

Data Submitted (UTC 11): 12/9/2020 8:00:00 AM

First name: Jasmine

Last name: Kleiber

Organization: Nevada Department of Wildlife

Title: Wildlife Staff Specialist

Comments: The Nevada Department of Wildlife (the Department) appreciates the opportunity to provide comment

on the Scoping Proposed Action for the Humboldt-Toiyabe (H-T) National Forest Forest-wide

Prescribed Fire (Proposed Action) Restoration Project. We have included our specific comments in the attached table and offer some overarching questions and concerns below.

In general, the Department greatly appreciates the consideration of management tools for landscape level range and habitat improvement. In reading the Proposed Action, we find that few specifics on how this tool would be utilized on the landscape are addressed. The Proposed Action does not adequately address where, or under what conditions, prescribed fire is an inappropriate or overly risky management tool and would not be considered for use. The Department is also concerned with a lack of sufficient analysis and sideboards to account for historical and ongoing disturbances, such as utilization by livestock or wild horses and burros that may jeopardize a prescribed fire's success. It is unclear how the USFS will move from a landscape scale analysis to a site-specific determination regarding the appropriateness of prescribed fire as a management tool. The document is largely missing a framework for assessing on the ground conditions and risk that are critical in order to implement a successful project. In addition to being very overly general, we recognize that large-scale and frequent wildfire already occurs across the entirety of Nevada, the H-T included, and we question the need for more fire on the landscape. There are alternative management techniques that may result in similar ecological outcomes while presenting far less risk of undesirable or unplanned negative outcomes.

We would also like to point out that there is a fairly extensive existing body of literature illustrating fire return intervals in big sagebrush shrublands normally exceeds 50-100 years and may be even longer within *A. tridentata* ssp. *wyomingensis* habitats, and low sagebrush shrublands do not deal well with fire whatsoever (Davies and Bates 2020). Sagebrush systems are not considered fire dependent or fire adapted in the sense many forested systems are, although fire may promote diversity in some types of

sagebrush. Big sagebrush (*A. tridentata*) in particular, is already losing ground to fire due to decreased return intervals, while there is some emerging evidence that mountain sage communities can benefit from certain types of fire. Statements within the Proposed Action are too broad, and we recommend providing more specificity regarding this. Big and low sagebrush are also overly broad in the context of the H-T due to the presence of many species and subspecies occupying different soils, elevations, and temperature/moisture regimes. We are concerned that the Proposed Action, as written, provides overly broad latitude for using prescribed fire without conducting an in-depth analysis, and could allow for the misuse of prescribed fire as a management tool. We recommend that the Proposed Action include more specific constraints regarding when and where prescribed fire may be appropriate and could be considered for management use.

Without more specificity in the proposed Project, the Department is not convinced the proposed Project scale is appropriate and suggest prescribed fire might be better as a highly targeted tool for specific, small-scale restoration projects in Nevada. We are also concerned that the Proposed Action could be approved through the use of a Categorical Exclusion, thus reducing the level of planning and analysis that will be completed, and the disclosure of analyses to the public. Given the recent history of wildfire and invasive annual grass in Nevada, use of prescribed fire should be very judicious and used only after extensive analysis, both at the programmatic and site-specific project scale. We recommend this project be analyzed as an Environmental Assessment and additional coordination and communication with the Department occur given the potential for prescribed fire to conflict with wildlife resources.

We greatly appreciate the opportunity to participate in the review and development of this proposed Action, and genuinely look forward to further discussions with the Forest Service on this project. Should you have any questions regarding our comments, please do not hesitate to reach out to me directly.

Excerpts from Table of comments:

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Due to significant ecological changes in Nevada, driven

primarily by invasive annual grasses and large wildfires, since the mid-1980s, we question the reliance of LRMPs as justification for prescribed burning at the scale identified in the Proposed Action.

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are present in the ecosystems of Nevada and California.

These dynamics compound impacts from changes to historic fire regime; therefore, analysis of departure from reference based on analysis of Landfire datasets is a starting point for analysis of potential acres that may be departed, but on the ground conditions must be used to determine final acres and specific projects where prescribed fire is warranted and likely to increase ecosystem function and associates values. The analysis presented here does not support the statement that [ldquo]This information provides an approximation of how many acres should be targeted for burning on an annual basis to restore a more resilient stand composition and structure[rdquo].

Please see for further support: Urza, Alexandra K., et al.

"Post-fire vegetation response at the woodland[ndash]shrubland interface is mediated by the pre-fire community." Ecosphere 8.6 (2017): e01851.

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post-treatment issues related to cheatgrass and other potential problems. Many of the areas identified here are likely sagebrush communities, which are not ideal candidates for prescribed fire based on multiple publications from the Rocky Mountain Research Station, SageSTEP, and other projects across the Great Basin and Sierra Front. Please see as an example of current literature synthesis: Miller, Richard F., et al. "A review of fire effects on vegetation and soils in the Great Basin Region: response and ecological site characteristics." Gen. Tech. Rep. RMRS-GTR-308. Fort Collins, CO: US Department of Agriculture, Forest Service, Rocky Mountain Research Station. 126 p. 308 (2013).

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A GIS analysis that presents a more defined number of acres suitable for prescribed burning would help put context into the objective of burning 80-100k acres/year.

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We would encourage in-depth discussion and consideration of how presence and density of invasive annual grasses or weeds may be more important than if habitats or specific areas are departed from natural fire regimes. While we would not argue that certain areas are departed from a natural fire regime, we would also offer that the introduction and expansion of invasive plant species is an essential consideration and may make fire less desirable.

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Seeding with 100% native species is an unrealistic expectation due to limited availability and often high costs of native seed. Additionally, use of native seed given site conditions often lead to extremely low rates of success, negating the restoration management actions. We strongly recommend the inclusion of non-natives in consideration for seed mixes given the lack of commercially available native ecotypes from Nevada and California.

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Identified in the Proposed Action of this document, prescribed fire treatments would range in size of 500-100,000-acre treatments. With this scale in mind, how does the USFS plan to mitigate for and treat large scale invasive annuals not having aerial application of herbicide analyzed for on USFS status lands? Ground treatment of winter annual species such as cheatgrass are both cost prohibitive and very difficult at best and is largely terrain limited especially in mountainous lands administered by the USFS.

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The use of mechanical equipment/activities should be prohibited anytime that they would cause excessive ground disturbance. This would include anytime the ground is saturated including after snowmelt.

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We recommend this measure also be considered in all bighorn sheep habitat. Nevada has more bighorn sheep than other state in the lower 48 and this stipulation may be appropriate in Nevada bighorn habitat as well.

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Given the number of acres of sage grouse habitat that has burned in the last 20-30 years and general loss of habitat from fire, we question the inclusion of GRSG habitat as habitat available for prescribed burning. Please include citations that support prescribed burning in sage grouse habitats.

Should a similar design element be added for GRSG winter habitat during fall/winter months?

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Does this mean that prescribed fire will not occur in areas

of low resistance-resilience? What about areas of moderate resistance-resilience? There are certainly cases in Nevada where existing wildfire in moderate and even high R/R areas has resulted in increases of invasive annual grass. How will these situations be assessed and analyzed prior to implementing a prescribed fire project?

Page 23 - ID 49-54 -

An additional consideration in planning in any prescriptive burn treatment, mule deer and their critical habitats should also be avoided. As this species is on a precipitous westwide decline, not restricting the manipulation of a critical browse and thermal cover component in both migration and winter habitats could have devastating impacts on a herd. Many of these habitats are already compromised constricting use to even smaller patches of existing habitat making it all that much more important.

Page 26 -

Coordination with NDOW should not only include big game species but all wildlife including state protected and sensitive wildlife species. NDOW understands that USFS is not legally obligated to consider or analyze all State protected or sensitive wildlife; however, analysis or consideration of these species provides a stronger approach for landscape/habitat management and/or restoration.

Page 23 and 31-38 -

The maps (and related analyses) presented here show departure class from historic fire interval, but these departures are not overlaid with Landfire Existing Vegetation Type or Potential Vegetation Type. As such, they are not functionally useful for identifying acres/areas or habitat types where prescribed fire is warranted based on existing vegetative conditions, habitat potential/Ecological Site Description/ or Disturbance Response Group. Acres of departure classes based on overlay with existing R&R layers should also be presented to represent high priority areas based on language included in pages 4-5.

Page 31-38

Critical habitat for sage-grouse and other species that may be impacted should be explicitly addressed in the modeling exercise to identify areas that should be proactively removed from consideration for prescribed burning.

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Does this mean that prescribed fire will not occur in areas of low resistance-resilience? What about areas of moderate resistance-resilience? There are certainly cases in Nevada where existing wildfire in moderate and even high R/R areas has resulted in increases of invasive annual grass. How will these situations be assessed and analyzed prior to implementing a prescribed fire project?

Page 23 - ID 49-54 -

An additional consideration in planning in any prescriptive burn treatment, mule deer and their critical habitats should also be avoided. As this species is on a precipitous westwide decline, not restricting the manipulation of a critical

browse and thermal cover component in both migration and winter habitats could have devastating impacts on a herd. Many of these habitats are already compromised constricting use to even smaller patches of existing habitat making it all that much more important.

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Coordination with NDOW should not only include big game species but all wildlife including state protected and sensitive wildlife species. NDOW understands that USFS is not legally obligated to consider or analyze all State protected or sensitive wildlife; however, analysis or consideration of these species provides a stronger approach for landscape/habitat management and/or restoration.

Page 23 and 31-38 -

The maps (and related analyses) presented here show departure class from historic fire interval, but these departures are not overlaid with Landfire Existing Vegetation Type or Potential Vegetation Type. As such, they are not functionally useful for identifying acres/areas or habitat types where prescribed fire is warranted based on existing vegetative conditions, habitat potential/Ecological Site Description/ or Disturbance Response Group. Acres of departure classes based on overlay with existing R&R layers should also be presented to represent high priority areas based on language included in pages 4-5.

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Critical habitat for sage-grouse and other species that may be impacted should be explicitly addressed in the modeling exercise to identify areas that should be proactively removed from consideration for prescribed burning.