

July 17, 2015

MEMORANDUM

To: Managers of the Interagency Bison Management Plan

From: National Park Service, Yellowstone National Park, Bison Management Team

Subject: Reformatting the Annual Report to Improve Readability and Lessen Redundancy

Background and Issues:

In 2008, the federal and state agencies involved with the Interagency Bison Management Plan created measurable objectives in an adaptive management plan and developed a specific monitoring program to assess scientific and management questions. Since 2009, these agencies and their tribal partners have issued annual reports that included narrative summaries to address the effects and effectiveness of each management action in the adaptive management plan. These reports are structured to sequentially provide information on each management action.

Over the years, these reports have become more cumbersome, with redundant information under several management actions, lengthy lists of bison locations, property and safety complaints, and hazing events, and added sections on progress by subcommittees and recommendations from the Citizen's Working Group. The organization of the report by management actions rather than key topics/subjects and its increasing length (99 pages in 2014) has made it difficult to read and readily access key information.

In addition, there are issues with how to: 1) deal with management actions that have been completed; 2) lessen the point-counterpoint arguments among agencies that now permeate the report; 3) document progress and completion of tasks and recommendations by subcommittees and the Citizen's Working Group; 4) document public engagement; and 5) complete the technical review and reporting process in a timely manner.

Requested Administrative Change:

To alleviate the issues outlined above, we recommend reformatting the report with subheadings based on relevant topics/subjects instead of management actions from the adaptive management plan. The management objectives and actions can be provided in an appendix to the report or online. Also, we recommend streamlining the report to key findings under each subheading, with supporting information provided online at the ibmp.info website.

We propose the following report template (and lead agencies for reporting) to generate comments, ideas, and feedback. Each subsection could have a short paragraph describing why the activity/monitoring is conducted (i.e., management objective), followed by the key summary information for the reporting year. Figures and tables could be used sparingly to more effectively convey some information (e.g., trends in counts).

1. Background
2. Objectives
 - Demographic, disease, distributional, ecological, genetic (All)
3. Pre-winter Status and Trends
 - Bison count and age-sex classification by central and northern region (NPS)
 - Cattle locations in Gardiner and Hebgen basins (MDOL)
4. Operations Plan
 - Removal recommendations (NPS as modified by consensus)
 - Bison migration forecasts (NPS)
 - Summary of any changes from previous years (Lead Agency)
5. Bison migration and distribution
 - Northern and western management areas (NPS, MDOL, MFWP)
 - Trends through winter (NPS, MFWP)
 - Incidents of commingling with cattle (MDOL)
6. Hunting
 - Public (by management area and age-sex; MFWP)

- Treaty (by Tribe, management area, and age-sex; CSKT, Nez Perce, Shoshone-Bannock, Umatilla)
 - Effectiveness and issues (All, including NPS and USFS)
7. Culling
 - Timeframe and numbers (northern and western management areas; NPS and possibly MDOL)
 - Distribution of captured animals (NPS and possibly MDOL)
 - Capture/processing mortalities (NPS and possibly MDOL)
 8. Hazing
 - Summarize events, locations, numbers, timing, etc. (NPS, MDOL)
 - Put any detailed lists in supporting information on ibmp.info website and provide URL in report
 - Spring haze-back (MDOL)
 - Same as above
 9. Brucellosis Testing and Vaccination
 - Test results (NPS, MDOL)
 - Vaccination (bison, cattle, elk; NPS, MDOL)
 10. Post-winter Status and Trends
 - Bison count and age-sex classification by central and northern region, and trend over time (NPS)
 - Comparison of removal recommendations with actual removals (number, age, sex, management area; NPS)
 - Brucellosis outbreaks in cattle in the Gardiner and Hebgen basins (MDOL)
 - Issues; recommendations for next season (All)
 11. Human Safety and Property Damage
 - Summarize human injuries; property damage; highway collisions; other issues (NPS, MFWP)
 - Put any detailed lists in supporting information on ibmp.info website and provide URL in report
 12. Habitat Assessments and Enhancement
 - Activities conducted during the reporting year (All)
 13. Research and Surveillance
 - Activities completed during the reporting year (All)
 - Refer people to the complete report on the ibmp.info website and provide the URL in the report
 14. Landowner Engagement
 - Fencing and compensation (MFWP; possibly USFS)
 - Devil's Slide Conservation Easement (USFS)
 - Royal Teton Ranch Bison Management Plan (MFWP, USFS)
 - Other efforts (All)
 15. Education and Interpretation
 - Activities and documents completed during the reporting year (All)
 16. Stakeholder and Public Engagement
 - Meetings (Lead Agency)
 - Field trips (Lead Agency)
 - Media events (All)
 17. Adaptive Management Adjustments
 - Adjustments agreed to through consensus during the reporting year (Lead Agency)
 - Citations of previous adjustments
 18. Environmental Compliance, Legislation, and Litigation
 - Actions and documents initiated and/or completed during the reporting year (All)
- Appendix A: Management Objectives and Actions (2014 Adaptive Management Plan)
- Appendix B: Citizens Working Group Recommendations (2011)
- Appendix C: Northern and Western Management Area Maps

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APPENDIX A: MANAGEMENT OBJECTIVES AND ACTIONS (2014 ADAPTIVE MANAGEMENT PLAN)

Objective 1.1: Within timing and geographical considerations, allow bison within Zone 2 of the Hebgen and Gardiner basins to manage the risk of brucellosis transmission from bison to livestock and enhance wild bison conservation and hunting.

- Management action 1.1.a—Consistent with the management responses outlined below, allow untested female bison (or mixed groups of males and females) to migrate onto and occupy the Horse Butte peninsula (between the Madison Arm of Hebgen Lake and Grayling Creek) and the Flats (the area east of South Fork Madison River, south of the Madison Arm, and west of Highway 191) each winter and spring in Zone 2.
 - See *Bison Migration and Distribution* section of report
- Management action 1.1.b—Consistent with the management responses outlined below, allow bison on habitat on U.S. Forest Service and other lands north of the park boundary and south of Yankee Jim Canyon (see attached map at the end of this Adaptive Management Plan). Bison would not be allowed north of the hydrological divide (i.e., mountain ridge-tops) between Dome Mountain/Paradise Valley and the Gardiner basin on the east side of the Yellowstone River and Tom Miner basin and the Gardiner basin on the west side of the Yellowstone River.
 - See *Bison Migration and Distribution* section of report
- Management Action 1.1.c—Use research findings to inform adaptive management.
 - See *Research and Surveillance* section of report

Objective 1.2: Manage bull bison to reflect their lower risk of transmission of brucellosis to cattle.

- Management Action 1.2.a—Allow bachelor groups of bull bison to occupy suitable habitat areas outside the west boundary of YNP in the portion of Zone 2 south of Duck Creek each year within the parameters of conflict management.
 - See *Bison Migration and Distribution* section of report
- Management Action 1.2.b—Allow bachelor groups of bull bison to occupy suitable habitat areas in Zone 2 outside the north boundary of YNP within the following parameters of conflict management.
 - See *Bison Migration and Distribution* section of report

Objective 1.3: Reduce conflict between landowners, livestock operators, and bison outside YNP via permit management, improved relations, education, and incentives.

- Management Action 1.3.a—Work with private land owners and livestock producers and operators to provide conflict-free habitat in the Hebgen and Gardiner basins.
 - See *Human Safety and Property Damage* and *Landowner Engagement* sections of report
- Management Action 1.3.b—Work with landowners who have human safety and property damage concerns, as well as those who favor increased tolerance for bison, to provide conflict-free habitat in the Hebgen and Gardiner basins.
 - See *Human Safety and Property Damage* and *Landowner Engagement* sections of report
- Management Action 1.3.c—Annually, the Gallatin National Forest will ensure conflict-free habitat is available for bison and livestock grazing on public lands, as per management objectives of the Interagency Bison Management Plan (IBMP).
 - See *Bison Migration and Distribution* and *Habitat Assessment and Enhancement* sections of report
- Management Action 1.3.d—Consider a voluntary compensation program to allow for adjusting the dates livestock are released on private land beyond May 15.
 - See *Landowner Engagement* section of report

Objective 1.4: Recognize tribal treaty rights for hunting bison.

- Management Action 1.4a—Allow bison to occupy National Forest System lands and other areas determined suitable within the designated tolerance area (Zone 2), and maximize timing and geographical extents to increase tribal hunt opportunities.
 - See *Bison Migration and Distribution* and *Hunting* sections of report
- Management Action 1.4b—Coordinate management activities that could potentially impact opportunities for tribal members to exercise their treaty rights.

- See *Bison Migration and Distribution, Hunting, and Hazing* sections of report

Objective 2.1: Manage the Yellowstone bison population to ensure the ecological function and role of bison in the Yellowstone area and to maintain genetic diversity for future adaptation.

- Management action 2.1.a—Increase the understanding of bison population dynamics to inform adaptive management and reduce sharp increases and decreases in bison abundance.
 - See *Pre-winter Status and Trends, Post-winter Status and Trends, and Research and Surveillance* sections of report
- Management action 2.1.b—Increase the understanding of genetics of Yellowstone bison to inform adaptive management.
 - See *Research and Surveillance* section of report
- Management action 2.1.c—Increase understanding of the ecological role of bison to inform adaptive management by commissioning a comprehensive review and assessment.
 - See *Research and Surveillance* section of report

Objective 2.2: Minimize bison slaughter by employing alternative management techniques.

- Management action 2.2.a—Use slaughter only when necessary (e.g., disease suppression by selectively removing likely infectious bison); attempt to use other risk management tools first.
 - See *Operations Plan* section of report
- Management action 2.2.b—In Zone 2 lands adjacent to YNP, emphasize management of bison as wildlife and increase the use of state and treaty hunts to manage bison numbers and demographic rates, limit the risk of brucellosis transmission to cattle, and protect human safety and property.
 - See *Hunting* section of report
- Management action 2.2.c—Complete the quarantine feasibility study and consider an operational quarantine facility to provide a source of live, disease-free bison for tribal governments and other requesting organizations.
 - See *Research and Surveillance* section of report

Objective 3.1: Reduce the risk of disease transmission through vaccination.

- Management Action 3.1.a—Continue bison vaccination under prevailing authority.
 - See *Brucellosis Testing and Vaccination* section of report
- Management Action 3.1.b—Complete EIS processes (MEPA/NEPA) for remote delivery vaccination of bison and use the outcomes to inform adaptive management.
 - This action has been completed (Federal Register 79:35567-35568).
- Management Action 3.1.c—Test and vaccinate cattle.
 - See *Brucellosis Testing and Vaccination* section of report

Objective 3.2: Prevent cattle/bison interactions, with an emphasis on the likely bison birthing and abortion period each year.

- Management action 3.2.a—Use spatial and temporal separation and hazing to prevent cattle/bison interactions.
 - See *Bison Migration and Distribution* and *Hazing* sections of report
- Management action 3.2.b—Evaluate the use of limited, strategically placed fencing when and where it could effectively create separation between domestic livestock and bison, and not create a major movement barrier to other wildlife.
 - See *Landowner Engagement* section of report
- Management Action 3.2.c—Haze bison from the Hebgen basin into YNP with a target date of May 15.
 - See and *Hazing* section of report
- Management Action 3.2.d—Haze bison from the Gardiner basin into YNP with a target date of May 1.
 - See and *Hazing* section of report
- Management Action 3.2.e—Haze bison away from tolerance boundaries when conditions are conducive to breach. The goal is to reduce the opportunity for bison to breach the tolerance zone boundaries by employing management actions at the most efficient trigger points in consideration of overall conditions and risks.
 - See and *Hazing* section of report

APPENDIX B: CITIZENS WORKING GROUP RECOMMENDATIONS (2011)

Risk Reduction

- Reduce risk of transmission of brucellosis from wildlife to livestock by improving implementation of currently known livestock vaccine protocols, and through further research and refinement of livestock vaccination.
 - See *Brucellosis Testing and Vaccination* and *Research and Surveillance* sections of report
- Work with livestock industry to work toward adoption of mandatory statewide Official Calhhood Vaccination (OCV).
 - See *Brucellosis Testing and Vaccination* and *Research and Surveillance* sections of report
- Lobby to modify Select Agent List (Homeland Security) to enable improved livestock or other vaccine research on *Brucella abortus*.
 - See *Brucellosis Testing and Vaccination* section of report
- Strongly encourage continued funding and research to develop a practical test on live animals to distinguish between infected and resistant animals.
 - See *Research and Surveillance* section of report
- Provide a clearinghouse and other opportunities to gather and report on research related to *Brucella abortus* and management tools from various research institutions to present to the public annually.
 - See *Research and Surveillance* section of report
- Reduce livestock/wildlife interactions at key seasons.
 - See *Hazing, Habitat Assessment and Enhancement*, and *Landowner Engagement* sections of report
- Reduce artificial concentrations of animals (elk or bison) that may be exacerbating transmission.
 - See *Hazing, Habitat Assessment and Enhancement*, and *Landowner Engagement* sections of report
- Remote vaccination of wild bison using the current vaccine and delivery method as a means of reducing a risk of transmission should not be a priority at this time.
 - This recommendation was implemented (Federal Register 79:35567-35568).
- Education – to be addressed by the education group.
 - See *Education and Interpretation* section of report
- Advocate for completion of a Statewide Bison Management Plan.
 - See *Environmental Compliance, Legislation, and Litigation* section of report

Population Management

- Modify the Interagency Bison Management Plan Zones 1, 2, and 3 with an eye to finding better habitat solutions particularly in light of changes that have occurred since zones were designated in 2000. Identify habitat that can alleviate population pressure, including available public and private lands, and potential habitat acquisition as well as potential funding sources.
 - See *Habitat Assessment and Enhancement*, *Landowner Engagement*, and *Adaptive Management Adjustments* sections of report
- Strive to manage bison as wildlife, and complete, implement, and support a Montana Fish, Wildlife and Parks management plan that includes setting bison population objectives and hunting strategies as a priority population management tool.
 - See *Objectives, Operations Plan*, and *Environmental Compliance, Legislation, and Litigation* sections of report
- Make hunting a bigger component of bison management and consider different seasons or other opportunities to increase the impact of hunting.
 - See *Operations Plan* and *Hunting* sections of report
- Montana Fish, Wildlife and Parks and the Tribes hunting Yellowstone bison should work more closely together to set collective hunt targets and to document the hunting success numbers.
 - See *Operations Plan* and *Hunting* sections of report
- Agree on and establish a target population range that is biologically and ecologically acceptable and accounts for a variety of public interests. As Interagency Bison Management Partners, agree on criteria for evaluating and determining a population range and appropriate management tools, such as: a) winter range outside the park; b) risk factors; c) individual agency management mandates, constraints and responsibilities; d) genetic diversity, population structure and demographics, reproduction, and distribution;

- e) realistic opportunity for addressing private land owners' concerns; and f) hunting and wildlife viewing opportunities.
 - See *Objectives, Operations Plan, Adaptive Management Adjustments, and Environmental Compliance, Legislation, and Litigation* sections of report
- When bison have to be removed because of high migration numbers, management constraints, safety, etc., the priorities should be: a) hunting outside the park; b) moving them to nearby appropriate available lands; c) translocation from the Yellowstone area; and d) lethal removal by managing agencies.
 - See *Operations Plan, Adaptive Management Adjustments, and Environmental Compliance, Legislation, and Litigation* sections of report
- Quarantine should be economically justified in comparison with other means of producing *Brucella*-free Yellowstone bison for conservation purposes.
 - See *Environmental Compliance, Legislation, and Litigation* section of report
- In order to locate bison to lands elsewhere, Montana should develop and implement a translocation process for bison leaving quarantine. The quarantine process should minimize infrastructure requirements for places receiving bison.
 - See *Environmental Compliance, Legislation, and Litigation* section of report
- Determining where bison completing quarantine will go and *how* they will be restored and conserved on the landscape, with the highest priority on managing them as public and tribal wildlife, must precede capturing bison and implementing quarantine. Recipients of quarantined bison must be identified and an acceptable, appropriate translocation process must be in place prior to quarantining Yellowstone bison. This determination of where bison will go should be integrated with all Fish, Wildlife and Parks or other assessments of relocation possibilities for wild bison in Montana.
 - See *Environmental Compliance, Legislation, and Litigation* section of report
- Bison translocation and bison movement should not include moving seropositive animals outside the current DSA, and may preclude relocating seropositive animals to new areas within the DSA with the intent of establishing new herd ranges. The intent is to avoid establishing new sources of disease and new disease risks to cattle.
 - See *Operations Plan and Environmental Compliance, Legislation, and Litigation* sections of report
- Hazing of bulls should be minimized, unless there are issues with property damage or safety, because they are not a factor in the issue of brucellosis transmission. Hazing of newborn calves should be minimized for humane reasons.
 - See *Hazing* section of report
- Discuss expected adverse weather events (similar to fire management) and work with involved entities (public and private) to develop and agree on contingency plans.
 - See *Operations Plan and Stakeholder and Public Engagement* sections of report
- Develop and work with the livestock industry to implement an effective cattle vaccine and protocol to reduce the risk of transmission and make bison presence/translocation more acceptable. Support/secure funding for ongoing vaccine research.
 - See *Brucellosis Testing and Vaccination and Research and Surveillance* sections of report
- Lobby for removing the significant barriers that exist for *Brucella abortus* research because of the select agent listing.
 - See *Brucellosis Testing and Vaccination* section of report
- Develop and implement a strong, factual education component so an informed public is involved in the discussions.
 - See *Education and Interpretation* section of report
- Outside the Park, hazing and removals should be minimized in selected, suitable areas to establish year-round populations of Montana bison.
 - See *Culling, Hazing, and Environmental Compliance, Legislation, and Litigation* sections of report

Habitat Effectiveness / Habitat Expansion

- Identify public lands that could/should be open to bison year-round in accordance with state and federal law.
 - See *Habitat Assessment and Enhancement* sections of report

- Systematically identify suitable, available habitat outside Yellowstone National Park in the Greater Yellowstone Area (i.e., Federal, State and Private lands).
 - See *Habitat Assessment and Enhancement* and *Landowner Engagement* sections of report
- Develop and implement strategies (e.g., year-round bison habitat; interview landowners to identify where bison are welcome; implement adequate fencing or acceptable alternatives) that manage bison as wildlife on those lands, specifically: a) Hebgen basin; b) Gardiner basin c) beyond the Gardiner basin (Dome Mountain Ranch, Dome Mountain Wildlife Management Area); d) and in the Upper Gallatin, Taylor Fork, Cabin Creek, Porcupine, and Buffalo Horn Creek areas. Also, complete the statewide bison management plan to restore wild bison to additional biologically suitable, socially acceptable areas.
 - See *Habitat Assessment and Enhancement*, *Landowner Engagement*, and *Environmental Compliance, Legislation, and Litigation* sections of report