

**WEST DESERT  
(WDARM)  
LOCAL WORKING  
GROUP**

**Date: September 22, 2020**  
**Place: Virtual meeting via Zoom**  
**Individuals Present:** Melissa Chelak (USU), Steven Peterson (BYU), Trevor Schlossnagle (UGS), Nancy Williams (BLM), Jared Reese (BLM state office), Brad Jessop (BLM), Cjay Butters (USDA Wildlife Services), Terri Pope (UDWR), Robby Edgel (UDWR), Keeli Marvel (Dugway P.G.), Mikiah Carver (BYU), Renee Chi (BLM), Rebecca Lee (UGS), Cindy Ledbetter (BLM), Kert Young (NRCS), Ashley Longmore (GIP), Jimi Gragg (UDWR), Ann Neville (TNC), Stephanie Graham (BLM), Matt Philippi (NRCS), Joe Moore (USFWS), Hugh Hurlow (UGS), Jessica Wade (BLM), Heather Talley (DWR), Lorien Belton (USU Extension)

### Information Presented/Discussion Highlights

#### *Intros and Personnel Updates*

With multiple new faces, we started out with introductions and personnel updates.

- Kert Young is in the Tooele NRCS, and they are still hiring for an additional position
- Stephanie Graham (BLM renewable resources biologist) noted that there are several new faces in the BLM offices. Kevin Oliver left the District Manager Position, and Matt Preston has also left. Jordan Davis is the assistance field manager for range and wild horse issues. Jessica Wade is the acting field manager.
- Boyd White has moved on from the Farm Bill biologist position. Daniel Eddington is helping manage some of the ongoing projects Boyd was working on. That position will be filled hopefully soon.

#### *Sage-Grouse Research Updates*

Melissa Chelak provided a research overview. She has reached the end of her final field season. She did four years of translocations, starting in 2016, and had five field seasons, monitoring from March through August. Both residents and translocated birds were tracked over the years. They found 2 new leks, plus seeing the Little Valley lek repopulated. Even with more leks, there was still an increase of males per lek. They were able to show apparent nest and brood success. Mortalities have been relatively consistent, with slightly more mammalian predation than avian, but many were not able to be determined.

In addition to the grouse-specific data gathered, her team has tracked predators since 2017: ravens are most abundant but data has not been analyzed yet. They did point counts for ravens and scat surveys for mammals, along transects. She plans to look at predator occupancy across seasons. In addition, she is looking at recreation data: OHV users, GIS, and traffic counters. They

only have data from 2018/19, not 2020, due to covid, on OHVs and GIS tracking, but there are traffic counter data for 2020.

For her dissertation, Melissa has four chapters planned:

- 1) Movements and habitat selection of sage-grouse
- 2) Demographics: she will be working with Pete Coates on models for before and after the translocations
- 3) Genetics (all translocated and collared birds had genetic material gathered, and they also gathered egg shells from nests to look at the impacts of translocation on genetics)
- 4) GPS transmitter functionality analysis, comparing the different transmitters used

Melissa is also working with Randy Larsen and BYU and Jeff Beck in Wyoming. Her timeline: planning for an early summer finishing up.

### *Horse and Sage-grouse Study from BYU*

Mikiah is just finishing up a field season, and shared some preliminary work. They are looking at late brood-rearing locations, and potential interactions between sage-grouse and wild horses in several locations in Nevada and Utah, including Sheeprocks and Hamlin Valley. She is using paired sites, inside/outside Herd Management Areas (HMAs) and looking at brood-rearing.

### *UGS Hydrologic Study*

UGS continues to work on several different hydrologic monitoring studies of habitat restoration projects.

Hugh Hurlow provided an overview of the Tintic Valley work, on the south end of the Sheeprocks SGMA. They are monitoring various hydrologic features in each areas, where each method is possible (for example, some sites have no surface flow, so that cannot be measured there). These features include surface flow, groundwater, water chemistry, climate, wet meadow vegetation, etc. The monitoring is looking at the impact of removing conifers. Once conifers are removed, the post-project monitoring will be done.

Rebecca Lee is starting to use NDVI, to quantify the impact on the landscape of different treatments. NDVI is a measure of vegetation greenness. She is planning to compare the change in NDVI to evapotranspiration, and hopefully link that to groundwater recharge. She noted that the "Google Earth Engine" tool is very helpful in this analysis. She showed a PowerPoint of two polygons: first, a lop & scatter treatment (WRI#1105) done in 2008, a phase 1 project. It's difficult to see the impact via NDVI of that project. However, a second one (WRI#1628), the Winter Springs Bullhog) in 2010, allows a clear picture of the impact of the project on greenness in August.

Trevor Schlossnagle then presented on the BDA monitoring in Vernon Creek. They are looking at how the BDAs there impact streamflow and groundwater. There is a connection between flows and what the ground water (piezometer) measures are and what the flow is. That means we can use piezometers to monitor BDA effects. Now we can install BDAs in the untreated area to continue the research. They are also exploring using drones to monitor greenness of the extent of the riparian area relative to the BDA placements.

### *BLM Causal Factor Analysis*

Renee Chi presented the newly developed BLM Causal Factor Analysis. She explained the history of the document: in the 2015 plan, an adaptive management system was put in place where certain population concerns would either trip “soft” or “hard” triggers resulting in other actions to protect the grouse, without having to do an entire new NEPA process. In the Sheeprocks, a hard trigger was tripped when 8 or 10 years showed a decline in grouse populations. Among the hard-coded necessary responses to that situation, a “Casual Factors Analysis” had to be done, to determine why the grouse decline was happening. This is a new document for BLM. It included two key elements:

- 1) Identification of threats that contributed to the trigger being tripped, and
- 2) Response actions for what to do about it.

An interagency team worked to examine possible threats and gauge whether each locally was a major, moderate, or minor threat, based on all the information that was available. Major threats to the Sheeprocks population were determined to be:

- A small, isolated population
- Infrastructure (roads, fences, and powerlines, for example)
- Fire
- Recreation
- Altered water distribution
- Conifer expansion

However, all of these major factors contribute, and there was no “silver bullet.” There was also an understanding that climate likely played a role, as there was a lot of drought in the area in the time frame when the population was in decline. The timeframe of analysis is the 20 years prior to the population hitting the hard trigger. Renee worked with what data was available, but there is a clear need for additional data, particularly on recreation/roads, to understand the situation better.

The CFA document is available for review. The next steps are:

- Partner review of the CFA, which could include additional modeling
- And evaluation of the translocation success
- More/continued habitat restoration work
- An interdisciplinary team that will review the need for more analysis or new modeling

- Finishing the HAF analysis in the Sheeprocks. This is in progress, but the data is still being compiled. It will be an additional source of information when completed at both the 3<sup>rd</sup> order and 4<sup>th</sup> order levels of detail.

### *Predation Management*

Cjay provided predator management updates. He has worked with Melissa to get egg baits around leks. He also tried to focus on raven nest sites this year. Coyote and fox work will be starting in the week following this September meeting.

### *Project updates*

- There is discussion about doing some BDAs in Bennion Creek this fall.
- Boyd White has moved out of his position, and was working on a lot of projects. If anyone was working with Boyd on contracts, let Robbie know so he can follow up.
- Brad Jessop has several projects in the implementation phases: Erickson Knoll has been awarded and will be implemented within a month. Maple Springs and McIntyre lop and scatters are on schedule. Mud Springs (about a 4000 acre PJ project related to the Tintics hydrology study) is on hold, waiting for cultural clearance. He is also planning a project for about 2500 acres of open-range G aerial spraying for cheatgrass.

### *Other updates*

- Jared (BLM) and Heather (DWR) have sent out reminders about biologists giving feedback on the draft HAF maps. If anyone needs help, reach out to Michel Kohl. Feedback is needed from local biologists with on-the-ground knowledge in each SGMA.
- Asley noted that there is a Dec 31 deadline for GIP projects. They also have \$2 million ongoing for water projects. These were ranked within WRI for the past few years since the funds were first made available, but the ranking has now shifted to GIP. Wildlife or livestock must benefit from the water projects to qualify.
- Lorien mentioned that there will be upcoming presentations on sagebrush treatments and on a conifer removal cost-benefit tool. Emails will be set with the zoom info to the full utahcbcp listserv rather than each individual LWG list.

## **Follow-up Needed**

No action items were identified.

## **Next Meeting**

The next meeting will be set by doodle, likely in December.