Topic: Thunder Basin National Grassland (TBNG) Restoration and Prairie Dog Colony Management: Short and Long-

Term Implementation Activities

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**Issue Summary:** The Medicine Bow-Routt National Forests and Thunder Basin National Grassland (MBRTB) is actively engaged in on-the-ground grassland restoration, prairie dog management projects, and participation in collaborative discussions. Concurrently, the Forest Service is undertaking a Grassland Plan amendment to address concerns regarding plan direction associated with the management of the black-tailed prairie dog colonies on National Forest System lands.

Summary/Key Points: Coordination meetings and site visits with grazing associations, state agencies, county weed and pest organizations, permittees, land owners and non-government organizations (NGO's) have provided a foundation for a collaborative environment to cultivate short and long-term solutions to prairie dog colony impacts on the Grassland. The Forest Service is encouraging groups to work together to develop management alternatives for the agency to consider, which will be implementable and provide for the long-term success of the Grassland.

Several short and long-term actions have been taken or are in the planning stages:

## **Short term management (FY18-FY19)**

A variety of public and intergovernmental meetings regarding management of prairie dog colonies on the TBNG were held from 2016-18. In April of 2018, an assessment was distributed, and results were compiled by Wyoming Department of Agriculture. Based on the results of that survey, interested parties want to continue a collaborative effort and dialogue.

A working group, comprised of interested stakeholders and convened by Wyoming County Commissioners Association, is currently scheduling project coordination meetings for 2019, the first on Feb. 26.

\$180,000 was obligated in FY18 for grassland restoration projects with a combination of contracts and agreements with county conservation districts and weed and pest districts. Restoration efforts include heritage surveys for planned restoration projects, noxious weed control, reseeding and some lethal control. Examples include:

- Campbell, Converse, and Weston Conservation Districts were funded for a total of \$133,700 for restoration projects.
- M Creek Rangeland Renovation A partner-funded project completed in April 2018 that includes visual barrier fencing and seeding to provide vegetation structure to discourage prairie dog movement into sage grouse core habitat. The project also includes approximately 70 acres of prairie dog colony that was reseeded using a no till drill system.
- Frog Creek Range Renovation Projects, 4W Ranch Archelogy clearances were completed on 150 acres and authorization was given to aerate and blade down burrows with a floating blade.
- Approximately 2,000 acres were surveyed for archeology clearance in the summer of 2018 in areas identified for possible vegetation improvement projects.
- Campbell, Converse, and Weston counties received USFS funding in agreements totaling \$17,500 for noxious and



invasive weed treatments.

Non-lethal control activities and other proposed projects have been informed by input gathered at public workshops, working group meetings, and grazing association meetings.

Approximately 5,200 acres of lethal control (rolled oats with zinc phosphide) were authorized in September 2017, to be implemented by Campbell, Converse, and Weston County Weed & Pest Districts. Areas designated for treatment were identified by the grazing associations and local land owners and informed by information gathered in 2017 at public workshops, working group meetings, and grazing association meetings. The Forest Service contributed \$135,000 to agreements for these colony control efforts. As cooperating partners, the Wyoming counties contributed approximately \$108,000, in cash and in-kind, to the prairie dog control efforts. Due to the onset of plague, only \$35,896 was spent on a total of 2,239 acres of control in Converse and Weston counties.

In 2018 an additional \$37,000 was given to the counties. Colonies that were prioritized in 2017 were again identified for control in 2018. Converse County has been monitoring colonies and will treat in areas where it is appropriate. Campbell County is also monitoring. Weston County has identified colonies to treat based on treatment occurring on private land and will monitor and may retreat areas identified in 2017. Treatment of colonies is conducted from October-December. Plague may still be present in the system.

In 2018, a coalition of interested partners conducted a systematic inventory of locating and mapping active prairie dogs on, and associated with the TBNG. It was determined that this mapping was needed to improve the management of the prairie dog ecosystem for all ownerships. It was especially important to the U.S. Forest Service for active management of other associated species such as burrowing owl, mountain plover, and swift fox. It was also needed to help understand the effects of the plague in the Thunder Basin area and in support of new and on-going research.

Data from the mapping indicates 1,154 active acres in 2018 of active prairie dog colonies across all surface ownerships in the central Thunder Basin National Grassland. That number compares to a maximum outer boundary extent of intact burrows on 76,156 acres from 2016-18.

In addition to the prairie dog mapping, surveys for swift fox, burrowing owl, and mountain plover were conducted. A noticeable reduction was seen in all three species in 2018. It is assumed that this a direct result of loss of habitat due to the reduction in active prairie dog colonies.

## Long term management (FY19 and beyond)

The Forest Supervisor and District Ranger will continue to participate in the ongoing collaborative efforts.

In cooperation with the Working Group, the Forest Service will aggressively implement prairie dog control on boundaries and use all existing tools in the current Grassland Plan.

The Forest Service signed individual agreements with Campbell, Converse, and Weston County Weed & Pest Districts for lethal and non-lethal prairie dog colony control efforts through Dec. 2018. Modifications to the terms of the agreements are currently in process, which will lead to additional years being added to the agreements.

Noxious/invasive weed spraying of approximately 26,000 acres covering the Thunder Basin National Grassland, as well as



state and private lands, is planned over a five-year period, beginning in the spring of 2018. This work will be completed through two instruments. The first is through a cooperative agreement established in April 2017 with Converse County Weed & Pest District and funded by the Forest Service (approximately \$90K). The second is through a grant (approximately \$450K) provided by Forest Service State and Private Forestry to the Wyoming Department of Agriculture in partnership with Converse County Weed and Pest District. Both of these instruments were part of a larger \$1 million grant provided by the Forest Service to the State of Wyoming for grassland and sagebrush restoration. Control efforts will target cheatgrass and other noxious/invasive species such as cactus, juniper and salt cedar. Treatment areas will be identified by partners on an annual basis and will include a review of prairie dog mapping efforts, extent of plague impacts, and resulting rangeland health conditions. The five-year implementation timeline will also provide time for mapping of prairie dog colonies to be completed and will make sure that treatments are designed to decrease invasive species and increase perennial grasses and forbs in order to be as effective as possible in meeting restoration objectives on affected lands.

On-going monitoring of the current plague epidemic is occurring in coordination with Weed & Pest Districts, Wyoming Department of Health, Wyoming Game and Fish Department, and Thunder Basin Grasslands Prairie Ecosystem Association. Information gathered will be used to inform future management actions regarding prairie dog colony management on the Thunder Basin National Grassland.

