

# Greater Sage-Grouse Species Report Outline – FOR DISCUSSION 4-20-2015

UPDATED 4-23-2015

## Introductory and Background Section

**Chapter: Executive Summary** (Amy Nicholas)

Short (2-3 page) summary of the report.

**Chapter: Introduction** (Sarah Backsen)

- Regulatory History (including all FR notices and litigation) → **Table of the new information and timelines of major achievements. E.g. Buffer report, Logic for developing this landscape strategy. Introducing concepts and terms, like a “consultation history.”**  
Include summary that lead to the 2010 finding.
- Process for 2015 Status Review **Low priority.**
- Species Report Overview **Low priority.**

**Chapter: Species Description, Range, and Distribution** (Amy Nicholas and Craig Hansen)

- Species Description **Where to work the population information.**
- Taxonomy → **Pat removed a lot of the old stuff.**
- Genetics **Paragraph placeholder → Pat did a brief overview (two paragraphs) Uniqueness, connectivity, Holly and Craig will incorporate connectivity etc. with Pat’s overview.**
- Life history and ecology  
*All life stages: breeding, nesting, brood rearing, wintering, movement/migration*
- Historical Range
- Current Range/Distribution **Placeholder for a map.**
- Annual Lek Counts/Surveys **Population Trends etc.**
- Management Zone Discussion/Description (one for each management zone with reference to populations contained within) **Strongholds map – where does it go, is it regulatory? COT Report go here? For Reg mechs, it’s PACs and Birds, Threats is Occupied Range and Birds. Introduce that the MZs are our unit of analysis (look for old writeup, Unit of Analysis). Pat has a basic description. Perhaps copy COT report description from Bi-state. Abundance model is run by MZ. FRAMEWORK FOR THIS SET THIS WEEK. NEED BY MAY 1. HIGH PRIORITY. Trends and Cycles. Pat will work on and will coordinate with Craig and Holly on connectivity.**
  - [Figure – WAFWA MZs, populations, and range map]
  - [Figure – PACs map]
  - [Figure – Strongholds map]
  - [Figure - Distribution models by MZ] **Ask Kevin → How are these scaled by MZ?**
  - [Table - Numbers from Distribution models by MZ]
  - [Figure – Abundance models by MZ]
  - [Table - Numbers from Abundance models by MZ]

**Chapter: Land Ownership and Management** (Jesse D’Elia) **HIGH PRIORITY – MUST HAVE BY MAY 1. Draft this week. 90 percent done now (Jesse)**

Summary (2-3 pages) of Ownership, and types of decisions and management actions (regulatory mechanisms) that are associated with each agency/owner

- [Figure - Land Ownership status by MZ]
- [Table – Land Ownership status by MZ]
- Will revisit with Reg Mechs.
- ◆ Federal Plans
  - USFS/BLM
    - ◆ LUP Amendments / Planning efforts
      - ◆ Disturbance Monitoring
      - ◆ Adaptive Management
      - ◆ Mitigation
      - ◆ FIAT
  - FWS/Refuges
  - NPS
  - DOD/DOE
- ◆ Tribal Lands and Plans
- ◆ State Plans
- ◆ Private Lands
  - FWS CCAA
  - NRCS SGI

## Impacts Analysis

Include threats table to indicate cumulative threats or threat interactions. All threats will use Management Zone as the common spatial scale/unit of analysis.

## Habitat Loss and Fragmentation

### Chapter: (Tier 1) Wildfire (Altered Fire Regime) (Genevieve Skora)

- Has chunks of req mechs. List of IMs (Instructional Memos, with qualifiers) → need to summarize.
- Summary needs to be in there by May 1. Steve A is going to read and give thoughts on completeness.
  - → Steve had questions, sent to Gen.
- (Craig finished State plan summary).

### Chapter: (Tier 1) Noxious Weeds and Invasives (Dawn Davis)

- Steve A is going to read and give thoughts on completeness.
- Steve had no suggestions on this chapter, back to Dawn for Species Report Slimdown.
- (Craig finished State plan summary.)

### Chapter: (Tier 1) Conifer Encroachment (Jeff Everett) →

- Needs to be assigned. Perhaps start with 2010.
- There could be an Oregon model, summary of conservation efforts with risk from CEDs. NRCS is building the conifer model, model not done by May 1.
- I Dawn updated this Chapter. Provided back to Jeff Everett (due COB 4-24-2015).

### Chapter: (Tier 1) Agricultural Conversion (Joy Gober)

- Who is putting the modeling information in here after May 1?
- Amy is going to read and give thoughts on completeness.
- → Missing pieces (roads, why used predation buffer, but didn't tie back to predation, indirect buffer).
- (Craig finished State plan summary).

### Chapter: (Tier 1) Oil & Gas (Amy Nicholas) Who is putting the modeling information in here after May 1? Let Kevin check the text.

### Chapter: (Tier 2) Mining (Ron Baxter)

- Amy reviewed.
- Difficult to gauge impacts, location, needs to connect the dots to sage-grouse.
- Could easily be slimmed down.

### Chapter: (Tier 2) Renewable Energy (Lisa Solberg Schwab)

#### Wind

- Gen reviewed. Needs to be trimmed, tables combined.

#### Solar

#### Geothermal

### Chapter: (Tier 2) Infrastructure (Heather McPherron)

- (Craig finished State plan summary)

#### Roads

#### Power Lines

#### Communication Towers

### Chapter: (Tier 3) Fences (Jennifer Siani)

### Chapter: (Tier 3) Grazing and Rangeland Management (Craig Hansen)

### Chapter: (Tier 3) Free-Roaming Equids (~~Jennifer Siani~~ Genevieve Skora)

- Steve sent questions to Gen.

### Chapter: (Tier 2) Urban and Exurban Development (Joy Gober)

- (Craig finished State plan summary).

#### Landfills

Chapter: (Tier 3) Recreation (Angela Burgess)  
Chapter: (Tier 3) Climate Change (Holly Freifeld)  
Chapter: (Tier 3) Drought (Angela Burgess)

#### Overutilization

Chapter: (Tier 3) Hunting (Amy Nicholas)  
Chapter: (Tier 3) Scientific and Education Purposes (Amy Nicholas or Other) General overview. Amy finished.

#### Disease and Predation

Chapter: (Tier 3) Disease (Holly Freifeld)  
Chapter: (Tier 3) Predation (Lara Drisd) Is this a Tier 3? Elevate to Tier 2? Tie back to Habitat Loss and Fragmentation.

#### Other Threat Factors

Chapter: (Tier 3) Small population and life history traits affecting population viability (Lief Wiechman) LOW.  
Chapter: (Tier 3) Contaminants (Angela Burgess)  
Energy Development  
Other  
Chapter: (Tier 3) Military Activity (Pat Deibert or Other) Yakima Training Center is important. PAT.  
Waiting for update from Jessi on Yakima; Pat has new info on MT bombing range. LOW

#### Synergistic Impacts

Chapter: Threat Interactions (Angela Burgess, Insistations from Pat Deibert)

This chapter will describe synergistic relationships among threats described in chapters above. These relationships are identified in individual threat chapters under 'Compounding Effects'. This chapter will lead reader into cumulative threats discussion below.

(Examples: Fire and Invasives, Fire and Conifer, Anthropogenic disturbance and predators) Make sure chapters are consistent. Pick out the Top 5 interactions (e.g Fire and Invasives) maybe come up with a list. Look at Tier levels, a check. Graphic not necessary.  
Worked on this.

#### Regulatory Mechanisms and Conservation Efforts

Chapter: Federal (Jesse D'Elia) Have these Landownership percentages now. Yakima Training Center (WA State) DOE (in Idaho, CCA), NPS (Craters of the Moon). FWS (Arapahoe NWR, etc), BLM and FS. Need to write up the PECE-like criteria.  
Federal regulations → Jesse will pull this together next week. BLM and FS. Waiting on FO assistance and GIS.

Chapter: State (Jesse D'Elia) Plug in the FO text and tables. Craig completed summary table and some narratives (by State and by potential threat). Craig has his narratives posted to SP under the Plans/Reg Mechanisms page.

Chapter: Private (Jesse D'Elia)

Check the WGA report that was recently released.

Tribal (Jesse → The SLT is reaching out to Tribes that occupy more than 0.5 percent of the MZ (Wind River, Uinta and Ouray, Duck Valley, Summit Lake).

Canadian (Holly). Holly has a draft (waiting on small pieces of information).

LOCAL --> done (Jesse)

Hunting Regulations from Amy.

Comment [LW 1]:  
May want to change this title of the Chapter subsection to be consistent...

Craig is finishing the State.

## Chapter: Conservation Efforts

### • Conservation Measures CED Summaries

- FIAT Secretarial Order (Dawn) → Fire and Invasives (Table that breaks down by project and MZ, acres). County weed management areas (table of proportion by MZ9. DONE (Dawn incorporated).
- CED Summary (Holly) → Compare to threat acreages (What goes here and what goes in each chapter). Phased process and numbers. Summary by early next week. Intro paragraphs for CED background. Explain the tables and maps. Done early next week, except for potential delays due to maps.
  - Threat acreages are under construction (this goes into the threat chapters). Summaries by MZ and threat all of the projects deemed effective by the FWS. Almost done with summary table of all projects that the proponents deemed complete and effective.
  - Holly is attempting to address overlap between zones and threats (multiple threats and occur in multiple MZs). Will have a clean number by threat across the range.
  - Holly will send the GIS team information for a map of all complete and effective projects entered into the CED and NRCS data not entered into the CED.
  - Threat amelioration calculations for conifer, agriculture, and urbanization.
- CCA and CCAAs (Angela, table similar to Craig's for BLM EISs).
  - Angela completed an evaluation worksheet to consolidate review of the CCA and CCAAs.
  - Similar to State plans, we have acres for these. DONE.
- SGL (Kathy Hollar, need to add some stuff, what is SGL, but none of the threat specifics). Working Lands for Wildlife. Threats: Conifer, grazing, fences, ag conversion. Perhaps use their report. DAWN is going to take Kathy's work and add threat specifics from the SGL report). Lief is going to make a map of SGL data for conifer removal. See above under CED.
- Conservation Banking Summary. (Drue, Shauna, and Lee) DONE.
- Canada (Non-regulatory, Holly) SEE ABOVE
- Other (if needed)

## Cumulative Effects

### Chapter: Cumulative Threats and Amelioration by Management Zone (Steve Abele, with assistance from MZ Leads)

*This chapter is the discussion of cumulative threats and plans/action to ameliorate **by MZ**, as well as the status of sage-grouse in the MZ.*

*This chapter will identify all threats by MZ, relying on threat interactions described in previous chapter and spatial threat concentration information of primary threats. This allows an examination of primary threats that we have quantitative/spatial information for, and a concomitant examination of other threats tied to the primary threat by MZ.*

*Additionally, this chapter will describe the efforts implemented and planned to reduce or remove threats and risks on the landscape. Summaries of conservation actions would be summarized from CED, as well as evaluation of plans, policies, and regulatory mechanisms, broken down by MZ.*

#### Comment [LW 2]:

*Relative to the evaluation of conservation plans, each MZ subsection would include information from the following list (as appropriate):*

- Laws, regulations, Policies and Management Plans
  - Federal Plans
    - BLM/FS LUP Amendments / Planning efforts
      - Disturbance Monitoring
      - Adaptive Management
      - Mitigation
      - FIAT
    - FWS (Refuges)
    - NPS
    - DOD/DOE
  - State Planning Effort
  - Private Lands
    - FWS CCAA
    - NRCS SGI
  - Tribal Lands
  - Canadian Federal and Provincial Laws and Regulations

#### Comment [LW 3]:

- MZ 1 (Montana – Jeff Berglund / North Dakota Kevin Shelley [support from Wyoming and South Dakota])
- MZ 2 (Wyoming – Lisa Solberg Schwab [Support from Montana, Colorado, Utah])
- MZ 3 (Nevada – TBD / Utah – TBD) (potentially Jay Martini, Ron Baxter)
- MZ 4 (Idaho – TBD [Support from Oregon, Nevada, Utah, Montana])
- MZ 5 (Oregon – TBD [Support from Nevada, California])
- MZ 6 (Washington – TBD) (potentially Jessi Gonzales, Heather)
- MZ 7 (Colorado – TBD)

Lastly, this chapter will describe overall status of sage-grouse in each management zone, based on the cumulative threats and the plans/action aimed at ameliorating them.

MZ X (Template) Similar to 2010. Tables and Maps.

- 1.0 Summarize current population size/population trend /habitat extent (Brief – refer reader to appropriate section earlier in the document – differentiate habitat category when describing extent) What is going on in this MZ to remind the reader. Tier to another section.
- 2.0 Summarize current threats (existing footprint).
  - 2.1 Table (Current human footprint with altered indirect buffers)
    - 2.11 All threats w/i MZ X
    - 2.12 Call out tier's
    - 2.13 Calculate % occurrence against 'habitat' and sum
    - 2.14 Calculate % fragmentation ???
    - 2.15 Call out interactions (synergistic refer up to section)
  - 2.2 Map
    - 2.21 Swiss cheese map (existing)
- 3.0 Summarize future potential threats (could marry 3.0 and 4.0)
  - 3.1 Table (Projected human footprint in year 20xx)
    - 3.12 (similar to 2.11–2.15)
  - 3.2 Map
    - 3.12 Swiss cheese map (future)
- 4.0 Summarize CED/Reg mechanisms
  - 4.1 Table
    - 4.11 Efforts by threat
    - 4.12 Reg mechs by threat (these will differ depending on habitat delineation (e.g., PHMA).
  - 4.2 Map
    - 4.12 What does the future look like given effort/regs

Notes:

Human footprint today vs Human footprint in future given conservation efforts and reg changes  
Need to call out phma and ghma to get at difference

## Overall Summary of Species Status

**Chapter: Overall Summary of Species Status (SLT)**

*What's new and different since 2010 status determination?*

May 4 – May 14. Perhaps work on a bulleted list? Rangewide summary, the MZ summary is above. Include Columbia Basin for now.

## Support Sections

REFERENCES CITED (*Lara Drisd*) *Where are the hardcopies (PDFs) going? What do the Chapter Authors put the Literature PDFs? Low Priority -*

APPENDIX A — DEFINITIONS *Glossary. Clarifying terminology.*

APPENDIX B — ACRONYMS USED (*Erin?*)

APPENDIX C — OCCURRENCE TABLE (if too large to include in that section) *Reconsider. Low priority*

APPENDIX D — THREATS SUMMARY TABLE (if too large to include in that section) *(Amy and Craig)*

APPENDIX E — CHANGES OVER TIME SUMMARY TABLE (if too large to include in that section)

APPENDIX F — MANAGEMENT ZONE (and POPULATION) MAPS *Need by May 1*

APPENDIX G — NON-REGULATORY MECHANISMS EVALUATED

### Tools for Writers:

- ◆ Chapter Template (*Amy Nicholas*)
- ◆ Occurrence Table (*Amy Nicholas*)
- ◆ Threat Summary Table (*Amy Nicholas*)
- Changes over Time Summary Table (*Amy Nicholas*)