**Threat-Based Strategic Conservation Workshop: Lakeview, Oregon**
Thursday, March 7, 9am-4pm

Facilitators:
Vanessa Schroeder (OSU extension), Katie Wollstein (OSU extension), Chad Boyd (Agricultural Resource Service), Megan Creutzburg (Institute for Natural Resources), Dylan O'Leary (Institute for Natural Resources)

Participants:
Alex Dohman (Lakeview LIT coordinator), Anya Tyson (TNC, Tri-Corner Community Collaborative facilitator), Josh Loew (USFWS – Hart Mountain Assistant Manager), Brian Wilk (USFWS based in Bend), Laura Enders (USFWS based in Reno), Katie Underly (Nevada Department of Wildlife – NDOW), Amanda Gearhart (NDOW), Kim Haub (Sheldon-Hart Wildlife Biologist), John Tull (USFWS based in Reno), LP Mancini (USFWS – Sheldon-Hart Invasives Species Biologist), Lindsey Smith (BLM), Lee Davis (TNC), Kevin Goldie (USFWS – Sheldon-Hart Habitat Biologist), Judy Steward (rancher), Myron Steward (rancher), Brian Day (USFWS - Sheldon-Hart Refuge Manager), Carissa Callison (USFWS - Sheldon Assistant Manager), Jesse Morris (BLM), Craig Foster (Wild Sheep Foundation), Darwin Johnson (Lake County), Chuck Messner (local landowner), Brandi St. Clair (Lake SWCD), Julie Weikel (Friends of Hart Mountain), Grace Haskins (BLM), Matt Haskins (BLM), Tristan Henry (Theodore Roosevelt Conservation Partnership – TRCP), Michael O'Casey (TRCP), Brandon Palmer (ODLT), Shannon Ludwig (USFWS), Autumn Muir (ODLT), John O'Keeffe (rancher)

**Meeting Notes**

Welcome
- Brief remarks by Anya Tyson, Tri-corner Community Collaborative (TCC) facilitator, and Alex Dohman, Lakeview Sage-grouse Local Implementation Team (LIT) coordinator. More info on the TCC via this overview and this common ground document. More info on the Lakeview LIT here.
- Acknowledged that the facilitators and LIT decided to start with a workshop focused on this landscape, because of already established overlap of 1) ecological importance with 2) social and 3) administrative capacity; for example, the TCC is already a group of folks that's meeting to support & uplift existing stewardship efforts in this area.
- The LIT and the TCC are separate groups, with the LIT focused county wide and more specifically on sage-grouse (though also interested in advancing ecosystem and community health and resilience more broadly). But there is over lap between these groups—their members and their purpose at times.
- For the LIT that's concerned with a much larger area across Lake County, the hope is that the group might be able to recreate this sort of planning exercise for its entire geography of interest, but there was a need to start somewhere, and TCC area seemed like a good place to start.

Opening Presentation
- Desired Outcomes:

    - Shift towards more strategic spatial planning and provide a roadmap for how to get there
    - Assist the LIT in identifying and agreeing on some shared priority landscapes over the short-to-medium term, and empower LIT members to undertake similar exercises in other geographies within their LIT for the medium-longer term
    - Because this group is one of the first few to go through the workshop, the facilitators also intend to take feedback from today and apply lessons learned to overall approach and to inform upcoming workshops, for example, with other LITs.
- Ultimately, we want to end up today with a **shared vision of a spatial strategy that starts to identify and prioritize near-term and longer-term opportunities** to defend and grow the core in this important area.
- Today, we will go from 2.1-million-acre TCC landscape, which is huge and hard to wrap your head around, and move towards talking about smaller chunks of the landscape
- We want to stay strategic today instead of diving into the specific of tactics, e.g. "maintain perennial plant communities and address invasive annual grasses in core habitats", NOT "let's spray 6oz of imazapic across these 10 acres."
- We all make strategic decisions, but now we have new tools to empower strategic discussions at larger scales and more complex scenarios
- Strategic conservation is NOT:
    - Necessarily doing the things we've already done: "traditionally, we would..."
    - Personal example from Chad Boyd: last-minute spending contract of juniper cutting where there was good road access, but not adjacent to core of good habitat—instead just a patch of improved condition off by itself.

- Brief overview of process steps within today's workshop:
    - Define Core Growth Areas/ visualize ecosystem integrity
    - Determine threats to ecosystem integrity
    - Determine how values refine our spatial approach
    - Identify actions, their relative urgency
    - Reflection and wrap-up

- One principle of strategic conservation: Overlap of three ingredients leads to the biggest, most impactful conservation outcomes:
    - Ecological Importance
    - Social capacity: the presence of people willing to engage in coordinating actions to address ecosystem threats
    - Conducive Administrative Conditions: the presence of the authorities and resources that enable action ("rules & tools")

Sagebrush Conservation Design (SCD)

- Based on SCD data layers, a multi-state biome-wide look at ecosystem conditions, the TCC landscape jumps out as important, intact
- What is the SCD? A simple model that provides a report card for how we are doing collectively as managers/users/fans of the sagebrush ecosystem.

- Takes into account: encroaching conifers, invasive annual grasses, fragmentation from roads and development
- Important report takeaway: We are losing 1.3 million acres per year annually on average.
    - Sobering reality: all the good work we've been doing/are doing is not enough
- Big intact landscapes with sagebrush and perennial grasses and forb understories; these core areas promote a broad suite of values: plants, wildlife, ranching, recreation, carbon storage, solitude/escape, etc.

Defend and grow the core:

- Core = large, expanses of healthy sagebrush and perennial bunchgrass plant communities. Annual grasses and juniper are not present and/or certainly not dominant.
- A new way of doing things that hinges on "an ounce of prevention is worth a pound of cure"
- Seems simple, but human nature is sometimes we put all of our attention on the areas that are in rough shape instead of small, regular investments to keep things in good shape, good.
- Comparison to "chasing ambulances" rather than "getting regular check-ups." One is more effective and lot less costly.

Threat-based Land Management – A few foundations

- Focus on key far-reaching threats:
    - Invasive annual grasses: spreading with and without fire
    - Fire: some places with way too much and some with too little
    - Conifer expansion
- Communication tool for managers, especially those that think about large landscapes, and for folks who care about these landscapes:

Threat-based Ecostate Maps: Available on [SageCon Landscape Planning Tool]

- Can help us:
    - Summarize condition in broad bins
    - Summarize change over time
    - Consider spatial distribution of threats and conservation opportunities
- Based on Rangeland Analysis Platform functional group data
    - All shrubs
    - All trees
    - All perennial grasses and forbs
    - All annual grasses and forbs
- Simple categories:
    - Shrubland: shrubs>10% cover
    - Grasslands: shrubs<10% cover
    - "good", "intermediate" and "poor" refer only to understory conditions based on ratio of perennial forbs/grass to annual forbs/grass. Not meant to be a definitive take on what's actually good or bad habitat for a specific species.
        - The simple ratio site can be misleading at times, for example, in very low productivity sites, where ratios can be skewed towards annuals, so show up as

poor, but in truth there is very little annual grass out there (and very little grasses/forbs in general)

- Tree categories very simple:
  - >5% -15%: Low Tree Cover
  - >15%: High Tree Cover

- Again, this data layer and others are available via web viewer and for download on [SageCon Landscape Planning Tool]

**Prineville LIT Example:** In-progress and not final, but still helpful to consider to show us where we are going today

- Started with very large landscape, ~1 million acres, stretching south from 12-mile sage-grouse PAC.
- Step 1: Defined core/growth/other rangeland areas based on ecostate map and local knowledge
  - Core areas: largely intact and important to keep it that way. Still may require active management/restoration in small included areas of threats
  - Growth areas: Threats are present, but we can work with it
  - Other Rangelands: Tons of management effort would be needed to restore these areas
- Step 2: Define threats to core habitat with more specificity:
  - Likelihood of conversion to annual grasses based on "biotic and abiotic resistance"
  - Ended with two different flavors of "core"
    - Core facing Invasive Annual Grass threat
    - Core facing conifer threat
  - The end product of step 2 is a big win; helps you put your back to core and work outwards
- Step 3: Start to get more refined based on stakeholder values
  - In the instance of Prineville LIT, honed into sage-grouse seasonal habitats
  - End up with smaller management areas defined by unique combination of threats and, in this instance, sage-grouse habitat values
- Step 4: Defining management goals and relative management urgency among core rangeland sub-units
  - End up with important road map of overarching goals and context for management sub-units.
  - Still in strategy headspace, e.g., "reduce annual grass threat" as opposed to tactics "use this specific herbicide"
  - End result of smaller, sub-units defined by specific values/threats, helps us navigate complexity strategically and "eat the elephant" as opposed to being stuck in overwhelm and/or playing whack-a-mole.
- Question: "Core" in this case is different that "core" sage-grouse habitat designation:
  - Yes, "core" in this case is based on plant communities: large, intact expanses where there isn't really much in terms of juniper cover and/or significant areas where annual grasses are dominant.

- Sage-grouse cores are important too, but may include areas where threats are much more prevalent.

**Step 1:** Define Core/ Growth areas to visualize ecosystem integrity

- Step 1: start with a broad strategy to defend and grow core sagebrush rangelands. Start with ecological condition/vegetation lens using ecostate map and local knowledge to define areas:
    - Core
    - Impacted
    - Growth
  - A) started individually on paper maps
  - B) combined individual results into small group results
  - C) each small group presented and adjusted live map to end up with consensus-derived version of this map.
- Discussion:
  - Tips for distinguishing what you might consider core vs. growth vs. impacted
    - If your management goal is to keep it the way it is (in terms of plant communities), then it's likely "core"
    - If your management goal is to improve it/change it back to core, then it's likely a growth area.
    - Then there is a spectrum from "growth opportunity areas" to "impacted rangelands". At one end, if it's impossible or all but impossible to restore it back to core, then it's probably a good fit for "impacted rangeland." On the other hand if it's very feasible to change an area back to core, then it's very likely "a growth opportunity area" on the other end of the spectrum. In the middle, are places where it's possible to restore, but you may need to weigh the proximity to core areas and other values to decide whether it's "impacted rangelands" or "growth opportunity."
  - Putting something in one category as opposed to other doesn't mean you are "giving up on it" it means you are consider strategically, pragmatically, what might be possible there and how that piece of ground relates to the larger landscape.

**Step 2:** Determine threats to ecosystem integrity

- We considered that "not all cores are created equal" and there's a need to distinguish between and even prioritize different actions and levels of urgency among areas we've considered to be core at first glance. To start this process, we looked at risk/vulnerability
- We considered abiotic site potential (e.g. soils and moisture and precip) using Resistance and Resilience maps
- And we consider abiotic potential plust biotic potential (current plant community resilience and resistance) using maps that model "post-wildfire likelihood of transition to annuals"

- We refined and further described some of the polygons we'd initially drawn on the map

**Step 3**: Determine how values refine the spatial approach

- After lunch, we discussed wildlife as a generally valued component of the landscape, and looked at data layers, including pronghorn use areas and cooridors and sage-grouse leks categorized as highly activity to just moderate or low activity. We noticed a general pattern of where higher activity of sage-grouse, based on lek, occurred in the area and decided to hone in on these areas for further discussion.
- Discussion:
    - Some discussion of whether pronghorn data representing just western populations of animals, bias of collaring study. Some feeling that the data were still relatively accurate even with some gaps.

**Step 4**: Explore relative urgency of actions

- Of the units, we took a closer look at in Step 3, we began to consider some of the key threats and considerations in each, what were some general relevant management goals for each, and how priorities might be considered in terms of urgency, e.g., such as where would there be potentially the most ecological loss in the case of wildfire.
- Discussion:
    - Some realization that there's different ways to think about urgency. Where is the greatest risk? What about likelihood of wildfire? What about "ripeness" in terms of actually having the social/administrative capacity to act?
    - The recognition that the values and outcomes of this process can shift based on who is in the room and the need to bring others along, and potentially shift a group's understanding based on new information and new input.