From:	Alt, Nicole
To:	johnharja@utah.gov; Carmen Bailey; Melissa Faigeles; virgil.moore@idfg.idaho.gov; cwightman@mt.gov; Bob Budd; Jesse DElia; Pat Deibert; Matt Kales; Drue DeBerry; Tim.Griffiths@mt.usda.gov; Finley, Marlene -FS; Stephen Small; Jeff Everett; Lief Wiechman
Subject:	Re: scheduling next GSG conservation efforts working group call
Date:	Tuesday, September 17, 2013 9:15:59 AM
Attachments:	GRSG measures discussion 9-17-13.docx

On the the call today, we'd like to walk through the threats identified in the COT report and review the list of actions or measures that we brainstormed to add any additional measures or actions that will have a population or PAC level benefit or impact. For the State and Federal agencies, please think about the actions you are implementing or recommending being implemented to address the threats so we can capture those within the measures.

Nicole

Nicole Alt
Deputy ARD Ecological Services
Mountain-Prairie Region
nicole_alt@fws.gov

On Mon, Sep 16, 2013 at 3:52 PM, Alt, Nicole <nicole_alt@fws.gov> wrote:

> Just a reminder that we're having a metrics team call tomorrow morning to continue the discussion regarding the efforts to be reported. We're still working the document to help frame the discussion and seek your feedback and input on the call tomorrow. I'll send that out first thing tomorrow morning.
>
> Call information
> 877-901-6917
> passcode: 4401420#
>
> Nicole
>
> Nicole Alt
> Deputy ARD Ecological Services
> Mountain-Prairie Region
> nicole_alt@fws.gov
>
> On Wed, Sep 4, 2013 at 2:23 PM, Alt, Nicole <nicole_alt@fws.gov> wrote:
>
> > It looks like Sept. 17 works best for those that responded to the poll for our next call. Please hold 10 am - noon MT on your schedules for our next call. The FWS is working on a draft document to share with you before the call and to use as a basis for this continued discussion. We'll send details as we get closer to the call.
> >
> > Nicole
> >
> > Nicole Alt
> > Deputy ARD Ecological Services
> > Mountain-Prairie Region

nicole_alt@fws.gov

On Thu, Aug 29, 2013 at 1:53 PM, Alt, Nicole <nicole_alt@fws.gov> wrote:

Please respond to the doodle poll below regarding you're availability for our next call. We'll be working internally before our next call to add some structure and substance to the discussion to continue the dialogue in the working group.

http://www.doodle.com/5dmnuk5z95n5ippr

Please also let me know your avaialbility for a 2 day meeting during the following weeks. Thanks.

Sept. 30 - John H. Nicole (9/30-10/1)
Oct. 7 - John H., Nicole
Oct. 14 - Nicole

Nicole

Nicole Alt
Deputy ARD Ecological Services
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SAGE-GROUSE CONSERVATION MEASURES / METRICS

This crosswalk is meant to provide the reader a breakdown of threats to sage-grouse and sagebrush habitat as identified by the COT report (2013). The threat is identified and listed below each threat are the metrics to be measured and reported to the USFWS. Also are possible research needs or information needed to better inform the metrics listed below.

THREAT: Isolated populations, subpopulations / small population size

- Identify connectivity corridors between PACs / Subpopulations
    - Identify these areas in each Management Zone (MZ)
- Maintain connectivity between PACs / within Management Zones

Research / population information needs:

- *Identify seasonal habitats/ranges,*
    - *Identify limiting habitats (if any exist)*
    - *Identify movement patterns between seasonal ranges, migratory status (1-stage, 2-stage, non-migratory)*

- Avoid translocations without understanding the underlying genetic implications
    - Translocation only as a last resort to bolster small populations

Research / population information needs:

- *Better understanding of genetic structure and relation to neighboring PACs / subpopulations.*

THREAT: Habitat protection / Sagebrush elimination

- Protect sagebrush / Minimize surface disturbing activities in sagebrush habitat
    - With special attention given to large expanses of contiguous sagebrush
    - Strategic application of sagebrush management
    - Reduce/eliminate use of fire as habitat / sagebrush management tool

Research / population information needs:

- *Modeling of winter habitat*
    - *Identification of Winter Concentration Areas (WCA) as well as 'Winter Refuge' areas / habitat for harsh winters prior to any sagebrush treatments*

- Avoid cutting/mowing sagebrush – Rather use mechanical dragging, brush-beating for sagebrush treatment
- Incentives for maintaining habitat in PACs
    - Use of Farm Bill programs, possible SGI efforts
    - Strive for balance between nesting, brood rearing, and wintering habitat

THREAT: Agriculture conversion

- Enroll private landowners in [conservation] easements
- Incentives to minimize / prevent conversion
    - CRP & other Farm Bill programs, increased extension of CRP contracts (longer time length, ability to renew), maintaining habitat after CRP contract expires
- Candidate Conservation Agreements w/ Assurances (CCAAs)

THREAT: Fire

- Minimize risk of fire:
    - Prescribe and implement appropriate habitat/vegetation management
    - Reduce high fuel loads, cheatgrass areas, in and near PACs or important habitat
- Strategic placement of fire breaks
    - Possible use of transmission lines as fire breaks
- Close areas to recreation in high fire-risk areas, restrict human activities that may cause fires in areas that may be at high risk of fire.
- Pre-positioning available resources to suppress fire in key habitats with forecasted as high threat
    - This may be informed by the identification of seasonal and limiting habitats in each PACs
- Encourage mutual aid agreements between jurisdictions
    - Identify PACs / subpopulations that span multiple jurisdiction to aid in the development/creation of those agreements
- Monitoring and adaptive management of restoration
    - Timely, adequate restoration after fire
        - Needs to be monitored for desired rehabilitation goal and use of local, native seed whenever possible
- Strategic placement of restoration efforts, likely success, may restore naturally, etc.
    - Appropriate local seed mixes, natives can compete
    - If local native seeds are unavailable, prioritize use of limited local native seeds

THREAT: Conifer encroachment

- Mechanical removal conifers in PACs
    - Eliminate any use of fire for conifer removal
- Mechanical removal of conifers in PACs in stage 1 & 2
- Mechanical removal of conifers in non-PACs in stage 1 & 2
- Removal of stage 3 with appropriate habitat restoration and management

THREAT: Noxious weeds / annual grasses / invasive species

- Minimize disturbance in sagebrush habitat
    - Avoid soil disturbance
- Remove use of prescribed fire in invaded habitat
- Avoid activities in PACs that increase risk of invasive species
    - Increase practices of washing vehicles, etc.
- Get cheatgrass on noxious weed list in each state
- Early detection and control of invasive plant species
- Increase conversion from weeds to native grasses through aggressive management or restoration
- Use of local, native grasses for restoration, reclamation, mitigation
    - Increase availability of native seed sources
    - Incentives or dedicated funding sources for local, native seed sources
- Implement proper range management activities
    - Identification of allotments with cheatgrass or other invasives to minimize transfer of livestock to 'uninvaded' parcels
    - Promote use of 'weed-free' hay in all priority habitat / PACs

Research / population information needs:

- *Development and implementation of ACK-55 in the battle against cheatgrass*

THREAT: Energy development

- Site planning to avoid PACs and important seasonal habitat
    - Strategic planning of lease sales outside of PACs
- Minimization of tall structures on the landscape / Employ extraction techniques that minimize footprint
    - Reduce distribution of / consolidate infrastructure
    - Bury transmission and pipelines when and where feasible
    - Co-location of energy development related structures
    - Incorporate directional drilling
- Reducing density of the habitat disturbance
    - Reduction of cumulative disturbance in PACs – use of disturbance caps
    - Use of state tools (DDCT)
- Conservation agreements with energy companies to provide USFWS assurance in regards to how companies will be operating
- Limit extensions of undeveloped leases
- Withdraw underperforming, under-developed leases
- More consistent oversight of industrial siting, lower economic threshold that triggers industrial siting (less local, more regional/state/national)

THREAT: Mining

- Avoid leasing in PACs
- Placement of disturbance out of PAC
    - Mining infrastructure: Place railroad lines, yards, spurs, outside of GRSG habitat
    - timing limitation stipulations (on specific practices – blasting, etc)
    - duration of construction
- Reclamation: Must have a realistic timeline as well as monitoring until habitat is returned to functional status geared specifically for GRSG
- Mitigation
    - Mitigation, timing of monitoring or what qualifies for reclaimed (different state definitions of reclamation)
    - Create mitigation plans for all development and habitat loss
    - Mitigation monitoring and definition of 'success'
    - Change in State regulation to change standard for reclamation
- Avoid additional impacts until habitat is restored from previous disturbance, no-net loss of habitat
    - Establish a project footprint, establish the amount of habitat that needs to be mitigated for prior to further development
    - Attempt to synchronize timelines for sage-grouse and mining development
- Adequate state regulation, OSM oversight, Federal minimum

THREAT: Infrastructure

- Site planning to avoid habitat / Moving facilities or lines outside of habitat
    - Re-planning to avoid sites
- Designate travel corridors and infrastructure corridors outside of PACs
- Travel management plan
    - Resource advisors on-site to advise on travel management, site plan
- Identifying and removing negative structures (fencing, abandoned/inactive powerlines, roads, in-active wells, etc.)
- Mitigation for impacts (direct and indirect) that are unavoidable
- Minimize footprint of features to minimize predator incursion

    - Develop and implement practices during construction and maintenance of structures to minimize predator incursion
    - Minimization of anthropogenic nesting or roosting sites
- Control or design to avoid invasion of invasive species
- Mitigation for noise
- Roads:
    - Enforcement of travel restrictions and road closures
    - Design roads for appropriate traffic volume and traffic weight/load
        - Do not create road larger or smaller than they need to be
    - Road placement to maintain habitat and to be used as a fire break
    - Seasonal or daily timing restrictions for road traffic
    - Speed limits (GPS monitored by energy companies)
    - Minimize traffic volume through carpooling or efficient use of transport
    - Reduce traffic by using remote sensing and placement of structures
- Restoration with sufficient monitoring and adaptive management
- Mitigation implemented
    - Restoration of disturbed habitat

THREAT: Grazing / range management

- Proper grazing management
    - Prescribed grazing plans that provide ecologically appropriate practices
        - Range management, grazing management plan
    - Adjusting stocking rates
        - Stocking rates to provide appropriate seasonal habitat
    - Adjust or set AML for drought conditions
    - Grass banks established for drought conditions
    - Grazing allotment rest and rotation
    - Timing restrictions / seasonal restrictions
    - Prescribed grazing plans that follow NRCS conference report
    - Identification of seasonal needs addressed in livestock mgmt. plans that benefit sage-grouse
- Ecological habitat requirements
- Prescribed grazing
    - Grazing as a tool to remove invasive (read: cheat grass, medusa head)
- Grazing management practices consistent with all seasonal habitat needs
    - Do not provide incentives to eliminate sagebrush (in lieu of created brood rearing habitat)
    - Establish habitat needs in specific areas where 'in-kind' habitat restorations and/or mitigation
- Monitoring for native/perennial grass communities
- Seasonal closure of roads
- Buffers, avoidance of key habitats (wet seasonal habitat, leks)
- Incentives to provide important seasonal habitat (brood rearing, nesting, wintering, lek), prioritize
- Management of game areas
- Proper management of bone-piles, carcasses
- Fencing livestock out of riparian areas
    - Minimizes creation of mosquito habitat (WNv)
    - Maintains PFC of riparian areas
- Large scale CCAAs

THREAT: Free-roaming equids

- Population control
- Appropriate management
    - Proper grazing for ecological conditions
    - Proper management for ecological conditions – maintain upland and riparian habitat
    - Identifying adaptive management triggers for adjustment for management
    - Adjust or set AML for drought conditions

Research / population information needs:

- Research & count equids

THREAT: Recreation

- Use access, timing, and seasonal restrictions
    - Seasonal closures – closures as appropriate
    - Hunting restrictions
- Enforcement of existing regulations
- Rerouting trails
- Avoid creating new trails in habitat or near leks
- Travel management plans

THREAT: Urbanization

- County zoning regulations; specifically the reduction of housing, lot size, subdivision
    - Consolidation of infrastructure
- Strategic placement of development
- Easements
- Land swaps / Acquisition of habitat
    - Conservation leases / incentive based programs

THREAT: OTHER

- Overarching education and outreach in regards to every threat
- Report any new habitat created
- Restoration of previously disturbed areas with appropriate management, monitoring and protection