V. CAUSAL FACTOR ANALYSIS AND MANAGEMENT RECOMMENDATIONS

The Local AMRTs are tasked with completing a causal factor analysis and provide management recommendations associated with each population or habitat trigger. The results from this process are provided below in a *Causal Factor* table for each Conservation Planning Area.

5.1 ELKO CONSERVATION PLANNING AREA (POINT OF CONTACT – GERRY MILLER)

Category	AMRT Management Recommendations	Agency Response
	Please list appropriate, realistic, and targeted responses for each causal factor. ***Please limit/prioritize to a maximum of 5 actions per/PMU.*** *Actions need not be restricted to federal agencies (i.e., BLM/Forest Service), they may involve other governmental organizations (e.g., NDOW, County, State, etc.). Please identify which agencies the recommendations are meant for.*	*Please provide a brief, detailed explanation that responds to the request. If the request cannot be addressed, please detail the reason and how future requests may be more meaningful.*
	Tuscarora PMU Habitat Trigger: Multiple wildfires since 2006 have contributed to habitat declines (~1.2 million acres) Possible causal factor(s): There is a need to accurately portray all anthropogenic disturbances, not just recent disturbances with NEPA. There are large mining operations *Tuscarora PMU Population Trigger:* Possible causal factor(s): 1 lek soft cluster Double Mtn well 3 NW: We'll take a closer look 1 hard lek trigger: Saval 05 (Mahala Creek): Investigate the area, to determine the causal factors	
Invasive Weeds	Increase funding to make fighting invasive winter annual grasses a top priority, Medusahead and Ventenata are found in isolated pockets throughout the PMU. Fires and other disturbances will only continue to spread these highly competitive winter annuals if left unchecked. **NDF, NDOW, BLM, USFS, USFWS, Private landowners**	**USFS Response**: Within available funds and staffing, the Humboldt-Toiyabe National Forest Invasive Plants program prioritizes Medusahead and Ventenata under its Early Detection Rapid Response (EDRR) program. To supplement available funding; Joint Chief's funds were awarded to continue targeting these species specifically

		The Forest Service also coordinates with Cooperative Weed Management Areas, conservation districts, counties, tribal governments, the Nevada Department of Agriculture, the Nevada Department of Wildlife, BLM and the University of Nevada, Reno to team up to fight invasive winter annual grasses. Agencies plan treatments jointly to increase efficiency and avoid overlap. Working with other agencies, the Forest Service are able to access funding to increase the number of acres treated. **USFWS Responses:** The Service recommends that Nevada Department of Agriculture also be identified here. The Service has no problem with being identified with this need and agrees that invasive annual grasses are one of our state's greatest environmental threats. Our various programs (Ecological Services, Partners for Fish and Wildlife, and Refuges) all invest resources into combatting fire and invasive plants. We will continue to do so and appreciate working with our partners to do this strategically across the state within our authorities and allocated resources. **BLM-NV Responses:** Specific projects need to be identified/proposed and funding requested through the BLM BPSS (Budget Proposal Submission SharePoint) usually a year in advance (by March/April each year). Each District then ranks their BPS projects, then the State Office ranks the projects based on the Districts' rankings. Projects are funded based on the ranking and how much funding is available within each program. For funding to be increased, not only would the State Office need to receive additional funding, but the District/Field Office would need to have submitted projects through BPSS that are ranked high enough to be funded. Next year identify the locations and acreages of these invasive annual winter grasses, some possible treatment options, and possible partners to

		assist with treating the invasive annual winter grasses. This would help with drafting a BPSS proposal. Also, the *Targeted Grazing of Annual Grasses in Great Basin Ecoregions in Nevada Programmatic Environmental Assessment* should be completed during FY2020 (DOI-BLM-NV-0000-2019-0003-EA). Which means NEPA, for the most part (a DNA with a Decision Record will need to be written for the site-specific analysis) is done.
Fuels Management	Increase funding for large scale fuel breaks that consist of non-native vegetation (i.e. forage kochia and desirable fire-resistant bunchgrasses such as Siberian wheatgrass. (note (USFS Kochia is not allowed on USFS lands) **NDF, NDOW, BLM, Private landowners**	**USFS Response:** Forest Service vegetation management projects emphasize strategic placement of landscape level treatments that protect communities and habitat for multiple species, and include other restoration activities to meet multiple objectives. Smaller scale fuel breaks such as roadside treatments included in landscape level treatments are also used to provide for safe and effective fire suppression strategies. In addition, the Forest Service has plan direction related to fuels management activities: **GRSG-FM-GL-052-Guideline** – In planned fuels management activities or part of an overall vegetative management strategy to mitigate the impacts of wildfire in priority and general habitat management areas and sagebrush focal areas, when reseeding in fuel breaks, fire resistant native plant species should be used if available, or consider using fire resistance non-native species, if analysis and/or best available science demonstrates that non-native plants will not degrade greater sage-grouse habitat in the long-term.

		Forest Service policy (Forest Service Manual 2070, Section 2070.2) allows for the use of plant materials that are non-native providing that they are not persistent or invasive and are only used as an interim solution in situations where the reestablishment of native plant communities are not likely to occur in a timely manner. Such situations would usually be under emergency conditions where resources such as soil stability or water quality are under immediate threat or the prevention of establishment of invasive species and when native species are not available or economically feasible and in situations where the plant community has been permanently and highly altered. Both forage kochia and crested wheatgrass in all its derivations and mother lines (e.g. Siberian wheatgrass is a mother line for crested wheatgrass) are documented to be persistent and create long-term competition for the recovery of the endemic plant community and likely the permanent displacement of native species. **BLM-NV Response:** See above for information about requesting funding for projects. BLM has a policy for the use of non-native species (see H-1740-2 and MS-1745). **Excerpt H1740-2 Chapter 8, page 87** *3. Non-native Plant Materials* *Although native plants should always be given first consideration, there are certain situations where non-natives may be desired. For example, on highly disturbed sites that have had their physical characteristics altered so that native vegetation cannot reestablish or survive, it may be necessary to use non-natives to help restore site stability. Other examples include noxious weed containment and emergency situations where there is a risk of soil loss or threats to life and property. In cases where the use of non-native vegetation is desired, a justification, including the identification of*

		any desired native species that is not available, should be submitted for approval by the state director or other delegated authority. *As outlined in BLM Manual 1745 - Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants, the use of non-native seeds as part of a seeding mixture is appropriate only if:* *a. Suitable native species are not available,* *b. The natural biological diversity of the proposed management area will not be diminished,* *c. Exotic and naturalized species can be confined within the proposed management area,* *d. Analysis of ecological site inventory information indicates that a site will not support reestablishment of a species that historically was part of the natural environment and,* *e. Resource management objectives cannot be met with native species.* *When suitable natives are not available, identify the native species (including subspecies or variety when applicable) that is not available. Identify plant species native to the project area that may be available as a first substitute. If natives are only partially available, or not available, identify a nonnative species of the same functional group to use on that site. If analysis of ecological site inventory information indicates that a site will not support reestablishment of a species that historically was part of the natural environment, look for suitable native species replacements before choosing non-native plants.* *In considering the natural biological diversity of the area, it is best to consider the whole community, its processes and the dynamics between species rather than maintenance of vascular plant diversity.* *For example, there can be unintended consequences of the use of non-natives if or when soil microbial communities or pollinating animals including insects are displaced because non-native plants are chosen.* *All non-native vegetation used should be non-invasive and ideally be short-*

		lived, have low reproductive capabilities, or be self-pollinating to prevent gene flow into the native community. One good example is sterile oats, which provide erosion control and will fade out in one year without cultivation (although they do release seed if disturbed). Non-native vegetation should not compete with the naturally occurring or returning native plant community or exchange genetic material with common native plant species. Non-native material must not invade plant communities outside the targeted management area. Non-natives listed on state and federal noxious weed species lists or nonnatives listed in state weed seed lists must not be considered for use. *As stated in Chapter 2, diverse, healthy, and resilient native plant communities provide the greatest opportunity to be successful in meeting multiple use objectives within BLM. Set resource management objectives that can be met using native species for most situations. However, as a last resort, it may be necessary to introduce non-native, non-invasive plant materials to break unnatural disturbance cycles or to prevent further site degradation by noxious or invasive plants.* Use of non-natives does pose a litigation risk to the BLM. Next year identify the locations and acreages for proposed large-scale fuelbreaks and possible partners to assist with seed purchase and/or creating the fuelbreaks. This would help with drafting a BPSS proposal. Also, the *Programmatic EIS for Fuel Breaks in the Great Basin* (DOI-BLM-ID-0000-2017-0001-EIS) had been completed and the ROD signed. This document was written so that in most cases, a DNA can be written for the site-specific project.
Vegetation Management	Use of non-native seed mixes for fire rehab and habitat restoration should be used in areas with a high risk of winter annual invasion. **NDF, NDOW, BLM, USFS, Private landowners**	**USFS Response:** Forest Service policy (Forest Service Manual 2070, Section 2070.2) allows for the use of plant materials that are non-native providing that they are not persistent or invasive and are only used as an interim solution in situations where the reestablishment of native plant communities are not likely to occur in a timely manner. Such situations

	Though there has been considerable efforts made in restoring areas in this PMU, it still needs to be state again that even more intensive restoration work is needed. Perhaps developing small 10 -20-acre habitat islands that are strategically placed across the landscape and are more intensively managed as functional sagebrush/perennial grass/forb communities. This coupled with chemical/fallow/reseeding treatments within the plant communities exhibiting winter annuals would make a difference. **NDF, BLM, NDOW, USFS, Private landowners** ESDs/STM/DGRs in developing and implementing rehab/restoration – gets to what is ecologically attainable. Helps triage where can be successful. Map of connectivity – connect what is already going on and fil the gaps. **BLM, USFS, NDOW, NDF, CD's** Do more preemptive – proactive work before fire and addressing the unsuitable sagebrush communities Focus on R2 around lek clusters. **BLM, USFS, NDOW, NDF, CD's** Focus on protecting last intact islands of sagebrush on top of the Sheep Creek Range north of Workhorse Butte and south of Rock Creek as well as the remaining sagebrush island near the confluence of Antelope Creek and Rock Creek. **BLM, USFS, NDOW, Private land owners**	would usually be under emergency conditions where resources such as soil stability or water quality are under immediate threat or the prevention of establishment of invasive species and when native species are not available or economically feasible and in situations where the plant community has been permanently and highly altered. In addition, the Humboldt-Toiyabe National Forest has forest plan direction regarding habitat for greater sage-grouse in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-GRSGH-GL-032-Guideline** – In priority and general habitat management areas and sagebrush focal areas, actions and authorizations should include design features to limit the spread and effect of undesirable non-native plant species. **GRSG-GRSGH-GL-034-Guideline** – In priority and general habitat management areas and sagebrush focal areas, native plant species should be used, when possible, to maintain, restore, or enhance desired habitat conditions **GRSG-GRSGH-GL-038-Guideline** – In priority and general habitat management areas and sagebrush focal areas, treatment methodologies should be based on the treatment areas' resistance to annual invasive grasses and the resilience of native vegetation to respond after disturbance. **USFS Response:** Post fire restoration in this PMU has largely been focused on site-specific invasive plant treatments, road maintenance and

	Aggressively fortify the base of the Sheep Creek Range with forage kochia to prevent the reoccurring fire cycle that has taken place since the 2000's. Also an updated allotment management plan/rangeland health evaluation for the 25 Allotment would be good to account for the new vegetative community that makes up much of this allotment. **BLM, NDOW, Private land owners**	improvements, and fence replacement. Funding through the Burned Area Emergency Response (BAER) generally does not provide for native seeding and planting although BAER funds can be authorized for seeding when it can be shown that certain values are at immediate risk. In addition a lack of adequate cultural resource surveys have limited some planting efforts. To augment BAER efforts, funding has been obtained through Joint Chiefs awards and partner agencies have contributed with aerial seeding efforts. **USFS Response:** The Forest Service uses best available science to identify site specific treatment areas and types. This includes Forest Service general technical reports, the resistance and resilience matrix, ecological site descriptions (ESDs), and state and transition models. ESDs are essential resources to the Humboldt-Toiyabe National Forest Invasive Plants program. Where an ESD overlaps a treatment area, it is referenced for soil types to improve herbicide choices for the most effective treatment options. ESDs are also used for rehabilitation purposes to help with native vegetation reseeding efforts. **USFS Response:** The Forest Service has existing plan direction related to proactive work: **GRSG-GRSGH-GL-033-Guideline** – To facilitate safe and effective fire management actions, in priority and general habitat management areas and sagebrush focal areas, fuel treatments in high-risk areas (i.e., areas likely to experience wildfire at an intensity level that might result in movement away from the greater sage-grouse desired conditions in table 1) should be designed to reduce the spread and/or intensity of

		wildfire or the susceptibility of greater sage-grouse attributes to move away from desired conditions (table 1a and table 1b). **GRSG-FM-GL-053-Guideline** – In priority and general habitat management areas and sagebrush focal areas, fuel treatments should be designed to maintain, restore, or enhance greater sage-grouse habitat. In 2019, the Humboldt-Toiyabe National Forest (HTNF) completed 24,069 acres of fuels reduction treatments, treated 4,205 acres of invasive weeds and completed 382 acres of prescribed fire. Project planning and implementation occurs at multiple scales. Treatments of vegetation and fuels to enhance sage grouse and other wildlife habitat has contributed towards the fuels treatment target. The Forest Service emphasizes fuels and vegetation treatments to include strategic placement of landscape level treatments for communities, multiple habitats, and other restoration activities under a single project with multiple objects. Smaller scale fuel breaks such as roadside treatments included in landscape level treatments are also used to provide for safe and effective fire suppression strategies. To plan projects, the Forest Service uses existing policy such as forest plan direction, Fire and Invasive Threats analysis/recommendations, and Multi-Jurisdictional Landscape Risk Assessment and Treatment Prioritization Analyses. Broad scale planning includes out-year project planning and funding allocation for treatments using a 5-year planning horizon. Existing NEPA decisions and interagency planning efforts are also included in planning the location and timing of treatments. The Forest Service is

		working on additional efforts to analyze for prioritized landscape level treatments across multiple jurisdictions in order to be more efficient in addressing priority treatment areas with limited funds. These efforts also support the Chief's Shared Stewardship Strategy. Project-level NEPA involves local coordination with partners/stakeholders, public scoping, consultation with tribal nations, and consultation with State and other Federal agencies. Best available science is used to identify site specific treatment areas and types (general technical reports, resistance and resilience matrix, ecological site descriptions, state and transition models) in order to ensure success of treatment. Treatment methods considered during planning include thinning, mastication, Phase 1 and 2 pinyon/juniper thinning/removal, prescribed burning in a variety of vegetation types, herbicide treatments, and targeted grazing. Current larger scale efforts for planning these treatments include forest-wide conditional NEPA analyses for prescribed fire and herbicide treatments, targeted grazing for fine fuels reduction, and implementing the NV native seed strategy. **USFS Response:** Recommendations pertaining to the Sheep Creek Range are not applicable to the USFS. No NFS land present. **BLM-NV Response:** See above for information about requesting funding for projects and for information on use of non-native seed mixes. Next year identify the locations and acreages for proposed chemical/fallow/reseeding treatments and possible partners to assist with

		seed purchase and/or creating the treatments. This would help with drafting a BPSS proposal. The *Programmatic EIS for Fuels Reduction and Rangeland Restoration in the Great Basin* (DOI-BLM-ID-0000-2017-0003-EIS) is currently out for public comment. The ROD should be signed before the end of FY2020. This document was written so that in most cases, a DNA can be written for the site-specific project. This document should be useful for this type of project. For the four different proposals identified here, developing a more concrete proposed projects would be useful for the BLM. If a project proposal could identify who is going to implement the project, what needs to be done, where is the project located (maps always very useful), when/what time of year should the project take place, why is the project needed, how will the project be implemented. That would be very useful for the BLM when developing/proposing new projects.
Wildfire Response	Prepositioning firefighting resources when the weather and fuel moisture merits such action. **NDF, BLM, USFS, County** Where possible use the overhead teams as close to the fire as possible. **NDF, BLM, USFS, County** Utilize Great Basin expertise and tactics developed for our area (**NDF, BLM USFS County)** Have Morning Fire Coordination Meetings earlier in the than 7:00 a.m. Road access for Fire engines and equipment to provide effective responses. **County**	**USFS Response (1):** The Humboldt-Toiyabe National Forest has forest plan direction regarding prepositioning suppression resources in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-FM-GL-063-Guideline** On critical fire weather days, protection of greater sage-grouse habitat should receive high consideration, along with other high values, for positioning of resources. **GRSG-FM-GL-064-Guideline** – Line officers should be involved in setting pre-season wildfire response priorities and, prioritizing protection of priority and general habitat management areas and sagebrush focal areas, along with other high values. During periods of multiple fires or limited resource availability fire management organizational structure (local, regional, national) will prioritize fires and allocation of resources

		in which sage grouse habitat is a consideration along with other high values. During wildfire season, the Forest Service coordinates regularly with the other fire agencies to monitor conditions and preposition resources to protect sage grouse habitat and other high resource values. Local cooperators talk on a weekly or daily basis when conditions warrant and share information with fire management staff at the state and local level to assist in identifying where additional initial attack resources may be needed. Data used in determining whether conditions warrant prepositioning resources include the fuel moisture database, energy release components obtained from local Remote Area Weather Stations, the National Interagency Fire Center's predictive services outlook for the Great Basin (7-day and monthly), the U.S. Drought Monitor for Nevada, and information about events that could result in wildfire starts, such as Fourth of July celebrations, large public gatherings or a critical fire weather event (lightning, wind event, high Haines index). Regional and national preparedness levels affect the availability of resources for prepositioning. Sage grouse habitat maps are loaded into the Computer Automated Dispatch system, allowing interagency dispatch to determine when a fire start may potentially threaten sage grouse habitat. Initial attack crews verify this information when they arrive on site, and employ appropriate suppression tactics.

		USFS Response (2): Incident Management Teams (IMTs) place fire camps as close to the fire as they can. Some of the factors considered when selecting the location of a camp are: potential fire growth based on current/expected fire behavior; current/expected weather that could push the fire and threaten the camp; travel times from camp to the fire; road access to camp so that supplies for the firefighters may be delivered in a timely manner; large area for parking equipment; and safe sleeping areas for firefighters. Moving a camp once it is established is not something that happens quickly, a potential problem if a fast moving fire threatens the location, so IMTs are careful to place camps where they won't have to be moved until the fire is contained. If the camp is large and travel time is long to the fire, some IMTs establish spike camps close to the fire, provided they can support those camps. **USFS Response (3):** Most federal firefighters in Nevada have Great Basin experience and expertise. They utilize sound strategy and tactics when engaging in initial attack of a fire and also during extended attack. Where feasible and safe to do so, our firefighters coordinate and work with local ranchers and cooperators during fire suppression. If a fire resource doesn't have Great Basin expertise/experience, they are paired up with a similar resource that does. During the 2019 wildfire season, the Humboldt-Toiyabe National Forest launched its rancher liaison program to share information and utilize local knowledge during fire suppression operations. This program has been well received by both federal resources and private landowners.

		USFS Response (4): On fires that require an Incident Management Team to coordinate suppression of the fire, the Incident Morning Briefing launches the day shift of the incident. The briefing allows the incident commander and team, agency representatives and liaisons to provide the most up-to-date information on fire activity, weather outlook, safety considerations and changes in strategies and tactics to all resources engaged in the response. Having a coordination meeting before 7 am usually isn't feasible since the team has to brief the firefighters for the day shift. **USFS Response (5):** Forest Service wildland firefighters have access to AVENZA app and similar programs to identify the best road access to fires, as well as a roads database. Fire crews work with ranchers and others on the ground to identify the closest road access when that can be done in a timely manner. Where roads don't exist, engines are capable of traveling cross-country to respond where feasible and safe to do so The Humboldt-Toiyabe National Forest has one roads crew that covers the entire 6.3 million acre forest and actively seeks partnerships to improve road maintenance to ensure access for fire suppression, as well as public access generally. **BLM-NV Response** The BLM currently does this. The BLM currently does this.

		The BLM currently does this. The Incident Commander (IC) or Incident Management Team decides on the time of the morning briefing.
Range Management	Use targeted grazing on invasive annuals on post fire rehab and fuels reduction: **BLM, USFS, Private land owners**	**USFS Response:** The Humboldt-Toiyabe National Forest has been using targeted grazing with livestock on invasive annuals as part of two fuels reduction projects. In 2019, the Forest Service entered into an agreement with the University of Nevada, Reno to facilitate expansion of the use of targeted grazing across the HTNF. As part of this agreement, the Forest Service plans to expand use of targeted grazing into the South Sugarloaf burned area in an effort to reduce invasive annuals and will use targeted grazing of invasive annuals at multiple sites on the Carson Ranger District as part of the fuels reduction treatments. **BLM-NV Response:** The *Targeted Grazing of Annual Grasses in Great Basin Ecoregions in Nevada Programmatic Environmental Assessment* should be completed during FY2020 (DOI-BLM-NV-0000-2019-0003-EA). Which means NEPA, for the most part (a DNA with a Decision Record will need to be written for the site specific analysis) is done. And the *Programmatic EIS for Fuels Reduction and Rangeland Restoration in the Great Basin* (DOI-BLM-ID-0000-2017-0003-EIS) is currently out for public comment. The ROD should be signed before the end of FY2020. Either of these two documents would address the NEPA needed for this type of project. A project proposal/description and the locations of the invasive annuals would be needed for this to be considered.
Wildlife Management	Continue to foster the USGS raven egg oiling experiment associated with the Tuscarora	**USFS Response:** Direct control of raven numbers is not within Forest Service authority. The Forest Service partners with researchers from

	Geothermal Facility to determine short- and long-term effects on sage-grouse nest success in the area. If successful, perhaps further efforts to locate and oil eggs in raven nests within the Tuscarora PMU would be warranted.	University of Nevada Reno, the USGS, and NDOW to support this type of research in multiple locations across the state. **BLM Response:** N/A to BLM. BLM manages wildlife habitat, not wildlife.
Misc.	Road departments, mines, exploration companies, livestock operators, recreationists and developers need to be made aware of the risks and how to combat the spread of theses winter annuals. (need to Flush out Who but usually the Elko Weed Extravaganza is a good forum Continue to promote the health and viability of remnant and seeded perennial grass/shrub communities through proper land use management. **NDF, NDOW, BLM, USFS, CD** Connecting the agencies and landowners together so we have a good picture of what we are all doing in the area to improve the habitat: **BLM, USFS, NDOW, Private land owners**	**USFS Response:** Forest Service Manual 2080 outlines all the measures the Humboldt-Toiyabe National Forest employs to manage for noxious and invasive plants. All permitted actions on NFS lands are required to implement prevention and control measures to reduce the possibility of the transport, introductions, and spreading of invasive plants. In addition, the Forest Service also coordinates with Cooperative Weed Management Areas, conservation districts, counties, tribal governments, the Nevada Department of Agriculture, the Nevada Department of Wildlife, BLM and the University of Nevada, Reno to manage invasive winter annual grasses and to produce educational materials relating to invasive plant identification and management. **USFS Response:** The Humboldt-Toiyabe National Forest has forest plan direction regarding the maintenance and improvement of sage-grouse habitat including grass/shrub communities in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-GRSGH-GL-035-Guideline –** In priority habitat management areas and sagebrush focal areas, vegetation treatment projects should only be conducted if they maintain, restore, or enhance desired habitat conditions. **GRSG-GRSGH-GL-036-Guideline** – Vegetation treatment activities in lentic riparian areas (i.e., seeps, springs, and wet meadows) in priority

		and general habitat management areas and sagebrush focal areas, should only be authorized if they maintain or improve conditions to meet greater sage-grouse desired conditions. **GRSG-LG-DC-039-Desired Condition –** In priority and general habitat management areas, sagebrush focal areas, and within lek buffers, livestock grazing is managed to maintain or move towards desired conditions. **GRSG-FM-GL-053-Guideline** – In priority and general habitat management areas and sagebrush focal areas, fuel treatments should be designed to maintain, restore, or enhance greater sage-grouse habitat. The Forest Service emphasizes fuels and vegetation treatments to include strategic placement of landscape level treatments for communities, multiple habitats, and other restoration activities under a single project with multiple objects. **USFS Response**: The Forest Service agrees that connecting with other agencies and private landowners can enhance conservation. To that end, Forest Service staff at the district level participate in locally-based collaborative conservation efforts, such as local area working groups, and partner with conservation districts and Natural Resources Conservation District field offices. **BLM-NV Response:** This is a great idea! The BLM does have information, brochures, etc. on this topic. BLM, USFS, NDF, etc. should be invited to participate in this event.

		The overall goal of the BLM's rangeland management program is to ensure the health and productivity of public rangelands for the use and enjoyment of current and future generations. To achieve desired conditions on the public lands, the BLM uses rangeland health standards and guidelines. The BLM developed these standards and guidelines in the 1990s with input from citizen-based Resource Advisory Councils across the West. Standards describe specific *conditions* needed for public land health, such as the presence of streambank vegetation and adequate canopy and ground cover. Guidelines are the management *techniques* designed to achieve or maintain healthy public lands, as defined by the standards. For example, this may include seed dissemination and periodic rest, or deferment, from grazing in specific allotments during critical growth periods. That is one of the reasons for this type of forum (LAWGs). Members of the Elko Conservation Planning Area group should be made up of exactly those groups identified.
North Fork PMU Habitat Trigger: Multiple wildfires since 2006 have contributed to habitat declines (~1.2 million acres) Possible causal factor(s): There is a need to accurately portray all anthropogenic disturbances, not just recent disturbances with NEPA. There are large mining operations *North Fork PMU Population Trigger:* Possible causal factor(s): 1 lek soft cluster Double Mtn well 3 NW: We'll take a closer look 1 hard lek trigger: Saval 05 (Mahala Creek): Investigate the area, to determine the causal factors		
Invasive Weeds	Increase funding to make fighting invasive winter annual grasses a top priority, Medusahead and Ventenata are found in isolated pockets throughout the PMU. Fires and other disturbances will only continue to spread these highly competitive winter annuals if left unchecked. **NDF, NDOW, BLM, USFS, USFWS, Private landowners**	**USFS Response**: Within available funds and staffing, the Humboldt-Toiyabe National Forest Invasive Plants program prioritizes Medusahead and Ventenata under its Early Detection Rapid Response (EDRR) program. To supplement available funding; Joint Chief's funds were awarded to continue targeting these species specifically

		The Forest Service also coordinates with Cooperative Weed Management Areas, conservation districts, counties, tribal governments, the Nevada Department of Agriculture, the Nevada Department of Wildlife, BLM and the University of Nevada, Reno to team up to fight invasive winter annual grasses. Agencies plan treatments jointly to increase efficiency and avoid overlap. Working with other agencies, the Forest Service are able to access funding to increase the number of acres treated. **USFWS Responses:** The Service recommends that Nevada Department of Agriculture also be identified here. The Service has no problem with being identified with this need and agrees that invasive annual grasses are one of our state's greatest environmental threats. Our various programs (Ecological Services, Partners for Fish and Wildlife, and Refuges) all invest resources into combatting fire and invasive plants. We will continue to do so and appreciate working with our partners to do this strategically across the state within our authorities and allocated resources. **BLM-NV Responses:** Specific projects need to be identified/proposed and funding requested through the BLM BPSS (Budget Proposal Submission SharePoint) usually a year in advance (by March/April each year). Each District then ranks their BPS projects, then the State Office ranks the projects based on the Districts' rankings. Projects are funded based on the ranking and how much funding is available within each program. For funding to be increased, not only would the State Office need to receive additional funding, but the District/Field Office would need to have submitted projects through BPSS that are ranked high enough to be funded.

		Next year identify the locations and acreages of these invasive annual winter grasses, some possible treatment options, and possible partners to assist with treating the invasive annual winter grasses. This would help with drafting a BPSS proposal. Also, the *Targeted Grazing of Annual Grasses in Great Basin Ecoregions in Nevada Programmatic Environmental Assessment* should be completed during FY2020 (DOI-BLM-NV-0000-2019-0003-EA). Which means NEPA, for the most part (a DNA with a Decision Record will need to be written for the site-specific analysis) is done.
Fuels Management	Increase funding for large scale fuel breaks that consist of non-native vegetation (i.e. forage kochia and desirable fire-resistant bunchgrasses such as Siberian wheatgrass. (note (USFS Kochia is not allowed on USFS lands) **NDF, NDOW, BLM, Private landowners**	**USFS Response:** Forest Service vegetation management projects emphasize strategic placement of landscape level treatments that protect communities and habitat for multiple species, and include other restoration activities to meet multiple objectives. Smaller scale fuel breaks such as roadside treatments included in landscape level treatments are also used to provide for safe and effective fire suppression strategies. In addition, the Forest Service has plan direction related to fuels management activities: **GRSG-FM-GL-052-Guideline** – In planned fuels management activities or part of an overall vegetative management strategy to mitigate the impacts of wildfire in priority and general habitat management areas and sagebrush focal areas, when reseeding in fuel breaks, fire resistant native plant species should be used if available, or consider using fire resistance non-native species, if analysis and/or best available science

		demonstrates that non-native plants will not degrade greater sage-grouse habitat in the long-term. Forest Service policy (Forest Service Manual 2070, Section 2070.2) allows for the use of plant materials that are non-native providing that they are not persistent or invasive and are only used as an interim solution in situations where the reestablishment of native plant communities are not likely to occur in a timely manner. Such situations would usually be under emergency conditions where resources such as soil stability or water quality are under immediate threat or the prevention of establishment of invasive species and when native species are not available or economically feasible and in situations where the plant community has been permanently and highly altered. Both forage kochia and crested wheatgrass in all its derivations and mother lines (e.g. Siberian wheatgrass is a mother line for crested wheatgrass) are documented to be persistent and create long-term competition for the recovery of the endemic plant community and likely the permanent displacement of native species. **BLM-NV Responses:** See above for information about requesting funding for projects. See below for information on use of non-native seed mixes. Next year identify the locations and acreages for proposed large-scale fuelbreaks and possible partners to assist with seed purchase and/or creating the fuelbreaks. This would help with drafting a BPSS proposal. Also, the *Programmatic EIS for Fuel Breaks in the Great Basin* (DOI-BLM-ID-0000-2017-0001-EIS) had been completed and the ROD signed. This

		document was written so that in most cases, a DNA can be written for the site-specific project.
Vegetation Management	Use of non-native seed mixes for fire rehab and habitat restoration should be used in areas with a high risk of winter annual invasion. **BLM, USFS, NDOW, Private land owners**	**USFS Response:** Forest Service policy (Forest Service Manual 2070, Section 2070.2) allows for the use of plant materials that are non-native providing that they are not persistent or invasive and are only used as an interim solution in situations where the reestablishment of native plant communities are not likely to occur in a timely manner. Such situations would usually be under emergency conditions where resources such as soil stability or water quality are under immediate threat or the prevention of establishment of invasive species and when native species are not available or economically feasible and in situations where the plant community has been permanently and highly altered. In addition, the Humboldt-Toiyabe National Forest has forest plan direction regarding habitat for greater sage-grouse in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-GRSGH-GL-032-Guideline** – In priority and general habitat management areas and sagebrush focal areas, actions and authorizations should include design features to limit the spread and effect of undesirable non-native plant species. **GRSG-GRSGH-GL-034-Guideline** – In priority and general habitat management areas and sagebrush focal areas, native plant species should be used, when possible, to maintain, restore, or enhance desired habitat conditions

		GRSG-GRSGH-GL-038-Guideline – In priority and general habitat management areas and sagebrush focal areas, treatment methodologies should be based on the treatment areas' resistance to annual invasive grasses and the resilience of native vegetation to respond after disturbance. **BLM-NV Responses:** See above for information about requesting funding for projects. Next year identify the locations and acreages at high risk of invasive winter annuals and possible partners to assist with seed purchase and/or creating the treatments. This would help with drafting a BPSS proposal. The *Programmatic EIS for Fuels Reduction and Rangeland Restoration in the Great Basin* (DOI-BLM-ID-0000-2017-0003-EIS) is currently out for public comment. The ROD should be signed before the end of FY2020. This document was written so that in most cases, a DNA can be written for the site-specific project. This document should be useful for this type of project. BLM has a policy for the use of non-native species (see H-1740-2 and MS-1745). **Excerpt H1740-2 Chapter 8, page 87** *3. Non-native Plant Materials* *Although native plants should always be given first consideration, there are certain situations where non-natives may be desired. For example, on highly disturbed sites that have had their physical characteristics altered so that native vegetation cannot reestablish or survive, it may be necessary to use non-natives to help restore site stability. Other examples include noxious weed containment and emergency situations where there is a risk of soil loss or threats to life and property. In cases where the use of non-native vegetation is desired, a justification, including the identification of*

		any desired native species that is not available, should be submitted for approval by the state director or other delegated authority. *As outlined in BLM Manual 1745 - Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants, the use of non-native seeds as part of a seeding mixture is appropriate only if:* *a. Suitable native species are not available,* *b. The natural biological diversity of the proposed management area will not be diminished,* *c. Exotic and naturalized species can be confined within the proposed management area,* *d. Analysis of ecological site inventory information indicates that a site will not support reestablishment of a species that historically was part of the natural environment and,* *e. Resource management objectives cannot be met with native species.* *When suitable natives are not available, identify the native species (including subspecies or variety when applicable) that is not available. Identify plant species native to the project area that may be available as a first substitute. If natives are only partially available, or not available, identify a nonnative species of the same functional group to use on that site. If analysis of ecological site inventory information indicates that a site will not support reestablishment of a species that historically was part of the natural environment, look for suitable native species replacements before choosing non-native plants.* *In considering the natural biological diversity of the area, it is best to consider the whole community, its processes and the dynamics between species rather than maintenance of vascular plant diversity.* *For example, there can be unintended consequences of the use of non-natives if or when soil microbial communities or pollinating animals including insects are displaced because non-native plants are chosen.* *All non-native vegetation used should be non-invasive and ideally be short-*

		lived, have low reproductive capabilities, or be self-pollinating to prevent gene flow into the native community. One good example is sterile oats, which provide erosion control and will fade out in one year without cultivation (although they do release seed if disturbed). Non-native vegetation should not compete with the naturally occurring or returning native plant community or exchange genetic material with common native plant species. Non-native material must not invade plant communities outside the targeted management area. Non-natives listed on state and federal noxious weed species lists or nonnatives listed in state weed seed lists must not be considered for use. *As stated in Chapter 2, diverse, healthy, and resilient native plant communities provide the greatest opportunity to be successful in meeting multiple use objectives within BLM. Set resource management objectives that can be met using native species for most situations. However, as a last resort, it may be necessary to introduce non-native, non-invasive plant materials to break unnatural disturbance cycles or to prevent further site degradation by noxious or invasive plants.* Use of non-natives does pose a litigation risk to the BLM.
Wildfire Response	Where possible use the overhead teams as close to the fire as possible. **NDF, BLM, USFS, County** Utilize Great Basin expertise and tactics developed for our area **NDF, BLM USFS County** Have Morning Fire Coordination Meetings earlier than 7:00 a.m. Road access for Fire engines and equipment to provide effective responses. **County**	**USFS Response (1):** Incident Management Teams (IMTs) place fire camps as close to the fire as they can. Some of the factors considered when selecting the location of a camp are: potential fire growth based on current/expected fire behavior; current/expected weather that could push the fire and threaten the camp; travel times from camp to the fire; road access to camp so that supplies for the firefighters may be delivered in a timely manner; large area for parking equipment; and safe sleeping areas for firefighters. Moving a camp once it is established is not something that happens quickly, a potential problem if a fast moving fire threatens the location, so IMTs are careful to place camps where they won't have to be moved until the fire is contained. If the camp is large and travel time is

		long to the fire, some IMTs establish spike camps close to the fire, provided they can support those camps. **USFS Response (2):** Most federal firefighters in Nevada have Great Basin experience and expertise. They utilize sound strategy and tactics when engaging in initial attack of a fire and also during extended attack. Where feasible and safe to do so, our firefighters coordinate and work with local ranchers and cooperators during fire suppression. If a fire resource doesn't have Great Basin expertise/experience, they are paired up with a similar resource that does. During the 2019 wildfire season, the Humboldt-Toiyabe National Forest launched its rancher liaison program to share information and utilize local knowledge during fire suppression operations. This program has been well received by both federal resources and private landowners. **USFS Response (3):** On fires that require an Incident Management Team to coordinate suppression of the fire, the Incident Morning Briefing launches the day shift of the incident. The briefing allows the incident commander and team, agency representatives and liaisons to provide the most up-to-date information on fire activity, weather outlook, safety considerations and changes in strategies and tactics to all resources engaged in the response. Having a coordination meeting before 7 am usually isn't feasible since the team has to brief the firefighters for the day shift. **USFS Response (4):** Forest Service wildland firefighters have access to AVENZA app and similar programs to identify the best road access to fires, as well as a roads database. Fire crews work with ranchers and others on the ground to identify the closest road access when that can be done in a

		timely manner. Where roads don't exist, engines are capable of traveling cross-country to respond where feasible and safe to do so The Humboldt-Toiyabe National Forest has one roads crew that covers the entire 6.3 million acre forest and actively seeks partnerships to improve road maintenance to ensure access for fire suppression, as well as public access generally. **BLM-NV Response:** The BLM currently does this. The BLM currently does this. The Incident Commander (IC) or Incident Management Team decides on the time of the morning briefing.
Range Management	Consider Look at additional rehab needs of the 2005 Omega Fire (2,473 acres) very near the Double Mtn Well 3 NW lek. This lek is not a trend lek and is not a very big lek; peak male attendance of 5 males in 2015. **BLM**	**BLM-NV Response:** If additional rehab is needed, consider proposing a project that would address the additional rehab needed for this location to be successful. Are there partners or other groups that could assist with this project?
Wildlife Management	Look at alternatives to reduce mine noise seasonally (March –April) to limit impacts to adjacent leks **NDOW, USFS**	**USFS Response:** The Humboldt-Toiyabe National Forest has forest plan direction regarding noise in the 2015 Greater Sage Grouse Plan Amendment:

		GRSG-GEN-ST-006-Standard – Do not authorize new surface disturbing and disruptive activities that create noise at 10dB above ambient measured at the perimeter of an occupied lek during lekking (March 1 to May 15) from 6 pm to 9 am. Do not include noise resulting from human activities that have been authorized and initiated within the past 10 years in the ambient baseline measurement. For new actions proposed, such as new exploration projects, measures are typically implemented only authorize to operations outside the lekking and nesting seasons to eliminate the possibility of noise impacts. If a new mine plan is submitted, GRSG-GEN-ST-006 would be applied. Noise protocols provided by NDOW are used to implement this standard.
Misc.	Road departments, mines, exploration companies, livestock operators, recreationists and developers need to be made aware of the risks and how to combat the spread of theses winter annuals. (Note to flush out who) but usually the Elko Weed Extravaganza is a good forum Continue to promote the health and viability of remnant and seeded perennial grass/shrub communities through proper land use management. **BLM, USFS, Private land owners** Provide supporting comments for USFS on their ongoing NEPA for use of aerial application of herbicide.	**USFS Response:** Forest Service Manual 2080 outlines all the measures the Humboldt-Toiyabe National Forest employs to manage for noxious and invasive plants. All permitted actions on NFS lands are required to implement prevention and control measures to reduce the possibility of the transport, introductions, and spreading of invasive plants. In addition, the Forest Service also coordinates with Cooperative Weed Management Areas, conservation districts, counties, tribal governments, the Nevada Department of Agriculture, the Nevada Department of Wildlife, BLM and the University of Nevada, Reno to manage invasive winter annual grasses and to produce educational materials relating to invasive plant identification and management. **USFS Response:** The Humboldt-Toiyabe National Forest has forest plan direction regarding the maintenance and improvement of sage-grouse

	Look at noise influence from Jerritt Canyon Mine on adjacent public land. Mine noise can be heard throughout the entire Saval Bench. Footprint of Jerritt Cannyon needs to be examined **BLM, USFS, NDOW**	habitat including grass/shrub communities in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-GRSGH-GL-035-Guideline –** In priority habitat management areas and sagebrush focal areas, vegetation treatment projects should only be conducted if they maintain, restore, or enhance desired habitat conditions. **GRSG-GRSGH-GL-036-Guideline** – Vegetation treatment activities in lentic riparian areas (i.e., seeps, springs, and wet meadows) in priority and general habitat management areas and sagebrush focal areas, should only be authorized if they maintain or improve conditions to meet greater sage-grouse desired conditions. **GRSG-LG-DC-039-Desired Condition –** In priority and general habitat management areas, sagebrush focal areas, and within lek buffers, livestock grazing is managed to maintain or move towards desired conditions. **GRSG-FM-GL-053-Guideline** – In priority and general habitat management areas and sagebrush focal areas, fuel treatments should be designed to maintain, restore, or enhance greater sage-grouse habitat. The Forest Service emphasizes fuels and vegetation treatments to include strategic placement of landscape level treatments for communities, multiple habitats, and other restoration activities under a single project with multiple objects.

		USFS Response: The Humboldt-Toiyabe National Forest has forest plan direction regarding noise in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-GEN-ST-006-Standard** – Do not authorize new surface disturbing and disruptive activities that create noise at 10dB above ambient measured at the perimeter of an occupied lek during lekking (March 1 to May 15) from 6 pm to 9 am. Do not include noise resulting from human activities that have been authorized and initiated within the past 10 years in the ambient baseline measurement. The Jerritt Canyon Mine has already been authorized, however if a new mine plan is submitted, GRSG-GEN-ST-006 would be applied. Noise protocols provided by NDOW are used to implement this standard. As future phases at the mine are planned, additional NEPA analyses will be conducted and NDOW and the SETT will be consulted on noise management strategies. **USFS Response**: The existing footprint of the Jerritt Canyon Mine has been approved through previous analysis and decisions. As new proposals come forward to modify the existing operations, a comprehensive analysis will be conducted to assess the direct, indirect and cumulative effects of the proposal on the surrounding landscape. **BLM-NV Responses:**

		This is a great idea! The BLM does have information, brochures, etc. on this topic. BLM, USFS, NDF, etc. should be invited to participate in this event. The overall goal of the BLM's rangeland management program is to ensure the health and productivity of public rangelands for the use and enjoyment of current and future generations. N/A to BLM If this mine is on BLM managed lands, this issue could be something the BLM and NDOW could look into. Unclear as to what the issue/concern here is.
Ruby PMU Population Trigger: 1 hard lek Trigger: High Beach2 Black Sagebrush ARNO Complex Possible causal factor(s): Aroga moth has taken the sagebrush canopy – need proactive sagebrush treatments.		
Invasive Weeds	Continue the aggressive noxious weed treatments in the valley: **BLM, CD**	**USFWS Response:** The Refuge requests clarification of what weed treatments (in progress or planned) are deemed to be the highest priorities for sage grouse and sagebrush habitat. **BLM-NV Response:**

		One of the BLM's highest priorities is to promote ecosystem health and one of the greatest obstacles to achieving this goal is the rapid expansion of weeds across public lands.
Vegetation Management	Continued implementation of sagebrush enhancement projects in Ruby Valley (ie Ruby #6 project – **BLM)** Continue treatment of encroaching pinyon/juniper woodlands **BLM, USFS, NDF, CD**	**USFS Response:** One of the primary goals as identified in the 2015 Greater Sage Grouse Plan Amendment is to treat encroaching pinyon-juniper. In this PMU, there are a number of large scale projects, including some funded under the Southern Nevada Public Lands Management Act that seek to improve habitat for sage-grouse through the removal of pinyon-juniper. This area is also a focus of future Shared Stewardship activities involving NDF and NDOW. **USFWS Response:** The Refuge requests clarification on what is meant by sagebrush enhancement projects? The Refuge supports pinyon/juniper removal efforts. However, the lack of coordination with the Refuge and USFS on the South Ruby Valley PJ project, which included PJ treatment on 500 acres of Refuge managed lands and 1,500 acres of USFS managed lands, was unacceptable. In addition, this project left heavy fuel loading on the ground and wildfire is arguable the greatest threat to sagebrush habitat. **BLM-NV Response:** The BLM conserves, maintains, and restores native plant communities through its land use planning and land management activities. The *Programmatic EIS for Fuels Reduction and Rangeland Restoration in the Great Basin* (DOI-BLM-ID-0000-2017-0003-EIS) is currently out for public comment. The ROD should be signed before the end of FY2020. This document was written so that in most cases, a DNA can be written for the site-specific project. This document should be useful for this type of project.

		Also by June 1, 2020, a categorical exclusion (CX) for the BLM as directed by the amendment of the Healthy Forests Restoration Act (HFRA) of 2003 by the Agriculture Improvement Act of 2018 for covered vegetation management activities carried out to protect, restore, or improve habitat for greater sage-grouse or mule deer will be available for use by the field offices. The CX includes manual, mechanical, chemical, some fire, and targeted grazing techniques up to 4,500 acres.
Wildfire Response	Where possible use the overhead teams as close to the fire as possible. **NDF, BLM, USFS, County** Utilize Great Basin expertise and tactics developed for our area **NDF, BLM, USFS, County** Have Morning Fire Coordination Meetings earlier in than 7:00 a.m. IC Road access for Fire engines and equipment to provide effective responses. **County**	**USFS Response (1):** Incident Management Teams (IMTs) place fire camps as close to the fire as they can. Some of the factors considered when selecting the location of a camp are: potential fire growth based on current/expected fire behavior; current/expected weather that could push the fire and threaten the camp; travel times from camp to the fire; road access to camp so that supplies for the firefighters may be delivered in a timely manner; large area for parking equipment; and safe sleeping areas for firefighters. Moving a camp once it is established is not something that happens quickly, a potential problem if a fast moving fire threatens the location, so IMTs are careful to place camps where they won't have to be moved until the fire is contained. If the camp is large and travel time is long to the fire, some IMTs establish spike camps close to the fire, provided they can support those camps. **USFS Response (2):** Most federal firefighters in Nevada have Great Basin experience and expertise. They utilize sound strategy and tactics when engaging in initial attack of a fire and also during extended attack. Where feasible and safe to do so, our firefighters coordinate and work with local ranchers and cooperators during fire suppression. If a fire resource doesn't have Great Basin expertise/experience, they are paired up with a similar resource that does. During the 2019 wildfire season, the Humboldt-Toiyabe National Forest launched its rancher liaison program to share

		information and utilize local knowledge during fire suppression operations. This program has been well received by both federal resources and private landowners. **USFS Response (3):** On fires that require an Incident Management Team to coordinate suppression of the fire, the Incident Morning Briefing launches the day shift of the incident. The briefing allows the incident commander and team, agency representatives and liaisons to provide the most up-to-date information on fire activity, weather outlook, safety considerations and changes in strategies and tactics to all resources engaged in the response. Having a coordination meeting before 7 am usually isn't feasible since the team has to brief the firefighters for the day shift. **USFS Response (4):** Forest Service wildland firefighters have access to AVENZA app and similar programs to identify the best road access to fires, as well as a roads database. Fire crews work with ranchers and others on the ground to identify the closest road access when that can be done in a timely manner. Where roads don't exist, engines are capable of traveling cross-country to respond where feasible and safe to do so The Humboldt-Toiyabe National Forest has one roads crew that covers the entire 6.3 million acre forest and actively seeks partnerships to improve road maintenance to ensure access for fire suppression, as well as public access generally. **USFWS Response:**

		The Refuge agrees that wildfire readiness is important to protect sagebrush habitat. **BLM-NV Response:** The BLM currently does this. The BLM currently does this. The Incident Commander (IC) or Incident Management Team decides on the time of the morning briefing.
Range Management	Potentially install exclusionary fences around the limited springs in the more arid portions of the PMU - **BLM, CD**	**USFS Response:** In this PMU, there are a number of large scale projects, including some funded under the Southern Nevada Public Lands Management Act (SNPLMA) that seek to improve habitat for sage-grouse. Some actions identified in these projects are to protect seeps and springs with wildlife friendly fencing options coupled with off-site water development for permitted livestock as needed. These actions are ongoing. In addition, funds are being sought for additional spring protection efforts through partnerships, conservation organizations, and through future SNPLMA proposals. **USFWS Response:** The Refuge assisted NDOW with the construction of horse barrier pipe-rail fences around the hot springs on an NDOW conservation easement on the east side of Ruby Valley. Refuge has additional fence work to do to protect some springs on the Refuge. **BLM-NV Response:** Identify the springs where an exclosure fences and pipelines are needed.

Wildlife Management	Doing various raven deterrent activities Oiling of eggs, subsidies, ect **USF&WS**	**USFS Response:** The Humboldt-Toiyabe National Forest has forest plan direction regarding managing the effects of ravens on sage-grouse. **GRSG-P-DC-116-Desired Condition** – Anthropogenic uses on public lands are managed to reduce the effects of predation on greater sage-grouse This largely accomplished with managing habitat to ensure overhead concealment, adding perch deterrents, and limiting tall structures that would be desirable to ravens. Direct control of raven numbers is not within Forest Service authority. **USFWS Response:** The Refuge requests a copy of the nest predation study done in Newark Valley which was mentioned under the Butte/Buck/White Pine PMU – Beck Pass. On the Refuge, the need must be pretty compelling to justify oiling eggs and cost/benefit of oiling raven eggs versus taking other actions to benefit sage grouse and their habitat must be considered. The Refuge coordinated with Frontier Communications to have 3.5 miles of abandoned telephone poles and lines removed from the Refuge in order to reduce avian predator perches. There are several more miles of abandoned telephone poles/lines that could be removed from USFS lands along Ruby Valley Rd. The Refuge agrees it would be good to consider ways to reduce the predator subsidies that exist in Ruby Valley. Coyotes, another sage grouse predator, are abundant on and around the Refuge.

Misc.	Wild horses should be reduced to AML **(BLM)** Working towards reaching AML – (with recent horse gathers) Do NEPA to do proactive treatments and get an ID team together to determine an area, **BLM, USFS, Private landowners** Marking fences – there are plenty of flight diverters available. Find funding for CCC fences.	**USFS Response:** The Humboldt-Toiyabe National Forest has forest plan direction regarding management of wild horses and burros in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-HB-DC-067-Desired Condition** In priority and general habitat management areas, wild horse and burro populations are within established appropriate management levels. **GRSG-HB-GL-070-Guideline** In priority and general habitat, herd gathering should be prioritized when wild horse and burro populations exceed the upper limit of the established appropriate management level. **GRSG-HB-GL-071-Guideline** In priority and general habitat, wild horse and burro population levels should be managed at the lower limit of established appropriate management level ranges, as appropriate. Most wild horse and burro territories need approved management plans. The Forest continues to pursue completion of Environmental Assessments to set AML ranges and approve population management actions. The Cherry Spring Wild Horse Territory occurs on the southern end of the Ruby Mountains. The wild horses are currently leaving the territory and utilizing the range as far north as the Fort Ruby area along the east side of the Rubies. Current priority is the Spring Mountains Complex in Southern Nevada.

		USFS Response: The Forest Service has existing plan direction related to proactive treatments: **GRSG-GRSGH-GL-033-Guideline** – To facilitate safe and effective fire management actions, in priority and general habitat management areas and sagebrush focal areas, fuel treatments in high-risk areas (i.e., areas likely to experience wildfire at an intensity level that might result in movement away from the greater sage-grouse desired conditions in table 1) should be designed to reduce the spread and/or intensity of wildfire or the susceptibility of greater sage-grouse attributes to move away from desired conditions (table 1a and table 1b). **GRSG-FM-GL-053-Guideline** – In priority and general habitat management areas and sagebrush focal areas, fuel treatments should be designed to maintain, restore, or enhance greater sage-grouse habitat. In 2019, the Humboldt-Toiyabe National Forest (HTNF) completed 24,069 acres of fuels reduction treatments, treated 4,205 acres of invasive weeds and completed 382 acres of prescribed fire. Project planning and implementation occurs at multiple scales. Treatments of vegetation and fuels to enhance sage grouse and other wildlife habitat has contributed towards the fuels treatment target. The Forest Service emphasizes fuels and vegetation treatments to include strategic placement of landscape level treatments for communities, multiple habitats, and other restoration activities under a single project with multiple objects. Smaller scale fuel breaks such as roadside

		treatments included in landscape level treatments are also used to provide for safe and effective fire suppression strategies. To plan projects, the Forest Service uses existing policy such as forest plan direction, Fire and Invasive Threats analysis/recommendations, and Multi-Jurisdictional Landscape Risk Assessment and Treatment Prioritization Analyses. Broad scale planning includes out-year project planning and funding allocation for treatments using a 5-year planning horizon. Existing NEPA decisions and interagency planning efforts are also included in planning the location and timing of treatments. The Forest Service is working on additional efforts to analyze for prioritized landscape level treatments across multiple jurisdictions in order to be more efficient in addressing priority treatment areas with limited funds. These efforts also support the Chief's Shared Stewardship Strategy. Project-level NEPA involves local coordination with partners/stakeholders, public scoping, consultation with tribal nations, and consultation with State and other Federal agencies. Best available science is used to identify site specific treatment areas and types (general technical reports, resistance and resilience matrix, ecological site descriptions, state and transition models) in order to ensure success of treatment. Treatment methods considered during planning include thinning, mastication, Phase 1 and 2 pinyon/juniper thinning/removal, prescribed burning in a variety of vegetation types, herbicide treatments, and targeted grazing. Current larger scale efforts for planning these treatments

		include forest-wide conditional NEPA analyses for prescribed fire and herbicide treatments, targeted grazing for fine fuels reduction, and implementing the NV native seed strategy. **USFS Response:** The Forest Service has had an agreement with Great Basin Institute and Nevada Conservation Corps since 2016 to install flight diverters, remove fences, and to build wildlife-friendly fences. We hope to continue to support the agreement into the future. **USFWS Responses related specifically to Aroga moth listed as a causal factor:** The Refuge requests documentation that details the extent of sagebrush mortality from the Aroga moth. The Refuge also requests clarification of what is meant by need proactive sagebrush treatments. **USFWS Response:** The Refuge supports a reduction in wild horses in Ruby Valley. We have problems with horses getting inside refuge fences as well as degrading unfenced areas on the east and west sides of the Refuge. The Refuge requests clarification regarding the project(s) that proactive treatments is referring to. The Refuge has marked some of our fences with flight diverters and plans to mark additional fences. Most importantly, the Refuge is removing unneeded interior fences to benefit sage grouse and other wildlife. The Refuge would like to be invited to the Local Area Working Group meetings. **BLM-NV Responses:**

		The BLM is committed to working with Congress, state and local governments, partner organizations, and the public to find commonsense solutions for putting the wild horse and burro program back on a sustainable and fiscally responsible track. The BLM could prioritize HAF assessments and sage-grouse habitat inventory in HMAs that are within triggered areas to help support gather priorities. However, gathers are scheduled at a national level, not at a State Office or District Office level. Please provide specific locations and acreage (maps would be useful) for each location of proactive vegetation treatments. Please provide specific locations and how many miles fence in a specific location need to be marked with flight diverters.
Desert PMU Population Trigger: Desert Habitat Trigger: Multiple Wildfires Horses		
Vegetation Management	Proactive Vegetation manipulation methods. **BLM, USFS, NDOW, NDF, CD** Reseed Natives in the areas where the annual grasses haven't established, **BLM, USFS, NDOW, CD, Private land owners**	**USFS Response:** The Forest Service has existing plan direction related to proactive vegetation treatments: **GRSG-GRSGH-GL-033-Guideline** – To facilitate safe and effective fire management actions, in priority and general habitat management areas and sagebrush focal areas, fuel treatments in high-risk areas (i.e., areas likely to experience wildfire at an intensity level that might result in movement away from the greater sage-grouse desired conditions in table 1) should be designed to reduce the spread and/or intensity of wildfire or the susceptibility of greater sage-grouse attributes to move away from desired conditions (table 1a and table 1b).

		GRSG-FM-GL-053-Guideline – In priority and general habitat management areas and sagebrush focal areas, fuel treatments should be designed to maintain, restore, or enhance greater sage-grouse habitat. In 2019, the Humboldt-Toiyabe National Forest (HTNF) completed 24,069 acres of fuels reduction treatments, treated 4,205 acres of invasive weeds and completed 382 acres of prescribed fire. Project planning and implementation occurs at multiple scales. Treatments of vegetation and fuels to enhance sage grouse and other wildlife habitat has contributed towards the fuels treatment target. The Forest Service emphasizes fuels and vegetation treatments to include strategic placement of landscape level treatments for communities, multiple habitats, and other restoration activities under a single project with multiple objects. Smaller scale fuel breaks such as roadside treatments included in landscape level treatments are also used to provide for safe and effective fire suppression strategies. To plan projects, the Forest Service uses existing policy such as forest plan direction, Fire and Invasive Threats analysis/recommendations, and Multi-Jurisdictional Landscape Risk Assessment and Treatment Prioritization Analyses. Broad scale planning includes out-year project planning and funding allocation for treatments using a 5-year planning horizon. Existing NEPA decisions and interagency planning efforts are also included in planning the location and timing of treatments. The Forest Service is working on additional efforts to analyze for prioritized landscape level treatments across multiple jurisdictions in order to be more efficient in

		addressing priority treatment areas with limited funds. These efforts also support the Chief's Shared Stewardship Strategy. Project-level NEPA involves local coordination with partners/stakeholders, public scoping, consultation with tribal nations, and consultation with State and other Federal agencies. Best available science is used to identify site specific treatment areas and types (general technical reports, resistance and resilience matrix, ecological site descriptions, state and transition models) in order to ensure success of treatment. Treatment methods considered during planning include thinning, mastication, Phase 1 and 2 pinyon/juniper thinning/removal, prescribed burning in a variety of vegetation types, herbicide treatments, and targeted grazing. Current larger scale efforts for planning these treatments include forest-wide conditional NEPA analyses for prescribed fire and herbicide treatments, targeted grazing for fine fuels reduction, and implementing the NV native seed strategy. **USFS Response**: The Humboldt-Toiyabe National Forest has forest plan direction regarding reseeding and native plants in the 2015 Greater Sage Grouse Plan Amendment: **GRSG-GRSGH-GL-032-Guideline** – In priority and general habitat management areas and sagebrush focal areas, actions and authorizations should include design features to limit the spread and effect of undesirable non-native plant species.

		GRSG-GRSGH-GL-034-Guideline – In priority and general habitat management areas and sagebrush focal areas, native plant species should be used, when possible, to maintain, restore, or enhance desired habitat conditions **GRSG-GRSGH-GL-038-Guideline** – In priority and general habitat management areas and sagebrush focal areas, treatment methodologies should be based on the treatment areas' resistance to annual invasive grasses and the resilience of native vegetation to respond after disturbance. Forest Service Burned Area Emergency Response (BAER) funding may support early detection and rapid response for invasive weeds under certain circumstances. BAER funds can be authorized for seeding when it can be shown that certain values are at immediate risk. In these situations, native plant materials that are regionally adapted and genetically appropriate are to be given primary consideration by Forest Service policy. For areas that do not meet the criteria under BAER, the Forest Service seeks other sources of funds and is fortunate to receive support from partners such as Nevada Department of Wildlife for reseeding efforts in areas that lack a residual seed bank and are at risk for conversion to annual grasses. **BLM-NV Responses:** Please provide specific locations and acreage (maps would be useful) for locations of proposed proactive vegetation treatments as well as locations for reseeding natives.

Wildfire Response	Fire suppression – full suppression **BLM, USFS, NDF, County** Where possible use the overhead teams as close to the fire as possible. **NDF, BLM, USFS, County** Utilize Great Basin expertise and tactics developed for our area. **NDF, BLM, USFS, County** Have Morning Fire Coordination Meetings earlier than 7:00 a.m. IC Road access for Fire engines and equipment to provide effective responses. **County**	**USFS Response (1):** The Humboldt-Toiyabe National Forest has forest plan direction regarding wildfire suppression in the 2015 Greater Sage Grouse Plan Amendment. **GRSG-FM-DC-048-Desired Condition** – In priority and general habitat management areas and sagebrush focal areas, protect sagebrush sage grouse habitat from loss due to unwanted wildfires or damages resulting from management related activities while using agency risk management protocols to manage for fire fighter and public safety and other high priority values. In all fire response, first priority is the management of risk to firefighters and the public. Sage grouse habitat will be prioritized as a high value resource along with other high value resources and assets. The Forest Service contains 97% of wildfires during initial attack and full suppression is generally the objective in sage grouse habitat. However, firefighter and public safety is the agency's number one priority, and the incident commander and line officer maintain the flexibility to identify appropriate objectives, strategies and tactics for each wildfire. **USFS Response (2):** Incident Management Teams (IMTs) place fire camps as close to the fire as they can. Some of the factors considered when selecting the location of a camp are: potential fire growth based on current/expected fire behavior; current/expected weather that could push the fire and threaten the camp; travel times from camp to the fire; road

		access to camp so that supplies for the firefighters may be delivered in a timely manner; large area for parking equipment; and safe sleeping areas for firefighters. Moving a camp once it is established is not something that happens quickly, a potential problem if a fast moving fire threatens the location, so IMTs are careful to place camps where they won't have to be moved until the fire is contained. If the camp is large and travel time is long to the fire, some IMTs establish spike camps close to the fire, provided they can support those camps. **USFS Response (3):** Most federal firefighters in Nevada have Great Basin experience and expertise. They utilize sound strategy and tactics when engaging in initial attack of a fire and also during extended attack. Where feasible and safe to do so, our firefighters coordinate and work with local ranchers and cooperators during fire suppression. If a fire resource doesn't have Great Basin expertise/experience, they are paired up with a similar resource that does. During the 2019 wildfire season, the Humboldt-Toiyabe National Forest launched its rancher liaison program to share information and utilize local knowledge during fire suppression operations. This program has been well received by both federal resources and private landowners. **USFS Response (4):** On fires that require an Incident Management Team to coordinate suppression of the fire, the Incident Morning Briefing launches the day shift of the incident. The briefing allows the incident commander and team, agency representatives and liaisons to provide the most up-to-date information on fire activity, weather outlook, safety considerations and changes in strategies and tactics to all resources engaged in the

		response. Having a coordination meeting before 7 am usually isn't feasible since the team has to brief the firefighters for the day shift. **USFS Response (5):** Forest Service wildland firefighters have access to AVENZA app and similar programs to identify the best road access to fires, as well as a roads database. Fire crews work with ranchers and others on the ground to identify the closest road access when that can be done in a timely manner. Where roads don't exist, engines are capable of traveling cross-country to respond where feasible and safe to do so The Humboldt-Toiyabe National Forest has one roads crew that covers the entire 6.3 million acre forest and actively seeks partnerships to improve road maintenance to ensure access for fire suppression, as well as public access generally. **BLM-NV Response:** Wildland fire suppression operations and life and safety continue to be the top priority for the BLM. The BLM currently does this. The BLM currently does this. The Incident Commander (IC) or Incident Management Team decides on the time of the morning briefing.

Misc.	Establish site specific objectives. **BLM, USFS, NDOW, NDF, CD**	**USFS Response**: The Humboldt-Toiyabe National Forest has forest plan direction regarding the maintenance and improvement of sage-grouse habitat in the 2015 Greater Sage Grouse Plan Amendment. The entire plan lays out desired conditions, goals, objectives, standards, and guidelines that are designed to be applied at multiple scales including site-specific. The Humboldt-Toiyabe National Forest will continue to implement plan direction to support sage-grouse, their habitat, and the larger ecosystem, on which they depend. **BLM-NV Response:** The 2015 GRSG ARMPA and the 2019 GRSG ARMPA provide vegetation objectives.

5.8 COMMENTS NOT SPECIFIC TO ANY AREA

NDOT Comments:

- **Noxious and invasive weed management**: NDOT recognized the importance of this issue last year and NDOT through the ENV Division now provides funding to the Nevada Department of Agriculture for a NDOT dedicated full-time position to serve as point for NDOT's weed management efforts. This position will provide review of noxious weed management plans submitted by contractors and permittees as well as provide training and specialist assistance to NDOT staff.
- **Fuel Breaks**: generally, highways serve as effective fuel breaks, however any focus to increase the effectiveness of NDOT ROW as fuels breaks must consider Department air quality and stormwater requirements if reducing vegetation is the goal.
- **Wildfire**: NDOT through its District personnel will continue to work closely with wildfire incident teams.
- **Health of grass scrub communities**: NDOT will continue to use native seed mixes as part of its revegetation efforts within NDOT ROW.

- **Wild and estray horse population management**: NDOT supports efforts to manage the populations of wild and estray horses as growing populations have become a safety issue on NDOT roadways.

USFWS Comments:
The U.S. Fish and Wildlife Service (Service) recommends the Ruby Lakes National Wildlife Refuge be included in the list of interested stakeholders. They have been contacted for a review of this report and their comments are included herein.