a threat that makes them at increased risk of extirpation (extinction debt).
- Political unrest and corporate greed. Funding resources may become more scarcer from the federal level, and more local levels of government (state and local governments). It is unknown how the new tax laws will affect nonprofit bottom lines. Basic resources to conduct restoration activities could diminish significantly over the next several years, this trend is likely going to take time to reverse.
- Slow erosion of land use over time; lack of ordinances to protect oaks; loopholes in existing laws to remove "hazard trees" usually oaks off a development site; changing trends in agriculture; slow restoration management of already owned sites; funding direction changes
- Funding capacity (or lack thereof) to sustain management (e.g. burning, mowing, weed treatment, etc.) of these habitats in perpetuity.
- Funding capacity and/or authority to permanently protect oak and prairie habitats post 2025 (i.e. post WWMP).
- Will there continue to be a sustained supply of known source plant materials required to do high quality prairie habitat restoration?
- climate change-extreme weather events

- Climate change
- Inappropriate forestry management and inappropriate tree planting (even in supposedly protected parks).
- Absence of historic predator fauna
- Incompatible recreation development/use
- Climate change
- Recreation (although perhaps this is covered under the umbrella of human intrusion)
- Public understanding and support
- Fire suppression - I also thought of this category as a lack of technical capacity and need for political support regarding prescribed fire. Thinking about our particular challenge in the WV of trying to add more fire to the landscape in a region with a history of smoke management concerns from agricultural burning.
- Forest pathogens are an outside threat compared to the list of items selected for ranking, and would better fit the timeframe of the SAP than the next 10 years. But sudden oak death, insect pests like Asian long-horned beetle and emerald ash-borer (riparian oak associations) etc. have potential to have a significant impact.
- Climate change is another threat that better fits the timeframe of the SAP, but could have effects. Indirect effects could include greater development pressure due to human migration (climate refugees), loss of remnant prairie/oak plant populations in localized areas, harsher growing conditions which could impact oak seedling establishment, increased chance/frequency/intensity of wildfire, etc.
- Policy/Funding -- mechanisms that support protection, enhancement, and restoration of prairie and oak systems on private lands must continue and grow. E.g. federal incentive programs, funded watershed councils, and private land trusts who connect private landowners to resources (or provide those resources) are critical to preventing further degradation and loss of these habitats.
- Potentially pests and pathogens, especially if ash trees are included in these ecosystems.
- Specific to agriculture, is the winery industry as evidenced by what has/is happening in Yamhill County through widespread clear-cutting of oak woodlands on south facing slopes to vineyards. There is an opportunity to call attention to this and perhaps develop some sort of certification program that wineries that conserve oaks can use for marketing.
- From what I experience, conversion to vineyards is the largest loss oak habitat around me.
- Societal injustices in policy-making, planning, and decision-making
- Land ownership system
- Capitalism
- Society-wide value of oak-prairie habitats
- A great lack of humility and reciprocity
- Introduction of pathogens (disease)
- Climate change
- Unsupportive elected officials
- Must include threats from human supported predators such as cats on ground nesting birds for example. this is both "non-native species invasion" and "Human intrusion and disturbance". If it could be controlled, many areas that may have the appropriate plant communities could regain substantial habitat function.

## Small Group Exercise: Threats and Strategies

The following list of possible solutions were derived during a small group exercise at the April 24, 2018 WVOPC Working Group meeting. A total of five groups consisting of 5-7 participants spent 90 minutes on this brainstorming exercise.

**Small Group Exercise:** We have identified a total of 10 threat categories that have contributed to the decline in quality and extent of oak and prairie habitats. For each threat category, please brainstorm a range of possible solutions that could be utilized to address these threats.

- Group 1: Emily Steel, Diane Steeck, Linda Boyer, Laurence Schwabe, Michael Pope, Nicole Maness
- Group 2: Bruce Taylor, Matt Blakeley-Smith, Alejandro Brambila, Steve Smith, Jared Jabousek
- Group 3: Mark Miller, Kelly Warren, Andrea Berkley, Matt Gibbons, Sara Evans-Peters
- Group 4: Ed Alverson, Clinton Begley, Bob Altman, Kevin O’Hara, Carolyn Menke
- Group 5: Sara Deumling, Katie McKendrick, Pat Johnston, Shelley Miller, Audrey Squires, Megan Z., Tom Kaye



Threats	Solutions (Strategies and Actions)
<p><b>A. Fire Suppression</b></p> <ul style="list-style-type: none"> <li>• Policies and management</li> <li>• Lack of indigenous burning</li> <li>• Burn restrictions limit ability to implement burns</li> <li>• Lack of available crews during best burn windows</li> <li>• Lack of public acceptance</li> <li>• Capacity lacking at key times (competing with other fire priorities)</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Improve/Increase Public Outreach and Education: <ul style="list-style-type: none"> <li>○ Need a communication strategy for this: what needs to be said about the how and why of burning; how do you reach different audiences?</li> <li>○ Development of outreach materials (e.g. online/sharable video) about the important role of fire.</li> <li>○ Collaborative effort to develop common communication tools that everyone can use (pool resources to design and produce tools).</li> </ul> </li> <li>• Build Capacity: <ul style="list-style-type: none"> <li>○ Build a network of experts and advocates.</li> <li>○ Trained staff, burn bosses.</li> <li>○ Partnerships with local communities: develop a collective strategy for planning, training and implementation.</li> <li>○ Connect people who want to use first on private land with those who do it on public land.</li> </ul> </li> <li>• Make the Business Case for Fire <ul style="list-style-type: none"> <li>○ It's an effective restoration tool if you can limit costs around public engagement and need to respond to public concern</li> </ul> </li> </ul> <p><u>Group 2 Responses:</u></p> <ul style="list-style-type: none"> <li>• Create an integrated fire management effort that would include a coordinate approach with USFWS, TNC, BLM, USFS, Tribes, and other partners.</li> <li>• Bring in resources with experience in ecological burning from other regions (for example, TNC burn module from Colorado).</li> <li>• Consider hiring contractors to implement burns (issue is liability).</li> </ul> <p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>• Build capacity through training, education, and partnerships.</li> <li>• Possibly create a "burning cooperative" with a valley-wide focus.</li> <li>• Utilize best practices to guide valley-wide fire strategy.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>• Look for opportunities to extend the burn season by burning outside the window- e.g., balds that could burn earlier.</li> <li>• Take advantage of urban interface policy where fire is promoted – e.g., urban interface boundary fire proofing.</li> <li>• Make sure we are recognizing all societal benefits of fire for public safety and fuels reduction.</li> <li>• Outreach about fire benefits.</li> <li>• Add tax base funding for feuls reduction and market benefits.</li> <li>• Overcome prior bias around field burning – redefine it as a public benefit, not a landowner benefit.</li> <li>• Create public celebration and involve general public in ecological burning. Integrate the tie to indigenous burning history and cultural history. Include outreach and on the ground tours.</li> </ul>

Threats	Solutions (Strategies and Actions)
	<p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Support BLM's EA for fire dependent ecosystems (BLM + partnership Lands, could lead to funding on private lands)</li> <li>• Funding and technical support for burning on private lands. Make it seem simpler for private landowners and less complex (simplify procedures).</li> <li>• LRAPA \$1000 permit- reduce cost. Or enable private land participation in Rivers to Ridges?</li> <li>• Cross boundary coordination and resource sharing.</li> <li>• NRCS meetings – county work groups. Request funds for burning.</li> <li>• Bring private landowners into the burning process and simplifying process and communication to support private landowners (reduce cost and permitting requirements).</li> <li>• Improve access to equipment and staffing.</li> <li>• Coordinate with NRCS county workgroups annual meeting about where to put \$.</li> <li>•</li> </ul>
<p><b>B. Conversion to Agriculture</b></p> <ul style="list-style-type: none"> <li>• Conversion to vineyards</li> <li>• Conversion to marijuana and hemp</li> <li>• Conversion to orchards</li> <li>• Conversion to Christmas tree farms</li> <li>• Conversion to pasture</li> <li>• Lack of potential land trusts or entity to hold properties</li> <li>• Existing tax deferral incentives often discourage conservation</li> <li>• Cost of agricultural land increasing</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Incentivize Habitat Restoration: <ul style="list-style-type: none"> <li>○ Create long term incentives (payments, property tax incentives) for habitat restoration on private property.</li> <li>○ Make the business case for commodity production in a landscape that includes intact native habitat (i.e., it costs less, yields are improved or risks are reduced).</li> </ul> </li> <li>• Explore Regulatory/Policy Approaches: <ul style="list-style-type: none"> <li>○ E.g. maintain ag deferral status if kept in ag production.</li> <li>○ Explore Wetland Reserve Program as a model/template.</li> </ul> </li> <li>• Develop Outreach Strategy about the Benefits of Sustainable Agriculture: <ul style="list-style-type: none"> <li>○ Ecolabelling and certification as incentives to landowners and consumers.</li> <li>○ Education about how habitat restoration can improve production.</li> </ul> </li> <li>• Develop Land Use Planning Strategies: <ul style="list-style-type: none"> <li>○ Options to provide zoning flexibility to landowners as an incentive to maintain land in ag production.</li> </ul> </li> <li>• Increase Availability of Resources for Restoration: <ul style="list-style-type: none"> <li>○ Financial and technical support for landowners</li> <li>○ SWCDs are a lynchpin in the system</li> </ul> </li> </ul> <p><u>Group 2 Responses:</u></p> <ul style="list-style-type: none"> <li>• Develop financial or tax incentives to encourage oak-prairie conservation and management.</li> <li>• Expand NRCS Incentives Programs.</li> </ul> <p><u>Group 3 Responses:</u></p>



Threats	Solutions (Strategies and Actions)
	<ul style="list-style-type: none"> <li>• Oregon agriculture and Heritage Program could be expanded to prioritize oak conservation.</li> <li>• Identify areas where agricultural conversion threats are the highest.</li> <li>• Find (map) oak on existing agricultural lands and conduct targeted outreach.</li> <li>• Acquire land or establish conservation easements on key parcels to create more favorable circumstances for conserving/restoring oak-prairie habitat.</li> <li>• Utilize NRCS expertise on agricultural land management.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>• With policy, find a way to deal with the tax implications, and develop incentives not to convert for tax deferral. Create a special habitat assessment state wide that actually works – the current WHCMP does not work.</li> <li>• Habitat acquisition.</li> <li>• Education about the value of retaining habitats.</li> <li>• Do the analysis to understand where conversion is happening, how much is happening, and for what crops.</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Fund Zena forest to do continuing forest inventory.</li> <li>• Develop information on the value of oaks and prairie economically, ecologically and socially.</li> <li>• Something similar to oak accord but for prairies, especially wet prairie where ag isn't working.</li> <li>• Compatible ag use with ecological function – polyculture.</li> <li>• Regulation to limit whole sale conversion of oak/prairie.</li> <li>• Conserve native food and fiber plants and crops.</li> <li>• Engage OSU extension and ODA and ask for their assistance in recruiting land owners as partners in oak-prairie conservation efforts.</li> <li>• Demonstrate economic viability of agriculture that accommodates ecosystem function through neighbors and technical support.</li> <li>• CFI Funding plan to evaluate contribution of oaks.</li> </ul>
<p><b>C. Agricultural Management</b></p> <ul style="list-style-type: none"> <li>• Pesticide drift</li> <li>• Incompatible grazing</li> <li>• Lack of ecological focused management</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Development of BMPs for prairie and oak habitat within managed landscapes (e.g. Salmon-Safe's butterfly friendly BMPs for viticulture).</li> <li>• Align corporate and family farm standards.</li> <li>• Connect with CSAs.</li> </ul> <p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>• "Salmon Safe" program is a potential example of a model or program that could be used to encourage oak-prairie habitat conservation/restoration.</li> <li>• The "Oak Accord" could be expanded beyond vineyards to work with other agricultural land owners.</li> <li>• Work with DEQ to identify harmful pesticides (conduct outreach to farmers).</li> <li>• Focus and prioritize working lands benefit and impacts.</li> </ul> <p><u>Group 4 Responses:</u></p>

Threats	Solutions (Strategies and Actions)
	<ul style="list-style-type: none"> <li>• Incorporate habitat into Ag business planning, with economic incentives for tourism related to retained habitat.</li> <li>• Develop and share operational BMPs for agricultural enterprise around timing and intensity of activities that can co-exist with habitat/species.</li> <li>• Identify financial incentives for conservation in ag lands/management actions – e.g., field flooding in CA central valley</li> <li>• Implement education o increase awareness (e.g., for farmer’s field edge spraying-- - this creates a great zone for weeds to invade – do some of the required ag certifications cause more problems than they solve?)</li> <li>• Develop alternate management practices and integrate these as outreach tools.</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Incentivize landowners (emotionally and financially) to manage a mosaic of habitats and crops (especially pieces of land not productive (e.g., too wet).</li> <li>• Work with DLCDD to identify better places to place solar that limit habitat impacts or perhaps incorporate pollinator species in those areas.</li> <li>• Persuade ODF to be an ally in changing practices to not require replanting of conifers where incompatible (e.g., oak friendly habitat).</li> </ul>
<p><b>D. Transportation and Utilities</b></p> <ul style="list-style-type: none"> <li>• Roads</li> <li>• Utility and service lines</li> <li>• Solar farms</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Development of BMPs (e.g., to support active habitat management in corridors)</li> <li>• Agreements with utilities to modify impacts.</li> <li>• Advance Planning – use locations of new transportation corridors to be proactive about need for habitat protection and restoration strategies.</li> <li>• Increase capacity within transportation and utility organizations.</li> <li>• Consider a voluntary mitigation program that makes it easier for transportation and utilities to compensate for impacts.</li> </ul> <p><u>Group 2 Responses:</u></p> <ul style="list-style-type: none"> <li>• Collaborate with utilities like BPA to improve prairie management in easement areas, especially in or near a natural area.</li> <li>• Collaborate with ODOT and Counties to improve native oak-prairie habitat in road rights of ways (use Benton County Transportation as a template).</li> </ul> <p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>• Utilize utility corridors for conservation benefit (butterflies and pollinators)</li> <li>• Work with BPA on increasing native composition under powerlines.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>• Recognize where there are benefits, and maximize these</li> <li>• BPS has existing guidelines for vegetation management – continue to integrate habitat management into their protocols</li> <li>• New transportation and utilities – work to minimize their placement in high value habitat. Making the map of these high value habitats is a first step, and SHARING that map is critical.</li> </ul>

Threats	Solutions (Strategies and Actions)
	<ul style="list-style-type: none"> <li>• For transportation development, establish a goal of no net loss of prairie and oak, just like wetlands. E.g., when they are modifying highway 126, right by Fern Ridge, loss to prairie and oak would be mitigated.</li> <li>• If impacts happen in transportation/utility corridors, establish practices to reseed with natives. This should be integrated in BMPs and accompanied by mechanisms to increase the availability of native plant materials.</li> <li>• Manage ROW to benefit existing species, control invasives, and retain habitat value.</li> <li>• Inventory roadsides and communicate BMPs across roadsides.</li> <li>• Keep in mind that there can be a mortality risk on roadsides- these areas could be sinks for species (e.g., road kill, windshield butterfly effect...)</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Develop guidelines for improving ecosystem functions in solar farms. E.g., pollinator habitat, compatible prairie plants (note similarity to vineyards – rows of shade casting structure).</li> </ul>
<p><b>E. Urban and Rural Residential Development</b></p> <ul style="list-style-type: none"> <li>• Rural residential</li> <li>• Commercial and industrial uses</li> <li>• Golf courses</li> <li>• Other urban development and facilities</li> <li>• UGB expansion into oak-prairie areas (tend to have less protection)</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Prioritize Land Banking – with limited time and resources, focus heavily on land protection.</li> <li>• Explore options to designate oak as high value habitat at the municipal level (e.g. City of Corvallis) that limit the impacts of new development.</li> <li>• Create incentives for new developments that use conservation-based planning/design.</li> <li>• Better mapping of corridors with overlay of population growth projections in order to prioritize land purchases.</li> </ul> <p><u>Group 2 Responses:</u></p> <ul style="list-style-type: none"> <li>• Work with golf course owners and managers to integrate oak-prairie habitat features and to enhance habitat for birds, bats, and pollinators.</li> <li>• Consider regulating Goal 5 resources in urban and rural areas to more effectively protect oak-prairie habitats.</li> <li>• Work with Home Builders organizations to integrate oak-prairie habitat into new developments.</li> <li>• Encourage more collaboration/consultation between land use planners and USFWS and ODFW to determine more oak-prairie friendly development patterns and park acquisition.</li> </ul> <p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>• Backyard Bird program is a potential model for rural residential areas.</li> <li>• NRCS or SWCD programs that provide landowner incentives could be established or expanded.</li> <li>• Education and outreach about improving oak and prairie habitat on residential properties.</li> <li>• Increase capacities to run landowner incentives programs (e.g., tax credits could be provided to encourage habitat management.</li> </ul> <p><u>Group 4 Responses:</u></p>

Threats	Solutions (Strategies and Actions)
	<ul style="list-style-type: none"> <li>• Reinforce zoning and land use laws</li> <li>• For marginal lands, implement legislative or political process to reduce development.</li> <li>• Integration of prairie values into policy for mitigation requirements (e.g., to mitigate loss from development).</li> <li>• Encourage cluster development with open space – onsite density transfer (build at higher density than zoned and put “savings” of land into open space). Protect land especially just outside UGB.</li> <li>• Generate revenue for acquisition through real estate taxes (e.g., LID) transaction fees, etc.</li> <li>• Develop policies that require mitigation for oak and prairie losses.</li> <li>• Help landowners with habitat to better manage for habitat values. Especially working with OSU extension and watershed councils.</li> <li>• Education and outreach.</li> <li>• Make sure when properties are acquired for conservation that they still pay taxes, and work against the perception that conservation is bad for the economy and the county tax rolls.</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Push 1000 friends of Oregon to do more.</li> <li>• R2R Support of local communities in visioning and planning process to value natural habitats.</li> <li>• Push for legislation to protect undeveloped lands, parks, etc.</li> <li>• Acquisition of natural areas.</li> <li>• Thoughtful land use planning.</li> </ul>
<p><b>F. Non-native Species Invasion</b></p> <ul style="list-style-type: none"> <li>• Non-native grasses</li> <li>• Non-native forbs</li> <li>• Prairie and oak habitats require ongoing maintenance</li> <li>• Seed costs discourage revegetation of disturbed areas with native seed.</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Increase capacity (manpower and dollars) to better address the issue.</li> <li>• Develop an education and outreach strategy to inform private landowners about what they can do about invasive species.</li> <li>• Ensure better coordination on weed management: <ul style="list-style-type: none"> <li>○ Encourage models like the cooperative Weed Management.</li> <li>○ Engage Department of Ag and Forestry: privately owned, unmanaged lands are a significant seed source of invasives; need to prioritize how to address these lands.</li> </ul> </li> <li>• Encourage Use of More Native Seed: <ul style="list-style-type: none"> <li>○ Need incentives for its use.</li> <li>○ Need more of it; cheaper.</li> </ul> </li> </ul> <p><u>Group 2 Responses:</u></p> <ul style="list-style-type: none"> <li>• Create a stewardship trust fund that would allocate invasive control funds to areas of greatest need (geographic need or targeted species).</li> <li>• Follow Early Detection Rapid Response (EDRR) approach in managed oak-prairie habitat areas.</li> </ul> <p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>• Increase funding for treatment of highest priority species.</li> </ul>

Threats	Solutions (Strategies and Actions)
	<ul style="list-style-type: none"> <li>• Partner with established weed control programs/organizations and support expansion of education, outreach, and training efforts.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>• Bolster existing EDRR and increase ability to rapidly respond.</li> <li>• Talk about success stories, case studies.... What does it take to be successful at different scales.</li> <li>• ODA needs to have more regulatory role, and implement enforcement (e.g., what really happens when neighbors report neighbors).</li> <li>• Advocate for adequate funding for better enforcement and a more adaptive list.</li> <li>• Be more strategic and define urgency vs priority. New species may not yet be a priority, but they can have higher urgency.</li> <li>• Implement preventative measures and minimization – this could consider tracking what nurseries are selling.... These invasives are often easy to propagate, especially by ‘backyard nurseries’.</li> <li>• Address avenues for spread – for recreational users provide bike wash stations, boot cleaning stations at natural areas.</li> <li>• Build workforce of trained contractors that can diversify across seasons, so there are enough contractors available at key weed treatment times.</li> <li>• Provide training for contractors, to increase their skill.</li> <li>• Share knowledge about IPM BMPs.</li> <li>• Identify species with high potential to be invaders and do a full roll up of invasives across the US – identify those that are sold commercially in Oregon and evaluate those.</li> <li>• Find a way to reduce heavy equipment as vectors for weeds- e.g., mowers, road equipment.</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Engaging people to collect food from invasives, and maybe even natives.</li> <li>• EDRR support.</li> <li>• Species-specific control strategies – R and D, Disseminate information.</li> <li>• Coordinate herbicide use/avoidance with human use (e.g., Tribal harvest).</li> <li>• Workforce development. Rosario Franco visas. How to we support and develop a stable workforce – loss of migratory labor results in increasing costs. Job training with homeless, Dept of Correction inmate restoration hot shot crews. Support their development and training. Vocational training too.</li> </ul>
<p><b>G. Woody Encroachment</b></p> <ul style="list-style-type: none"> <li>• Conifer encroachment</li> <li>• Shrub encroachment</li> <li>• Unknown impacts of climate change and plant diseases</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Increase capacity and funding to address the issue.</li> <li>• For thinning oaks in particular, create innovative options for end use of material.</li> <li>• Create incentives for private landowners to address.</li> <li>• Be proactive about how climate change might shift priorities / strategies around this issue in the future.</li> </ul> <p><u>Group 2 Responses:</u></p>

Threats	Solutions (Strategies and Actions)
	<ul style="list-style-type: none"> <li>• Utilize commercial oak thinning approaches (conifer harvest) to create different density oak stands.</li> <li>• Utilize ODF, BLM and other available fuels management funds to help implement oak-prairie management efforts while also reducing risk of wildfire in urban fringe areas.</li> <li>• Provide technical assistance and incentives to private land owners to encourage fuels reduction/habitat management efforts.</li> <li>• Work with ODF to modify policies that discourage management of oak habitats.</li> </ul> <p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>• Increase ecological burning to control woody encroachment.</li> <li>• Utilize TNC comate resiliency data to identify opportunity areas for future habitat expansion.</li> <li>• Look at historical maps of drought and conifer die-off and see if there are patterns occurring.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>• Fuels reduction after fire – take advantage of opportunities</li> <li>• Education and promotion around achieving financial gain through Fir removal. Income can go to restoration... timber is often match for grants. Find ways to make the fir removal pay for itself.</li> <li>• Shared equipment and operators may help reduce costs and simplify forestry management aspects of restoration.</li> <li>• Non-native cherry can be high value specialty wood – work to expand this market</li> <li>• Long term stewardship markets- provide wood for streams, forestry product certification programs, try to shorten hauling distance as much as possible.</li> <li>• Jason Blazars restoration ciders – implement marketing and outreach around restoration ‘products’</li> <li>• Should potential economic benefits be a section of the SAP? Give examples, stories?</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Develop markets for small and imperfect wood removed from oak stands, etc. Coordinate with neighbors for volume. Biochar? Vinegar, smoke charate for seed germination? Other methods?</li> <li>• Easier access for private landowners about Douglas-fir removal in oak stands. Pamphlets, websites, access to technical experts.</li> <li>• Use of prescribed fire for limiting tree/shrub encroachment (see fire suppression)</li> <li>• Better understanding and communication of importance and context of shrubs for birds and wildlife. Also risks of shrubs, especially blackberry.</li> <li>• Better outreach about judicious use of herbicides as part of integrated pest management. It’s one tool cost comparisons among techniques, other impacts of other techniques, not talking about aerial application.</li> <li>• Develop and deploy workforce of paid and volunteer labor.</li> <li>• Encourage markets for small-scale harvest and/or combining work into larger, profitable projects.</li> </ul>

Threats	Solutions (Strategies and Actions)
<p><b>H. Incompatible Water Management</b></p> <ul style="list-style-type: none"> <li>• Ditching</li> <li>• Drain tiles</li> <li>• Tension between landowners and leasing farmers</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Create incentives to remove drain tiles and disconnect ditches</li> <li>• Partner with OWRD and NRCS</li> </ul> <p><u>Group 2 Responses:</u></p> <ul style="list-style-type: none"> <li>• Discourage use of pivot irrigation.</li> <li>• Eliminate incentives and policies that encourage tiling.</li> <li>• Reduce/eliminate water rights permit costs for wetland restoration projects (currently costs \$7,800 while at the same time there is no fee for tiling).</li> </ul> <p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>• Promote incentives for landowners to reduce tiling and irrigation.</li> <li>• Remove drainage tiles and ditching from conservation lands where it exists.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>• Wet prairie restoration ends up creating more and deeper water, benefitting different species than natural wet prairies address this.</li> <li>• Alternatives for marginal lands in agriculture.</li> <li>• Frequently big farmers/corporations are less interested in conservation – prevent these shifts in ownership, potentially through connecting with realtors, and filtering by a map of priorities.</li> <li>• Education and incentives about USDA programs.</li> <li>• Watch out for tiling in secret.</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>• Reconnecting stream for stream function</li> <li>• ACOE study of Amazon Basin accessibility stream needs. Implement it.</li> <li>• Plug ditches, remove dikes, recontour and needed to restore hydrology</li> <li>• Greater scope of assessment for stream and wetland function</li> <li>• Conversation with farmers about water use and ecosystem needs</li> <li>• Better understanding of water budget in Willamette Valley. Potential effects of climate change and human population growth.</li> <li>• Water right and water laws.</li> <li>• Engage U.S. Army Corps in floodplain restoration efforts (e.g. Metro Waterways Study in Eugene which proposes large wet prairie projects in conjunction with levee removal).</li> </ul>
<p><b>I. Human Intrusion and Disturbance</b></p> <ul style="list-style-type: none"> <li>• Poorly sighted trail development</li> <li>• Illegal area use (camping, off-roading)</li> <li>• Firewood cutting</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>• Address the root causes: homelessness, lack of education about the impacts of activities (e.g. illegal trail use) and outreach to user groups (e.g. bikers).</li> <li>• Provide alternative facilities (e.g., for biking).</li> </ul> <p><u>Group 2 Responses:</u></p> <ul style="list-style-type: none"> <li>• Consider closing sensitive habitat areas at certain times of the year.</li> </ul>

Threats	Solutions (Strategies and Actions)
<ul style="list-style-type: none"> <li>Feral cats</li> </ul>	<p><u>Group 3 Responses:</u></p> <ul style="list-style-type: none"> <li>Support and encourage animal control agencies to reduce feral cat populations.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>Education and policy.</li> </ul> <p><u>Group 5 Responses:</u></p> <ul style="list-style-type: none"> <li>Education and outreach.</li> <li>Improve trails so bad trails are not used.</li> <li>Partner with OFRI (OR Forest research institute).</li> <li>Address homelessness and social services.</li> <li>Ask counties to look ahead 30 years and decide what they want their county to look like (same with state legislature).</li> <li>Partner with Eugene Mission.</li> <li>Engage homeless in conservation actions.</li> <li>Coordinate with 1000 Friends of Oregon to work with small communities to help them develop community visioning that includes conservation of native habitats.</li> </ul>
<p><b>J. Lack of Public Knowledge or Support</b></p>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>Develop and implement a communication strategy: <ul style="list-style-type: none"> <li>Include mapping that shows the loss of oak and prairie over the last 30 years; connects people to the impact they have had on the landscape (more meaningful than the 1850 to 2004 map).</li> </ul> </li> <li>Increase awareness of value to county staff.</li> <li>Support good on the ground projects with profile.</li> <li>Support/foster a peer to peer network of good stewards.</li> <li>Increase outreach component (i.e. budget/effort) of projects/raise importance of outreach in staff work.</li> <li>Bring different groups of people into oak and prairie landscapes to build advocacy.</li> <li>Promote through Outdoor school.</li> <li>Seek Ag partnerships with conservation ethic.</li> </ul> <p><u>Group 4 Responses:</u></p> <ul style="list-style-type: none"> <li>Overarching – Compile information on what has been done, analyzed and achieved, and share it widely.</li> <li>Develop a protocol for the process of developing actions, implementing them. How will adaptive management work, what are strategies to make our SAP happen effectively – E.g., CPOP? How do we make this happen without getting species focused?</li> </ul>
<p><b>Other Threats:</b></p> <ul style="list-style-type: none"> <li>Conversion of timber (owners are forced to reforest with conifers, even after harvesting hardwoods)</li> </ul>	<p><u>Group 1 Responses:</u></p> <ul style="list-style-type: none"> <li>Plant oaks in prairie systems to create more savanna</li> <li>Develop long term management strategies</li> </ul> <p><u>Group 2 Response:</u></p> <ul style="list-style-type: none"> <li>Change property tax incentives so that forest deferral can include oaks.</li> <li>Develop conservation tax deferral or tax reduction programs.</li> <li>Work with Counties to adopt ODFW tax program.</li> </ul>



Threats	Solutions (Strategies and Actions)
<ul style="list-style-type: none"> <li>• Existing property tax deferral systems encourages timber management and conversion to agricultural uses such as Christmas trees, while discouraging management of oak-prairie habitats</li> <li>• Lack of true oak savanna</li> <li>• Short term managed ecosystems</li> </ul>	<p><u>Group 4 Response:</u></p> <ul style="list-style-type: none"> <li>• Change of ownership is an opportunity for conservation. Risk is that out of state corporations acquire lands. Identify local family owned and managed lands where stewardship may be a greater value. Improve communication with real estate community to connect with sellers and buyers. This will require breaking into a protective group.</li> </ul>