2016 ANNUAL REPORT OF THE INTERAGENCY BISON MANAGEMENT PLAN

November 1, 2015 through October 31, 2016

This report was produced by representatives of the Animal and Plant Health Inspection Service; Confederated Salish and Kootenai tribes; Custer Gallatin National Forest; InterTribal Buffalo Council; Montana Fish, Wildlife & Parks; Montana Department of Livestock; Nez Perce tribe; and Yellowstone National Park.

The report summarizes progress under the Interagency Bison Management Plan during November 1, 2015 to October 31, 2016. It provides the results of education, management, monitoring, outreach, and research activities conducted as part of adaptive management (see <http://ibmp.info/adaptivemgmt.php> website).

In addition, the report documents the effects and effectiveness of management actions taken to progress towards objectives and adjust management actions for the following year, as appropriate, to better meet those objectives. The annual report is *not* intended to provide a comprehensive description of all actions taken by the agencies during the preceding year. Additional information is available at the <http://ibmp.info/index.php> website, including meeting notes, key science reports, and information on other relevant activities.

2015 Annual Report of the Interagency Bison Management Plan

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Background

In 2000, the federal government and the state of Montana agreed to an Interagency Bison Management Plan (IBMP) to cooperatively manage the risk of brucellosis transmission from Yellowstone bison to cattle. The plan recognizes that bison fill important biological, ecological, and cultural roles and that seasonal migrations of the bison from the Park into Montana are natural events. The Animal and Plant Health Inspection Service, Forest Service (Custer Gallatin National Forest), Montana Department of Livestock, Montana Fish, Wildlife & Parks, and the National Park Service (Yellowstone National Park) were initially responsible for implementing the plan. In 2009, the Confederated Salish and Kootenai tribes and the Nez Perce tribe became involved due to their treaty hunting rights for bison on open and unclaimed federal lands in southwestern Montana. Also, the InterTribal Buffalo Council became involved due to their mission of restoring bison to tribal lands.[1]

Management practices under the IBMP have been successful at preventing the transmission of brucellosis from bison to cattle. This is due to efforts by state and federal agencies to maintain temporal and spatial separation between the species. The IBMP has also allowed the successful conservation of Yellowstone bison and supported the presence of a viable, wide-ranging bison population within the park and on adjacent lands in Montana. Bison management is a complex and often controversial endeavor requiring ongoing evaluation and adjustment of management actions to measure effectiveness and progress towards further desired conditions.

Objectives

The purpose of the IBMP is to maintain a wild population of Yellowstone bison and address the risk of brucellosis transmission from bison to protect the economic interest and viability of the livestock industry in the state of Montana. The agencies agreed to address these objectives[2]:

- Address bison population size and distribution; have specific commitments relating to the size of bison herd;
- Clearly define a boundary line beyond which bison will not be tolerated;
- Address the risk to public safety and private property damage by bison;
- Commit to the eventual elimination of brucellosis in bison and other wildlife;
- Protect livestock from the risk of brucellosis transmission from bison;
- Protect the state of Montana from risk of reduction in its brucellosis status;[3]
- Maintain a viable population of wild bison in Yellowstone National Park, based on biology, genetics, and ecology;
- Be based on factual information, with the recognition that the scientific database is changing; and

[1] The Shoshone-Bannock tribes and the Confederated Umatilla tribes have recognized treaty rights to harvest bison in southwestern Montana, but are not formal members of the IBMP.

[2] Objectives are from the 2016 Winter Operations Plan and based on the 2000 Final Environmental Impact Statement and Records of Decision.

[3] A "brucellosis-free" classification allows producers outside the designated surveillance area for brucellosis to export livestock to other states or nations without testing for brucellosis exposure.

- Recognize the need for coordination in the management of natural and cultural resource values that are the responsibility of the signatory agencies.

Under the IBMP, the number of bison in the Yellowstone population is supposed to be maintained around 3,000. The plan is not intended to eradicate brucellosis, but rather to prevent transmission from bison to cattle and reduce the prevalence of brucellosis in bison.

Pre-winter Status and Trends

During summer 2015, approximately 4,910 bison were counted in Yellowstone National Park distributed with 3,600 animals in the northern herd and 1,300 in the central herd. Since 2005 there has been a net dispersal of bison from the central herd into the northern herd. The number of bison in northern Yellowstone continued to increase from 3,420 in 2013, to 3,519 in 2014 to 3,600 in 2015. Conversely, the number of bison in central Yellowstone continued to decrease from 1,504 in 2013 to 1,448 in 2014 to 1,300 in 2015. Removal recommendations for the winter of 2016 were intended to increase bison numbers in central Yellowstone and decrease numbers in northern Yellowstone.

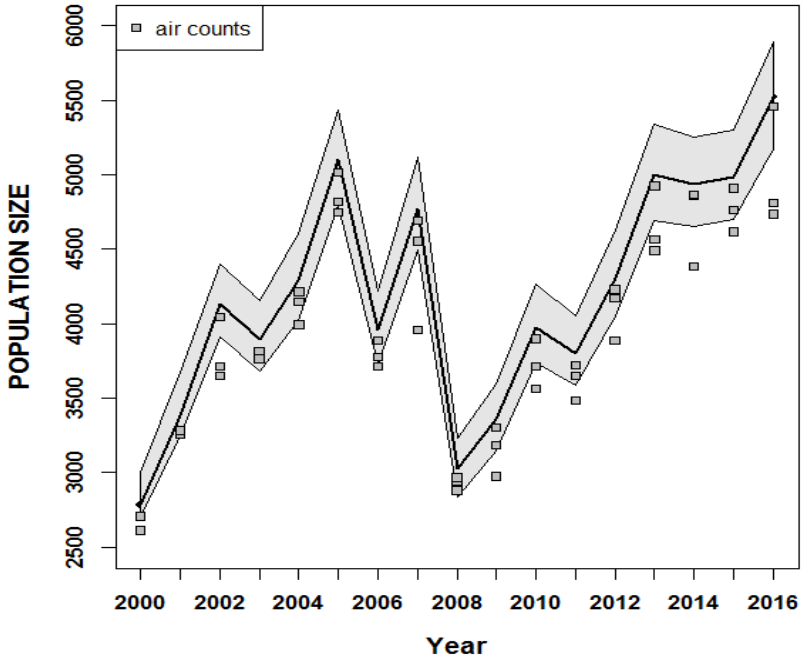


Figure 1. Estimated abundance of Yellowstone bison based on aerial counts conducted during the Interagency Bison Management Plan. Bold lines depict average abundance, while thin lines depict 95% credible intervals.

Operations Plan

Per the 2015-2016 winter operations plan, the National Park Service (YNP) conducts counts and age and gender classifications of bison in the central and northern regions of Yellowstone National Park in the early summer to use in models to predict numbers of bison migrating to park boundaries during the upcoming winter. Models built in the summer 2015 predicted that bison would move beyond the park boundaries in sufficient numbers to support the recommended number of removals. Models predicted hunters should be able to remove >300 animals with trapping at the northern end of the park accounting for the rest.

The IBMP members agreed to manage for a decreasing population during the winter of 2015-2016. The members planned to focus efforts to manage numbers and distribution of bison through public and treaty hunting in Montana. Additionally, IBMP members had the option to implement capture operations at Stephen's Creek during the period from February 15, 2016 to March 31, 2016 in order to help meet bison population objectives. Captured bison could be shipped to slaughter or transferred to research facilities in Montana or elsewhere. Timing and numbers of bison captured were intended to not interfere with hunting opportunities.

A change was made to the 2016 Winter Operations Plan and the Adaptive Management Plan in April 2016 based on the State of Montana Governor's decision expanding tolerance zones for bison. Based on these changes bull bison will be tolerated year-round on public lands in the Gardiner Basin outside the north end of Yellowstone National Park. All bison will be tolerated year-round in the Horse Butte area of Hebgen Basin on the west side of Yellowstone National Park. These new areas of tolerance were adopted in addition to the previous year-round tolerance areas of Eagle Creek/Bear Creek, Cabin Creek Wildlife Management Area, Monument Mountain Unit of the Lee Metcalf Wilderness, and including the upper portions of Hellroaring and Slough Creek in the Absaroka-Beartooth Wilderness areas.[4]

The operations plan for the winter of 2016 can be viewed at:http://ibmp.info/Library/OpsPlans/2016_IBMP_Winter_Operations_Plan_FINAL_amended160506.pdf

Migration and Distribution

NORTH:
Bison began migrating into the northern management area during December 2015, but few bison moved north of the park boundary until mid-January (Figure 1). The maximum number of bison in the northern management area was about 380 during mid-January. There were few bison consistently north of the park boundary after mid-February.

[4] 2016 Winter Operations Plan <http://ibmp.info/Library/OpsPlans/2016_IBMP_Winter_Operations_Plan_FINAL_amended160506.pdf>

Table 1. Numbers of bison counted in the Gardiner basin by ground observers during winter 2015-2016. Bison held within the Stephen's Creek Capture Facility are not included in counts.

Date	Mammoth to Gardiner	North Entrance Station to Stephens Creek Facility	Stephens Creek Facility to Park Boundary	North of Park Boundary	Eagle Creek SMA	**Total**
11/18/2015	50	8	0	2	0	**60**
11/24/2015	19	27	0	2	0	**48**
12/7/2015	36	38	0	0	0	**74**
12/11/2015	0	0	0	0	0	**0**
12/28/2015	1	42	115	0	0	**158**
1/4/2016	102	174	165	0	4	**445**
1/7/2016	114	164	55	6	14	**353**
1/12/2016	113	522	47	1	10	**693**
1/21/2016	54	196	0	311	0	**561**
1/28/2016	30	263	187	17	0	**497**
2/1/2016	83	422	124	1	0	**630**
2/4/2016	79	321	126	23	0	**549**
2/11/2016	54	432	167	1	0	**654**
2/16/2016	63	94	0	0	1	**158**
2/23/2016	67	198	0	1	0	**266**
2/29/2016	47	243	0	2	0	**292**
3/4/2016	172	193	127	6	0	**498**
3/7/2016	96	112	0	0	0	**208**
3/14/2016	118	85	0	1	0	**204**
3/22/2016	94	12	0	1	10	**117**
3/30/2016	27	199	0	69	0	**295**
4/11/2016	29	132	6	1	17	**185**

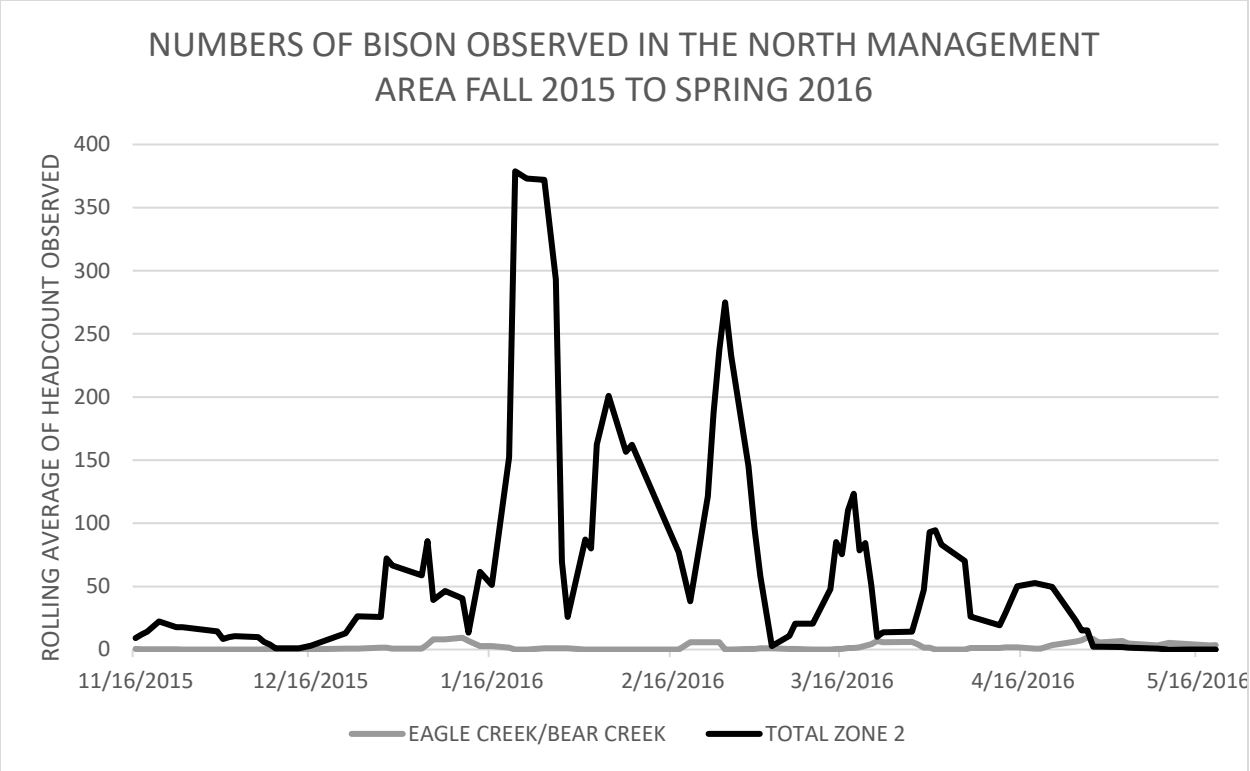


Figure 2. Rolling average of headcount of bison observed in the Northern Management Area by Montana Department of Livestock personnel from November 2015-May 2016. Rolling averages of 4 observations dates were used to account for days without observations and the dynamic nature of bison populations. These numbers are based on observations of abundance documented by MDOL personnel who are responsible for monitoring bison abundance outside YNP. Different counts by other observers may be due to bison on the park boundary moving back and forth across park lines.

WEST:

Bison were present in the Western Management area in moderate numbers in November 2015. Abundance decreased until March 2016 when a maximum of approximately 430 bison were observed in the NW management area which includes all of the year-round tolerance zones on the Western side of YNP (see map in Appendix C).

There were no instances of bison comingling with cattle in either the northern or western management areas. Bison were hazed on 4 separate occasions in the western management area to prevent comingling before it could occur.

Table 2. Numbers of Yellowstone bison observed in the western management area (Hebgen basin) for the Interagency Bison Management Plan during winter 2015.

Western Management Area	**Jan 2**	**Feb8**	**Mar18**	**Apr16**	**June 18**
Outside Yellowstone National Park	0	0	27	265	16
NPS boundary to 7 Mile Bridge	47	22	93	194	1
West of Madison Junction to 7-mile bridge	134	83	86	84	41
Total	**181**	**105**	**206**	**543**	**58**

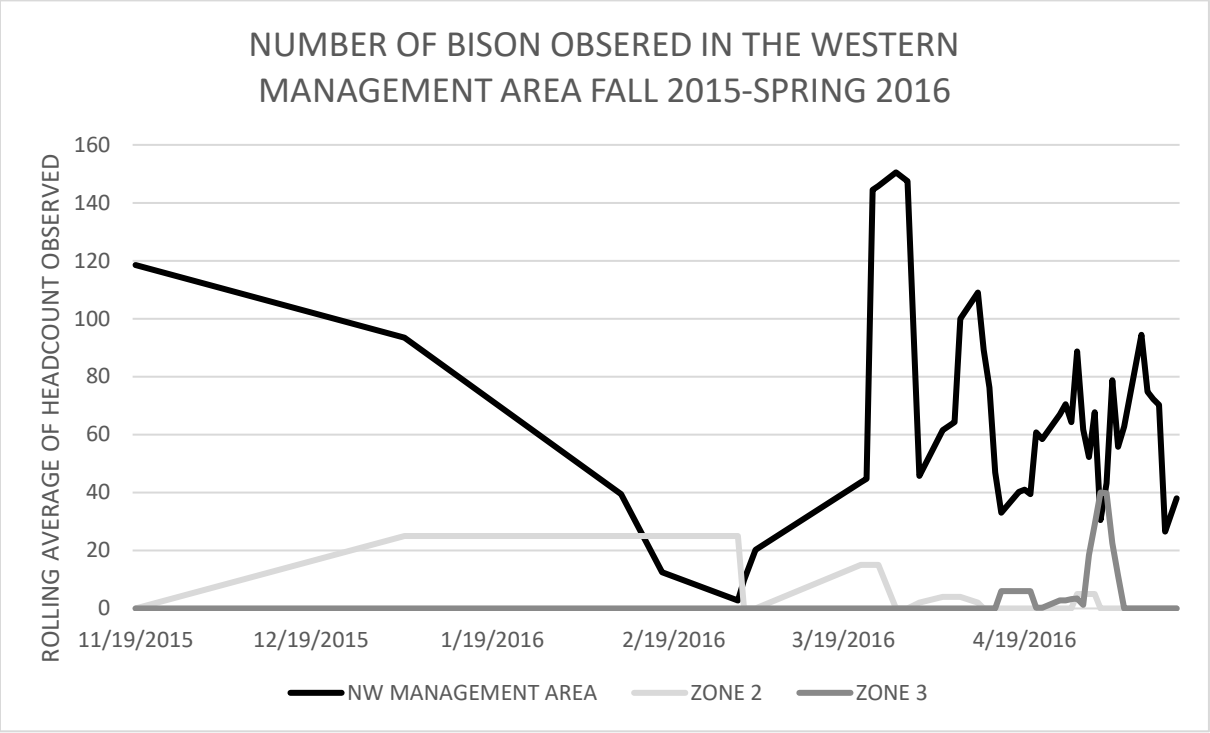


Figure 3. Rolling average of headcount of bison observed in the Western Management Area by Montana Department of Livestock personnel from November 2015-May 2016. Rolling averages of 4 observations dates were used to account for days without observations and the dynamic nature of bison populations.

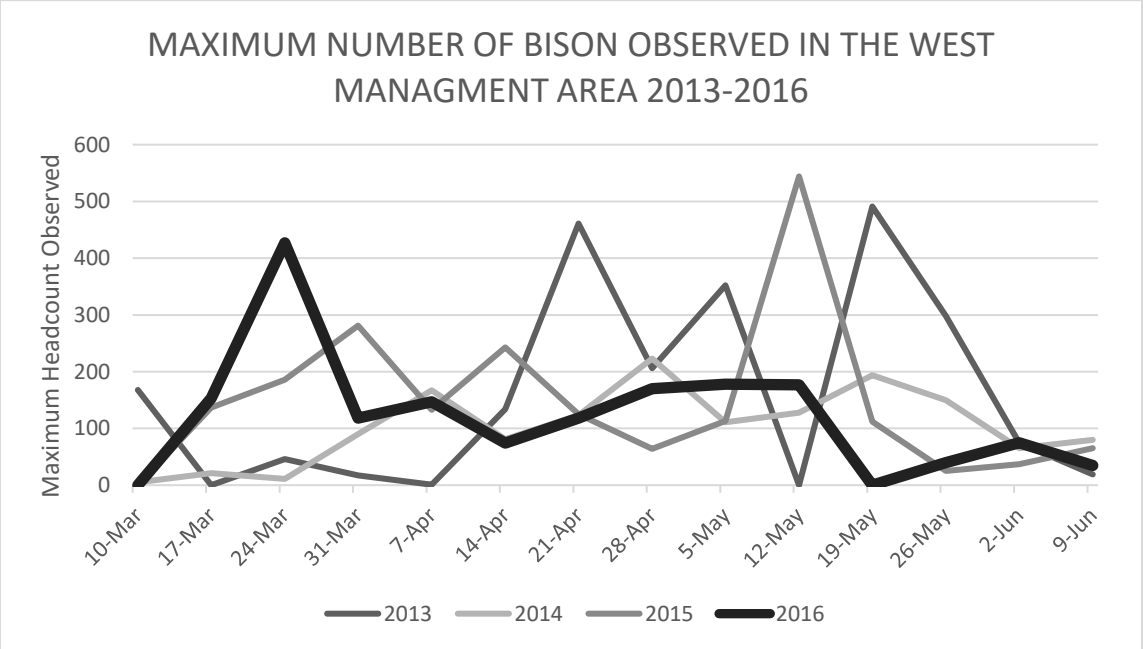


Figure 4. Maximum number of bison observed by Montana Department of Livestock personnel in the entire Western Management area by week during the spring seasons 2013-2016. Peak bison numbers remain fairly consistent although timing of migration into the Western Management Area changes each year.

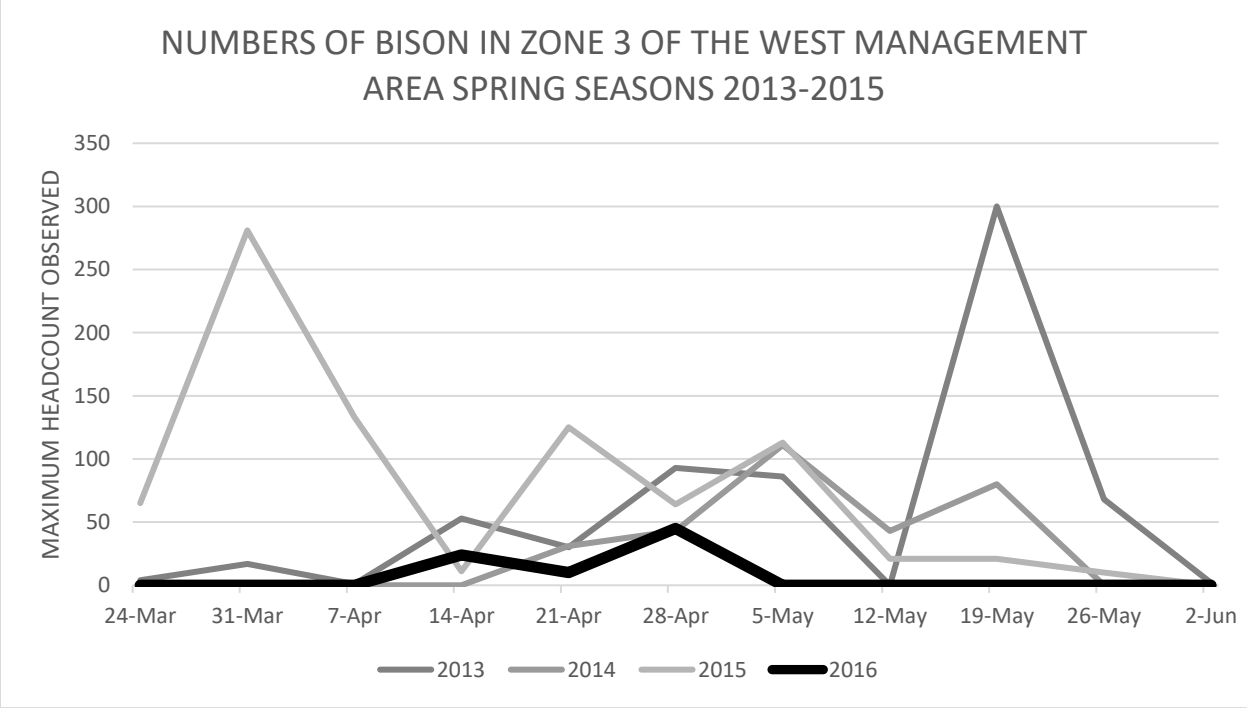


Figure 5. Comparison of maximum numbers of bison observed by Montana Department of Livestock personnel in Zone 3 of the Western Management Area during spring seasons 2013-2016. Zone 3 is the area west of the South Fork of the Madison Arm and outside the northern and northwestern boundaries of the year-round tolerance zones. Bison are never tolerated in Zone 3 of the Western Management Area.

Hunting

Each year, Montana Fish, Wildlife & Parks allocates permits for bison hunting from November 15 through February 15 in the northern and western management areas. Also, the Nez Perce, Salish-Kootenai, Shoshone-Bannock, and Confederated Umatilla tribes have rights, reserved through treaties with the federal government, to hunt bison on open and unclaimed lands in southwestern Montana. These parties coordinate each summer regarding bison removal objectives, permits, and harvests. Also, they enforce regulations and permit requirements for their respective hunters by sending game wardens to oversee hunts.

Table 3. A total of 384 bison were harvested by public and tribal hunters during winter 2016. Harvest is summarized by hunter, location of harvest, and category of animal taken.

	GARDINER					WEST					
	MALE	**FEMALE**	**CALF(M)**	**CALF(F)**	**UNKNOWN**	**MALE**	**FEMALE**	**CALF(M)**	**CALF(F)**	**UNKNOWN**	**TOTAL**
STATE	23	3	0	0	0	2	1	0	0	0	29
CSKT	71	70	14	16	0	8	3	0	9	0	191
NP	26	23	19	17	4	1	0	0	0	0	90
SB	10	10	0	0	0	0	0	0	0	0	20
CTU	13	25	3	13	0	0	0	0	0	0	54
TOTAL	143	131	36	46	4	11	4	0	9	0	384

Culling (Capture and Removal)

Stephen's Creek was the capture facility used for boundary operations this year. Approximately 150 bison were captured at Stephen's Creek beginning February 20th and ending March 3rd 2015. One hundred and one bison were shipped to processing facilities (9 and 10 March, 20 April, 16 May), including 4 by the Northwestern Band of the Shoshone, and 97 by the InterTribal Buffalo Council. Fifty-seven pre-reproductive animals were kept at the Stephen's Creek facility for further testing. Eight of those tested positive for brucellosis on March 8-9 and were included in the total 101 bison shipped to processing facilities. The 49 remaining animals were kept within fenced pastures at Stephen's Creek throughout the summer and autumn. No bison were transferred for research from 2016 capture operations. No bison died during confinement.

Hazing

No hazing was necessary in the Northern Management Area during the winter of 2015-2016. A spring haze back was also unnecessary due to bison migrating back into the park on their own prior to May 1.

Several hazing operations were conducted in the Western Management Area in 2016 for public safety, due to private property concerns, and to prevent bison comingling with cattle.

Table 4. Summary of hazing operations in the Western Management area in 2016.

WEST SIDE HAZING		
DATE	**Number**	**DESCRIPTION**
3/24/2016	20	moved off highway (191 and Madison Bridge)
4/15/2016	24	moved bison off the south fork (Povah's behind KOA, zone 3) to Madison Arm Resort
4/20/2016	20	moved off of private property at Duck Creek
4/22/2016	7	moved from Red Canyon to Corey Springs (to prevent comingling with cattle)
4/25/2016	10	moved off of Povah's Deep Well (zone 3)
5/2/2016	45	bison on Old Bar N (zone 3), hazed to the south fork river, crossed the south fork, hazed down Madison Arm road and onto Horse Butte
5/11/2016	20	moved from Red Canyon to Corey Springs (to prevent comingling with cattle)
5/12/2016	20	moved off Red Canyon, bison swam the narrows back to Horse Butte (to prevent comingling with cattle)
5/17/2016	55	hazed bison from HWY 287 at Red Canyon to lake edge of Meyer lease, pushed bison to narrows and across lake to Horse Butte
5/25/2016	63	combined two separate groups together and crossed them across the Madison River to the north side (49 adults 14 calves)

Brucellosis Testing and Vaccination

One hundred and fifty bison were captured at the Stephens Creek facility. Serum from 144 were tested for brucellosis exposure (i.e., antibodies) using the fluorescent polarization assay and the card test. Positive test results were obtained for 4 of 5 (80%) adult males, 8 of 14 (57%) yearling males, 0 of 29 (0%) male calves, 41 of 62 (66%) adult females, 9 of 19 (47%) yearling females, and 2 of 15 (13%) female calves. No bison were vaccinated for brucellosis using strain RB51 vaccine during winter 2016.

During winter 2016, there were 20-35 cattle located 10 miles north of the park boundary in the northern management area. During the summer 2016 there 100-120 cattle located in the northern management area.

Table 5. Summary of cattle ownership, cattle numbers, types of operation and dates cattle were present in or adjacent to the Northern Management Area during 2016.

Ownership and Turn-out dates for the Northern Management Area					
Owner	**Zone**	**No. Cattle**	**Class**	**On-date**	**Off-date**
JT	GB	23	pairs	year-round	n/a
Bridger Cunningham	GB	60/6	pairs/bulls	June 24	Oct 1
Cinnabar Basin	GB	22	pairs	June 20	Oct 15
Yellowstone Cattle Co	3	100	pairs	May 21	Oct 14
B-Bar	3	150	yearlings	June 15	Nov 15
Anderson Ranch	3	92	pairs	July 1	Sep 1
West Creek Ranch	3	100	pairs	June 1	Nov 1

Table 6. Summary of cattle ownership, cattle numbers, types of operation and dates cattle were present in or adjacent to the Western Management Area during 2016.

Ownership and Turn-out dates for the Western Management Area						
Property Owner	**Livestock Owner**	**Zone**	**Date in**	**No. Cattle**	**Class**	**Date out**
SR—Red Creek Ranch	BM—Reed Point, MT	2	Jun 20	200/4	Pairs/Bulls	Oct 17
PP—Deep Well Ranch	LM—Twin Bridges, MT	3	Jun 15	320/10	Pairs/Bulls	Nov 3
LD—Quarter Circle JK	CC/BF—Cameron, MT	3	Jul 1	22/1	Pairs/Bulls	
USFS—South Fork Allotment	CC/BF—Cameron, MT	3	Jul 1	11/1	Pairs/Bulls	
USFS—Watkins Cr. Allotment	CC/BF—Cameron, MT	3	Jul 1	55/4	Pairs/Bulls	

There were no brucellosis outbreaks in livestock in the Gardiner or Hebgen basins during November 1, 2015 through October 31, 2016.

Post-winter Status and Trends

A total of 552 bison were removed during winter 2016 operations. A total of 384 bison were removed through hunting including 360 harvested in the northern management area and 24 harvested in the western management area. An additional 150 animals were caught at the Stephen's Creek facility. Of these 101 were shipped to slaughter and 49 remained at Stephen's Creek. No animals were shipped for research purposes this year. In addition to these removals the park service euthanized 18 animals that were wounded by hunters but had returned to the park; there may be as many as double that number that were wounded but not found immediately by the park service. Following calving in spring 2016 the total bison population was estimated at about 5,500 animals. Thus, removals of bison in winter 2016 were not sufficient to lead to a population decrease. Populations of bison remained well above the 3,000 animals recommended by IBMP.

Human Safety and Property Damage

There were three people injured by bison in Yellowstone National Park during summer 2016 due to people approaching too close, primarily for photographs. There were 10 vehicle collisions with bison in the park during November 1, 2015 through October 31, 2016.

West Yellowstone: There were several bison vehicle collisions on Highway 191 resulting in damage to vehicles during this past year. Additional meetings and discussions with Montana Department of Transportation have occurred to explore possible mitigation measures that could be put in place on this stretch of road. FWP and DOL responded to one private property/livestock complaint regarding a bull bison near horses along the South Fork of the Madison. A state hunter was pulled from the bison roster. The bull bison moved back into Yellowstone National Park on his own. FWP received several requests for information on fencing assistance which were passed onto the Greater Yellowstone Coalition. FWP also received and responded to approximately six private property owner's complaints that bison were being hazed from private property during the hunt.

Gardiner: There were no reported bison vehicle collisions with in the Gardiner basin this past year. FWP did take one proactive hazing of 22 head of bison from highway 89 back across the Yellowstone River. FWP responded to numerous (10) instances of private property complaints and hazed bison from those properties in each instance. Numbers of bison ranged from (1 – 37). FWP responded to three instances of public safety. FWP hazed 30 bison away from the high school football field. FWP also lethally removed one bull bison located in Cooke City that did not respond to hazing efforts and was deemed a public safety risk. FWP responded to numerous requests to lethally remove bison that were crippled during the course of the hunt.

Habitat Assessments and Enhancement

The National Park Service is investigating grazing and production throughout the range that Yellowstone bison distribute, including under high bison abundance on the Lamar Valley and adjacent lower elevation areas during summer. The objectives of the study are to (1) determine the effect of ungulate grazing on aboveground production and standing biomass available at the

end of the growing season on seasonal ranges used by bison; (2) identify whether the Lamar Valley can withstand the more recent high level of grazing intensity; and (3) determine whether ungulate movements are linked to vegetation phenology. During 2012 to 2016, consumption of aboveground biomass exceeded 70% in some areas, yet gross annual production was higher compared to areas where grazing was excluded. Bison repeatedly grazed the same areas on summer ranges such that aboveground standing biomass remaining at the end of summer was approximately 10% of what was available in areas where grazing was excluded – raising concerns over whether bison are consuming such high proportion of the grassland that it limits their effective use of the traditional wintering area for migratory ungulates.

Research and Surveillance

Analyses by geneticists at Texas A & M University identified 10 different mitochondrial DNA haplotypes in 25 bison randomly selected from central and northern Yellowstone with a haplotype diversity of 0.78, indicating a healthy, diverse population. There was no sign of population subdivision based on mitochondrial DNA, but haplotypes indicated two independent lineages from the endemic bison originally in central Yellowstone and the bison introduced into northern Yellowstone from northwestern Montana. The relative frequencies of these two lineages do not show any significant changes over the last century, suggesting there are no strong negative selective forces influencing mitochondrial haplotype frequencies Forgacs D, Wallen RL, Dobson LK, Derr JN (2016) Mitochondrial Genome Analysis Reveals Historical Lineages in Yellowstone Bison. PLOS ONE 11(11): e0166081. doi: 10.1371/journal.pone.0166081
Scientists analyzed a genomic dataset of Brucella abortus, the bacteria that causes brucellosis, which spanned thirty years and included samples from cattle, bison, and elk. The study examined the evolution, cross-species transmission history and spread of the disease.
Results indicate five genetically distinct strains of B. abortus in the GYE that are likely due to historic cattle introductions. Four out of five strains are now primarily associated with elk and originate from the Wyoming feeding grounds, where state and federal land managers provide feed for elk in winter. Two of these elk-associated strains have spread at about 4-8 kilometers per year and elk are the most likely source of current brucellosis outbreaks in livestock. The paper is entitled: "Genomics Reveals Historic and Contemporary Transmission Dynamics of a Bacterial Disease among Wildlife and Livestock" by Pauline Kamath, Jeffrey Foster, Kevin P. Drees, Gordon Luikart, Christine Quance, Neil J. Anderson, P. Ryan Clarke, Eric K. Cole, Mark Drew, William H. Edwards, Jack C. Rhyan, John J. Treanor, Rick Wallen, Patrick J. White, Suelee Robbe-Austerman, and Paul Cross [Paper #NCOMMS-15-17513B]

The Custer Gallatin National Forest, in cooperation with Montana State University, undertook a habitat baseline study in Gardiner Basin in 2015 and this is on-going in 2016, with plans to replicate this type of analysis on Horse Butte in the Hebgen Basin in 2017-2018. The work included reconstructing historical conditions from past range studies and establishing soil and vegetation plots stratified by slope, aspect, elevation, lifeform, and geology. The objective of establishing the baseline is to be able to detect a 20% change in conditions with 80% accuracy. Data analysis from 2015 (Marlow, unpublished data) showed that range conditions are less than ideal, with most of the sites having 33-45% bare ground, which is between low-

moderate erosion potential. The study also found that there is low species richness (19 species versus 65 suggested from the literature for this range type), which may be suggestive of low ecosystem resilience. However, no conclusions about trend are possible at this point, and it could be that the range condition is heading in a positive direction because of the reduction in elk foraging due to the dramatic decline in the Northern Range elk herd.

During 2016, Colorado State University (CSU) continued to work to develop methods to mitigate the disease brucellosis in bison using assisted reproductive technologies. Major accomplishments included the creation and preservation of 133 embryos harvested from Yellowstone bison sent to slaughter. Embryos were distributed to bison at CSU, the Bronx Zoo, and the Minnesota Zoo.

Landowner Engagement

The bison coexistence fencing project; a joint effort between Montana Fish, Wildlife & Parks (FWP), Natural Resources Defense Council, Greater Yellowstone Coalition, Defenders of Wildlife, and the Sierra Club; completed 4 projects as of August 2016 and had 8 more lined up for the rest of the season.

Education and Outreach

MT FWP worked with YNP to begin work on a new bison educational pamphlet; this one focuses on co-existence strategies for living with bison. It is still in the draft stages, and the agencies are looking for input and comments from other partners.

Stakeholder and Public Engagement

The IBMP held the following public meetings (meeting notes are available at <ibmp.info/meetings.php>):

- November 19, 2015 held in Pray, Montana at Chico Hot Springs – The main topics of discussion were concerns and options for the upcoming hunt season including a presentation by the tribal treaty hunt subcommittee; discussion of the 2015-2016 Winter Operations plan; research presentation by Dr. Jennifer Barfield from Colorado State University on embryo transfer in bison; and updates from the partners.
- April 6, 2016 held in West Yellowstone, Montana – The main topics of discussion were updating the adaptive management agreement and winter operations plan to meet the Governor's Environmental Assessment (EA) decision on year-round tolerance; update on winter operations; a presentation by Aly Courtemanch and Ben Wise from Wyoming Game and Fish about the history and management of the Jackson, WY bison herd; update from Dr. Clayton Marlow from Montana State University on the habitat assessment research ongoing in the Gardiner Basin; a presentation by Peter Metcalf of research regarding perceptions of bison and bison management in the Greater Yellowstone area; and partner updates.
- August 3, 2016 in Bozeman, Montana – The main topics of discussion were proposed changes for the 2017 winter operations plan; presentation of topics discussed at the May

hunt meeting in Missoula, MT; a summary of operations from 2016; a discussion about shipping live bison for research purposes; a presentation by Dr. Angela Brennan about the spread of brucellosis in elk and livestock; a presentation by Pete Husby about the state of the ecology and habitat in the northern range; and routine partner updates.

A state of Montana and tribal treaty bison hunt meeting was held in Missoula, Montana on May 25, 2016 to affirm hunt goals, discuss issues and perspectives, discuss population management goals, and plan for future harvests. Representatives from the Forest Service and National Park Service also attended the meeting. Issues that were discussed included safety concerns especially around Beattie Gulch, the increased concentration of hunters given the week-on/week-off schedule, the need to improve communications, and crowding in the field. Recommendations suggested to alleviate these issues included returning to a continuous hunting schedule, starting capture operations at Stephen's Creek earlier and continuing throughout the hunt season, having all law enforcement in the field on the same radio frequency, use of a flag or other signal to notify hunters when there are active hunters in the field, and continuing use of the "clean zone" in the Beattie Gulch area. Representatives of the IBMP agencies and treaty tribes agreed to initiate weekly coordination phone calls during future hunts.

Adaptive Management Adjustments

The IBMP partners agreed to changes to the adaptive management protocols to reflect the changes to year-round tolerance zones based on the Governor of Montana's EA decision of December 22, 2015. All adaptive management documents can be found at <ibmp.info/adaptivemgmt.php>

Environmental Compliance, Legislation, and Litigation

On January 13, 2016, the National Park Service released an environmental assessment (EA) with three alternatives for *The Use of Quarantine to Identify Brucellosis-free Yellowstone Bison for Relocation Elsewhere*. Public comments were accepted until February 29, 2016. The purpose of quarantine is to (1) augment or establish new conservation and cultural herds of plains bison, (2) enhance the culture and nutrition of Native Americans, and (3) reduce shipments of bison to meat processing plants to limit population growth. The preferred alternative was to establish a quarantine program and send bison testing negative for brucellosis exposure to an existing quarantine facility on the Fort Peck Reservation for further testing pursuant to criteria in the EA. A decision regarding whether to implement a quarantine program is pending.

The National Park Service and the State of Montana are conducting a public planning process to develop an Environmental Impact Statement (EIS) for a new bison management plan to replace the IBMP. Cooperating agencies include the Forest Service, state of Idaho, Confederated Salish and Kootenai Tribes, Nez Perce Tribe, Shoshone-Bannock Tribes, Confederated Tribes of the Umatilla Indian Reservation, and the Inter-Tribal Buffalo Council. The EIS will focus on management alternatives that aim to conserve a wild and migratory population of Yellowstone-area bison, while minimizing brucellosis transmission between bison and livestock to the extent

practicable. A range of six preliminary draft alternative concepts were developed with input from cooperating agencies. The preliminary alternatives primarily differ in terms of bison abundance, bison tolerance outside the park, and the tools that could be used to manage brucellosis transmission risk from bison to cattle. A scoping report was released on November 19, 2015 with a summary of public comments and an in-depth look with representative quotes. An alternative development workshop was held by the co-lead agencies to further refine draft alternatives. Additional work remains before these draft alternatives will be presented to the cooperating agencies for input. Afterwards, the co-leads, in coordination with the cooperating agencies, will begin preparation of the draft EIS. The co-leads have hired the Udall Foundation, U.S. Institute on Environmental Conflict Resolution, to provide third-party, neutral facilitation and engagement services to help the partners work through differences in perspectives and produce a better plan.

Christopher Ketcham and Stephany Seay v. National Park Service et al., Wyoming Seventh Judicial District, Casper, Wyoming, Case No. 16-CV-00017-SWS (2016): Plaintiffs sought to enjoin the National Park Service from engaging in bison culling activities, arguing they have a First Amendment right to view the bison cull and that viewing restrictions of culling activities are content-based, impermissible restrictions of a traditional public forum. The Plaintiffs' motion for preliminary injunction was denied because they did not demonstrate a clear and unequivocal right to access and observe bison culling activities, nor did they make a strong showing of the likelihood of success on the merits. Also, the Plaintiffs motion to argue their claim as a First Amendment right under the U.S. Constitution was rejected, with the Court holding the action would appropriately be analyzed under the Administrative Procedures Act. Thereafter, the Plaintiffs filed for review of the Defendant's actions under the Administrative Procedures Act, claiming there has been no "final agency action" with regard to permitting or denying reasonable public access to observe the bison culling activities. No hearing has been set.

Buffalo Field Campaign et al. v. U.S. Fish and Wildlife Service et al., United States District Court for the District of Columbia, Case No. 1:16-cv-01909-CRC (2016): Plaintiffs brought action over the U.S. Fish and Wildlife Service's decision not to undertake a status review of the potential listing of a distinct population segment of Yellowstone-area bison as threatened or endangered. The Plaintiffs maintain the curtailment of range for Yellowstone bison, the last remaining free-roaming plains bison without evident of hybridization with cattle, by nearly 85% has already resulted in the population being at risk of extinction. They also maintain the continued culling of Yellowstone bison may degrade genetic viability through the loss of genetic heterogeneity and loss of ability to migrate. The Plaintiffs suggest the central and northern breeding herds, which they identify as subpopulations, should each have an effective population size of 1,000 (census of 2,000 to 3,000) to avoid inbreeding depression. No hearing has been set.

APPENDIX A

MANAGEMENT OBJECTIVES AND ACTIONS (2016 ADAPTIVE MANAGEMENT PLAN)

The most recent versions of the Adaptive Management Plan can be found in the Adaptive Management Section of the IBMP website. < http://ibmp.info/adaptivemgmt.php>

APPENDIX B

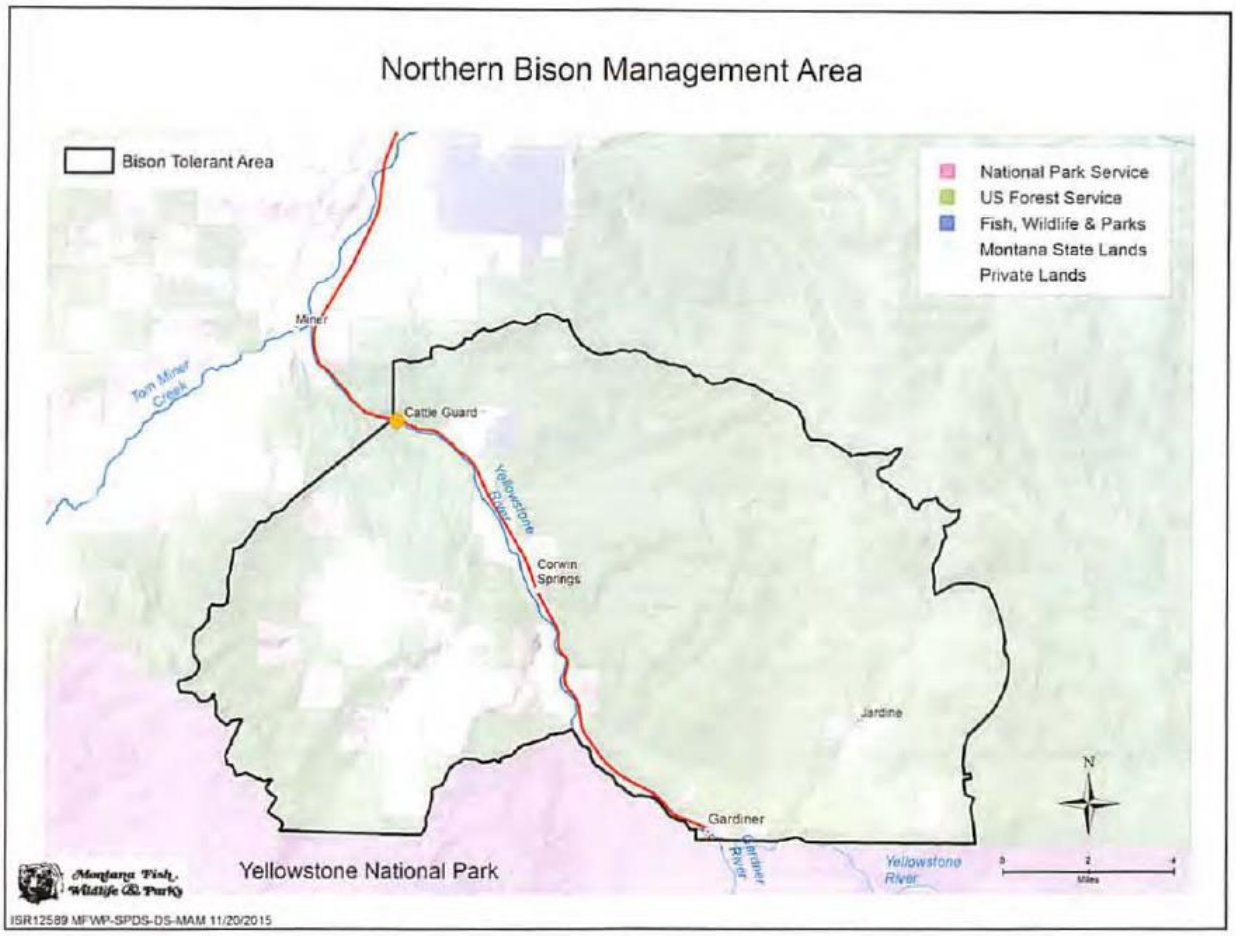
CITIZENS WORKING GROUP RECOMMENDATIONS (2011)

All of the documents pertaining to the Citizens Working Group can be found in the library section of the IBMP website < http://ibmp.info/library.php>

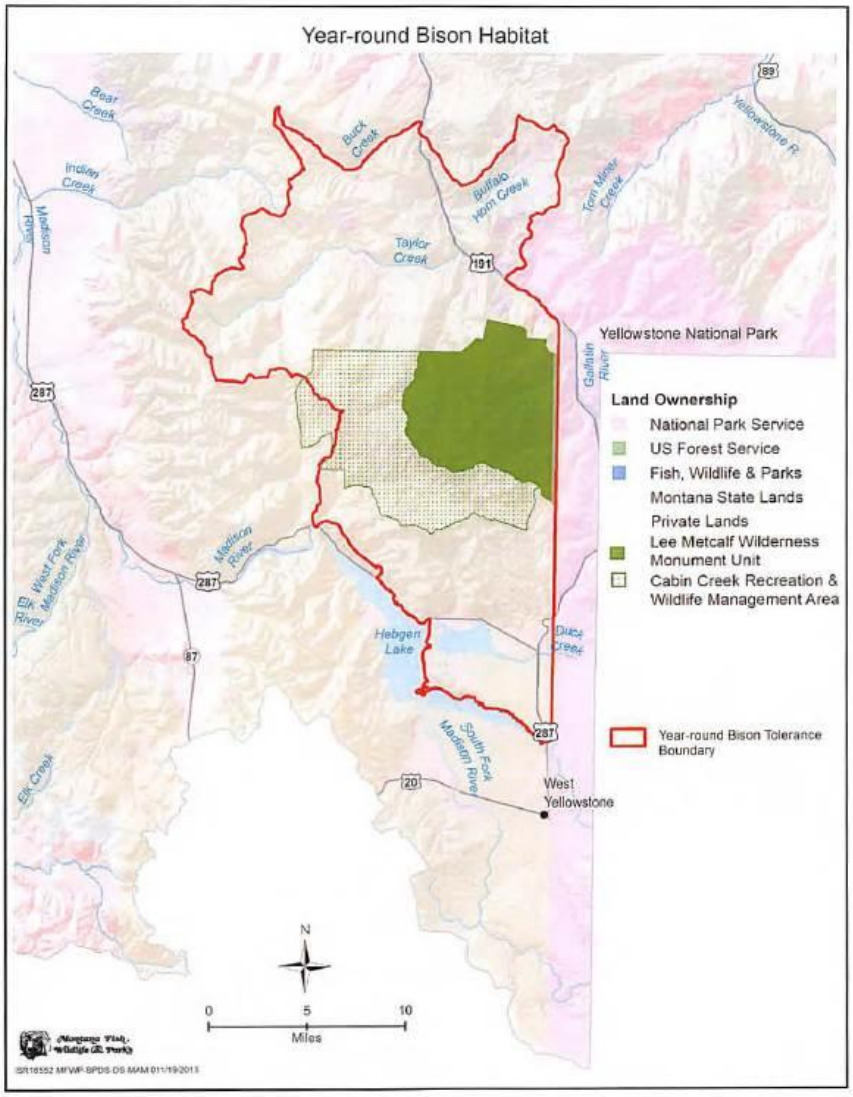
The recommendations from the Citizens Working Group can be found at < http://ibmp.info/Library/20111130/Final%20CWG%20recommendations_formatted2.pdf>

APPENDIX C

NORTHERN AND WESTERN MANAGEMENT AREA MAPS



Northern management area for the Interagency Bison Management Plan as adjusted during 2012.



Western management area for the Interagency Bison Management Plan.