



Memorandum

October 6, 2012

To: Administrative Record

From: Interagency Bison Management Plan Agencies

Subject: Operating Procedures for the Interagency Bison Management Plan

APPROVAL

Animal and Plant Health Inspection Service, Western Regional Director	Date
Confederated Salish and Kootenai Tribes, Division Manager	Date
InterTribal Buffalo Council, President	Date
Montana Board of Livestock, Executive Officer	Date
Montana Fish, Wildlife, and Parks, Region 3 Supervisor	Date
Montana State Veterinarian	Date
National Park Service, Superintendent, Yellowstone National Park	Date
Nez Perce Tribe, Chairman	Date
U.S. Forest Service, Forest Supervisor, Gallatin National Forest	Date

Introduction

This document outlines the actions necessary to implement the Interagency Bison Management Plan (IBMP) as set forth in the federal and state Records of Decision signed in 2000 and modified by adaptive management adjustments in 2005, 2006, 2008, 2011, and 2012. Agencies involved with the IBMP include the Animal and Plant Health Inspection Service (APHIS), Confederated Salish and Kootenai Tribes (CSKT), InterTribal Buffalo Council (ITBC), Montana Department of Livestock (MDOL), Montana Department of Fish, Wildlife and Parks (MFWP), National Park Service (NPS), Nez Perce Tribe (NPT), and U.S. Forest Service (USFS).

Operating procedures for the IBMP were originally developed in December 2002 and have been updated in November 2007 and 2009. The updated operating procedures outlined in this document will remain in effect until replaced by subsequent updates. All actions described in this document are consistent with the analyses of impacts included in the federal and state Final Environmental Impact Statements for the IBMP that were completed in 2000 to comply with the National and Montana Environmental Policy Acts.

Jurisdiction and Legal Mandates

The federal and state agencies agreed on a plan to manage bison in Yellowstone National Park and Montana as set forth in the IBMP and the associated Records of Decision. The NPS has lead responsibility for all bison management actions inside the park, while MDOL has lead responsibility outside the park. The NPS and MDOL may request assistance from the other IBMP agencies. Property damage issues on private lands will be the responsibility of MFWP. MDOL may assist upon request of MFWP. USFS law enforcement personnel will handle property damage and related violations on USFS lands. NPS staff will not routinely respond to property damage calls received from citizens at the Yellowstone Communications Center, unless a life threat or danger is reported.

USFS personnel will be responsible for federal resource-related violations on national forest system lands as defined under 36 CFR 261. When violations of state law occur on National Forest System lands, and upon request from MDOL through the Gallatin and/or Park County Sheriff's Offices, USFS law enforcement personnel will provide public safety assistance related to on-going hazing, capture, and removal operations for bison.

MFWP has primary responsibility regarding the public bison hunt in cooperation with MDOL as directed by State statute. The CSKT and NPT have responsibilities regarding their respective hunts of bison on certain federal lands in the Yellowstone area of Montana pursuant to treaties with the U.S. Government.

Media Relations/Public Information

Each agency will manage their media relations concerning bison management, with news releases or media contacts being handled by designated individuals. However, the IBMP agencies may also cooperatively represent and support management activities under this agreement with joint press releases and other associated media.

For all activities occurring within the boundaries of Yellowstone National Park, the NPS will take lead responsibility and coordinate media information. For information on bison management procedures within the State of Montana, the MDOL will take lead responsibility for coordinating media information on all other issues. The CSKT and NPT will take lead responsibility for information on bison management procedures within tribal lands.

MFWP will take the lead responsibility for issues regarding the Montana bison hunt, while the CSKT and NPT will coordinate media information on their respective bison hunts. MFWP will take the lead responsibility for issues regarding bison that have completed the quarantine feasibility study, while APHIS will coordinate media information on contraception research.

Organization

The agencies expect to cooperatively support bison management activities such as hazing, shooting, capture, research, and monitoring operations for bison (Table 1). However, each agency does not provide support for every management operation. The level of participation and support by agency personnel in bison management actions as set forth in the IBMP remains subject to each agency's supervision, jurisdiction, specific authority, and administrative oversight.

An Incident Command System will be used to implement actions/operations associated with the IBMP within and outside the park. Bison management operations within the park will be under the authority of the Chief Ranger (or designee) and positions in the command structure will be filled, as necessary, to ensure effective mission accomplishment. Bison management operations occurring outside the park will be under the direction of an on-site Operations Chief from MDOL (or designee). The NPS will not participate in bison operations outside of the park unless an on-site MDOL Operations Chief (or designee) is present, except for life threatening emergencies or eminent bison-livestock comingling.

Under a unified command structure, each agency involved may designate an Incident Commander to represent that agency in command decisions. However, at no time will there be more than one Operations Chief, regardless of the number of Incident Commanders.

Managing Bison Abundance and Brucellosis Prevalence

During June and early July, the NPS will conduct counts and age and gender classifications of bison in the central and northern breeding herds. The NPS will use long-term weather forecasts and population and migration models to predict herd abundances and compositions at the end of the upcoming winter, and the magnitude of numbers of bison migrating to park boundaries. They will establish annual removal objectives for bison based on abundance, disease, distribution, and demographic (age, herd, sex) goals (see Appendix 1 for winter 2013). These analyses and objectives will be shared with the other IBMP agencies for their consideration (e.g., refining harvest quotas) and comment. As winter progresses, the NPS will use aerial and ground counts, snow model projections for the park, and revised long-term weather forecasts to refine predictions of the timing and magnitude of trans-boundary movements by bison and support decision-making during winter operations.

A variety of management tools will be used to reduce bison numbers as necessary, including (1) public and treaty harvests in Montana, (2) selective culling (shipment to slaughter) at boundary capture facilities to reduce the proportion of infectious bison, (3) selective culling (shooting, shipment to slaughter) in Montana to prevent brucellosis transmission to nearby livestock or due to imminent threats to human safety or property damage concerns, (4) transfer of bison to research facilities, and, perhaps eventually, (5) transfer of bison to American Indian tribes or other organizations for quarantine and eventual release.

The NPS will monitor bison abundance through the winter and compile information on hunter harvest, management culls, predation off-take, and winter-kill. If abundance estimates decrease to 2,300 bison, then the IBMP agencies will increase the implementation of non-lethal management measures. If abundance estimates decrease to 2,100 bison, then the agencies will cease lethal brucellosis risk management and hunting of bison and shift to non-lethal management measures.

Monitoring and Reporting of Bison Movements and Management Activities

Timely monitoring and reporting of bison sightings and locations is necessary to facilitate operations managing the distribution and abundance of bison on winter ranges outside Yellowstone National Park. Inside the park, the NPS has the lead responsibility for monitoring the prevailing environmental conditions and the timing, numbers, and locations of bison movements. When appropriate and feasible during winter and spring, the NPS will conduct aerial and ground surveys of the number and distribution of bison throughout the park and nearby areas of Montana. This information will be used to determine migration routes and timeframes, and predict future movements of bison to the park boundary and into areas of Montana where

they may be hunted. The NPS will annually document the number of bison moving into the boundary areas and the number and type of management activities needed to manage bison distribution inside the park.

The MDOL will have the lead responsibility for monitoring environmental conditions and bison movements outside the park, with assistance from MFWP. When appropriate and feasible, these agencies will conduct ground surveys of the number and distribution of bison in the Gardiner and Hebgen basins outside the park. The MDOL will annually document the number of bison using these areas, the number of bison that attempt to leave agreed-upon tolerance areas, and the number and type of management activities needed to manage bison distribution.

MFWP will 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. They will annually document the numbers, timing, and types of reported incidents for human safety and property damage related to bison, with support from MDOL. The USFS will annually track the status (e.g., number of acres, location, etc.) of active and inactive grazing allotments on public lands. MDOL will work with livestock producers to protect against disease transmission from bison to cattle. MDOL will work with livestock producers with regards to vaccination, testing, and livestock operation changes.

The NPS and MDOL will communicate information on environmental conditions and bison movements to other IBMP agencies in a timely manner. This information will be used to prepare for and implement management actions, as well as to gain experience on how bison use habitat in and outside of Yellowstone National Park. The IBMP agencies may agree to additional monitoring provisions on a case-by-case basis. During the winter season, the lead agency for the IBMP¹ will prepare bi-weekly reports that summarize inter-agency bison monitoring, hazing, capture, vaccination, shooting, and other management actions within these operating procedures and the IBMP, which will then be promptly shared with all IBMP agencies and eventually posted on the IBMP website (ibmp.info).

Bison Distribution

Bison numbers and their distribution outside Yellowstone National Park are under the authority and discretion of the state veterinarian, and will be consistent with adaptive management adjustments to the IBMP. MDOL and MFWP maintain jurisdiction for management of bison outside Yellowstone National Park in Montana. Subject to the criteria set forth in the IBMP, and as modified by adaptive management adjustments in 2005, 2006, 2008, 2011, and 2012, the distribution of bison outside Yellowstone National Park during winter and spring will be limited

¹ The lead agency is rotated annually. APHIS will serve as the lead agency from November 1, 2012 through October 31, 2013. The CSKT, ITBC, and NPT will collectively serve as the lead agency from November 1, 2013 through October 31, 2014.

to certain lands adjacent to the park in the Hebgen and Gardiner basin areas (as described in the following paragraphs). Unlimited numbers of untested bison will be allowed to occupy the Eagle Creek/Bear Creek area, Cabin Creek Recreation and Wildlife Management Area, and the Monument Mountain Unit of the Lee Metcalf Wilderness year-round without agency interference.

In the north management area, bison will be allowed on national forest system lands and other lands north of the park boundary and south of Yankee Jim Canyon (see attached map) each winter and spring, subject to end-of-winter hazing back into Yellowstone National Park by May 1. At the discretion of the state veterinarian, the actual date may be earlier or later based on prevailing conditions (e.g., snow depth, vegetation green-up). The extent of haze back within Yellowstone National Park remains at the discretion of NPS. Bison will 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. Bison attempting to enter these areas will be hazed to other available habitat within the tolerance area, captured, or if necessary, lethally removed.

In the west management area, untested bison will be allowed to migrate onto and occupy the Horse Butte peninsula (between the Madison and Grayling Creek arms of Hebgen Lake) and the Flats (the area east of South Fork Madison River, south of the Madison Arm, and west of Highway 191) when cattle are no longer present (see attached map), subject to end-of-winter hazing back into the park with a target date of May 15. At the discretion of the state veterinarian, the actual date may be earlier or later based on prevailing conditions. The extent of haze back within Yellowstone National Park remains at the discretion of NPS. During November 15 through April 15, up to 30 female bison (or a mixed group of 30 males and females) will be allowed on the Madison Arm. After April 15, up to 30 female/mixed group bison will be allowed east of the Madison Arm Resort. After May 15, no female/mixed group bison will be allowed on the Madison Arm. During November 15 through May 15, up to 40 female bison (or a mixed group of 40 males and females) will be allowed north of Duck Creek and east of Corey Springs. Groups of female/mixed bison will not be allowed north of the Narrows, west of Corey Springs, or south and west of the Zone 2 boundary. Bison attempting to enter these areas will be hazed to the Horse Butte peninsula, other habitat, captured, or if deemed appropriate or necessary, lethally removed.

Hunting Bison

Hunting of bison provides sporting opportunities and cultural and spiritual engagement with subsistence food gathering conducted by our ancestors. Hunting contributes to the objectives of the IBMP by providing a tool for managing the abundance and distribution of bison.

Bison will be allowed to occupy National Forest System lands and other areas determined suitable within the designated northern and western tolerance areas of Montana to increase public and tribal hunting opportunities. Each year, MFWP sets a quota for state-licensed hunters, with permits allocated between two hunting districts in the Gardiner and West Yellowstone areas. Also, four American Indian tribes (CSKT, NPT, Confederated Tribes of the Umatilla Reservation, and Shoshone-Bannock) have treaty rights to hunt bison on certain federal lands in the Yellowstone area of Montana under treaties with the U.S. Government.

Each summer, MFWP will coordinate with the American Indian tribes regarding bison removal objectives, permits, and harvests. MFWP and the recognized treaty hunt tribes will enforce regulations and permit requirements for their hunters by sending enforcement officers to oversee hunts.

State-licensed hunting will primarily be permitted from November 15 through February 15, with some additional late-season harvests of bull bison. Hunting will occur on public lands and private lands with permission of the landowner outside Yellowstone National Park in agreed-upon tolerance areas in and near the Hebgen and Gardiner basins. The MFWP Commission will enact a 24-hour notice of hunting closure, when determined to be necessary, to implement other management actions such as hazing, capture, or lethal removal. Hazing bison wholly within areas closed to hunting will not require a hunt cessation unless deemed necessary to ensure the safety of agency staff.

MFWP, CSKT, and NPT will annually document the number of bison (by age and sex) harvested by public and tribal hunters in the northern and western management areas. MFWP and the MDOL will conduct an evaluation of the public bison hunt at conclusion of season and propose necessary adjustments to future bison hunts based on conclusions derived from the evaluation. The CSKT and NPT will conduct similar assessments of their treaty hunts. MFWP and the USFS will continue to explore appropriate new areas where bison are tolerated that could accommodate additional bison hunting opportunities.

Hazing Bison

Hazing is used to manage the distribution of bison by preventing dispersal beyond conservation area boundaries. It is also used to prevent the shedding of *Brucella* bacteria by bison on ranges that are or will be soon occupied by cattle.

Hazing may be used to move bison back into the park from outside the park; move bison out of areas where they are not tolerated; move bison away from areas where they are causing safety or property issues; and move bison further into the park away from the park boundary to achieve the risk management objectives of the IBMP. Hazing efforts will be done in the least intrusive manner necessary to accomplish the management objective. Hazing may be accomplished by

agency personnel using ATVs, snowmobiles, on foot, horseback, and/or helicopters, and may include the use of cracker shells or rubber bullets. These methods may be used singly or in combination, subject to applicable restrictions. The safety of personnel will be the primary consideration in any hazing operation and at no time will the safety of personnel be compromised.

The use of a helicopter for hazing bison will be at the discretion of the state veterinarian, with consideration for personnel, bison, and other wildlife. The MDOL may, at times, haze bison off of national forest system lands and continue helicopter hazing operations that started in Montana into Yellowstone National Park where the bison will be left or picked up by NPS personnel on the ground for continued movement. The NPS has asked the MDOL during pre-operations briefings to follow U.S. Department of Interior aviation regulations and policies and wilderness regulations while operating within the boundary of the park during these operations. Also, the NPS and the USFS have sought MDOL's cooperation in avoiding flying the helicopter near areas with active eagle nests and wolf dens, as well as observed bears and bear management areas. Furthermore, NPS rangers may at times ask the MDOL to cease helicopter hazing operations within Yellowstone National Park to allow bison to rest.

MFWP and MDOL will make efforts to integrate the risk management interests of the IBMP with recognized treaty tribal hunting on unoccupied federal lands outside the park. Hazing of bison will be minimized in these areas during the hunting seasons, but may at times be necessary to maintain separation with cattle, ensure human safety, prevent property damage, or prevent the movement of bison outside of agreed-upon tolerance areas or onto private property where bison are not desired by the landowner. MFWP will take the lead responsibility in communication on these mutual interests with the tribes. Efforts will be made to integrate tribal interests, along with public and personnel safety, during all hazing operations.

The NPS is the lead agency to implement hazing within Yellowstone National Park and the Chief Ranger (or designee) will determine the timing, location, and duration of hazing. MDOL is the lead agency to implement hazing outside of Yellowstone National Park in Montana with assistance from MFWP. The NPS and MDOL may request assistance with hazing from other IBMP agencies.

The IBMP agencies will coordinate in early April to compile and update knowledge on bison movements and distribution, snow conditions, vegetation green-up, stream flow in the Madison River, logistical issues (e.g., staff, horse, and helicopter availability; traffic control; visitation and road closures), and cattle turn-on dates and locations. The IBMP agencies will assess this information and discuss a step-wise, integrated plan for hazing bison from the northern management area (Gardiner basin) back into Yellowstone National Park by a target date of May 1. The agencies will also discuss the timing and tactics for hazing bison from the western management area (Hebgen basin) back into the park by a target date of May 15. While

maintaining a focus on brucellosis risk management, end-of-the-winter haze-back operations could occur earlier than the target dates if forage and other conditions at higher elevations in Yellowstone National Park are suitable or later if conditions preclude safe and effective movements of bison to habitats that will hold/sustain them (e.g., adequate snow melt or vegetation green-up), at the discretion of the state veterinarian. The extent of haze back within Yellowstone National Park remains at the discretion of NPS.

To reduce the need for multiple hazing operations, MFWP will take the lead in exploring private land management options, including conservation easements, livestock grazing plans, and strategic fencing to separate livestock and bison as they arise or are proposed by individual landowners. The agencies will evaluate whether strategic fencing is appropriate and, if so, at what locations along bison migration corridors to the South Fork, The Narrows, or on the Madison Arm of Hebgen Lake. They will also evaluate strategic fencing and other land management options to prevent bison-cattle mingling and property damage from bison in the Gardiner basin.

Capturing Bison

Bison are captured to reduce the number of brucellosis-infectious bison, reduce the overall population abundance, or prevent dispersal beyond conservation area boundaries. Bison may be captured (1) for disease testing and vaccination, (2) because they have repeatedly resisted hazing to keep them within agreed-upon tolerance areas, or (3) because there are already large numbers of bison in the tolerance areas and additional bison could induce movements into no-tolerance areas or cause human safety and property damage issues. If possible, the capture of bison will occur after general hunting seasons end in mid-February. Bison may be moved into capture facilities by hazing and/or through enticement with weed-free hay.

The NPS is the lead agency to implement bison capture within Yellowstone National Park and will maintain a capture and handling facility at Stephens Creek in the northern management area. The NPS will be responsible for capturing, processing, and caring for the welfare of bison in and around the Stephens Creek area, but may request assistance with capture and operating facilities from the other IBMP agencies. The NPS will conduct brucellosis and pregnancy testing, with assistance from MDOL, APHIS, or contract veterinarians.

The MDOL is the lead agency to implement bison capture outside the park and could maintain or erect one or more capture and handling facilities. The MDOL will be responsible for capturing and assisting with processing and sorting bison outside the park, but may request assistance with capture and operating facilities from the other IBMP agencies. MDOL or federal veterinarians may conduct brucellosis and pregnancy testing, though it may be necessary to use one or more contract veterinary practitioners on some occasions.

Brucellosis Suppression

Any strategy aimed at reducing brucellosis infection in Yellowstone bison would benefit from the identification and removal of actively infected bison, while retaining negative and possibly likely recovered bison and vaccinating all eligible bison to increase herd immunity. Herd immunity represents the portion of individuals in a population that have developed some level of resistance to the disease. This immune protection is typically gained through infection and recovery (i.e., clearing of the bacteria) or through vaccination which mimics this process without individuals becoming infectious. The effectiveness of increasing herd immunity through vaccination is enhanced by limiting the number of bison in the population that maintain an active brucellosis infection.

Unfortunately, there is no rapid, reliable live animal test for active brucellosis infection (i.e., live bacteria in tissues) in bison. Serologic tests identify exposure (i.e., antibodies circulating in blood) to *Brucella abortus*, but antibodies are long-lived and most bison older than 6 years that test-positive for low levels of antibodies are unlikely to shed the *Brucella* organism. These animals may have acquired some level of immunity to subsequent exposure that could slow down the spread of infection within the population. Thus, an effective strategy for reducing brucellosis transmission may be to target females of all ages for vaccination and retain older seropositive females with relatively low levels of antibodies in the population, while culling older seropositive females with relatively high levels of antibodies and reproductively active, 2¾ to 5 year old females that are seropositive and likely infectious.

Recent analyses indicate that blood antibodies specific to *Brucella abortus* are positively associated with active brucellosis infection, with the relationship most pronounced in older bison. The highly sensitive Fluorescent Polarization Assay (FPA) provides quantitative diagnostic results that can be used in conjunction with bison age to identify actively infected animals with a high level of certainty. Using the FPA to estimate active infection works best for older bison (5+ with all permanent teeth), with a net value greater than 150 mP (above negative control) for female bison 3+ years old suggesting active infection. Most bison less than 3 years old that test seropositive are also culture positive, with live bacteria in their tissues. A high net FPA value for this age group would be greater than 50 mP (above negative control), which might be used in circumstances when there are more seropositive bison less than 3 years old than can be removed from the population due to conservation concerns. If, for whatever reason, it is necessary to retain pregnant, likely infectious bison (rather than shipping them to slaughter), then NPS or MDOL staff will attempt to separate them from susceptible bison and hold them in captivity until they have calved.

MDOL and NPS, with assistance from APHIS, may conduct trap-side serologic testing of all captured female bison (aged calf to adult) and use FPA results to identify bison that are likely infectious based on age and FPA antibody levels. These bison will then be removed from the

population up to the removal objectives for that year. Seropositive bison that have a lower risk of being actively infected (based on age specific antibody levels) will be retained in the population. The FPA is sensitive to variations in temperature and vibration. Thus, tests will be run at the Yellowstone Wildlife Health Program laboratory in the Heritage Resource Center, when possible, with an alternate site in the trap-side building at the Stephens Creek facility. When bison are tested for brucellosis at a capture facility, back tags and/or other identification will be used to mark and separate bison selected for removal. All tested bison will be marked with a small, brown, metal ear tag and/or implanted subcutaneously in the ear with passive integrated transponder (PIT) tag. These nearly permanent tags are activated by a handheld scanner which detects the unique alphanumeric code of each tag, thereby providing a long-term, reliable form of individual identification.

Bison selected for removal from the population based on their FPA results will be separated from other bison, as facilities permit, by sex, size, and age to prevent injury. All bison consigned to slaughter will be delivered to appropriate facilities as soon as practical after capture and processing. The use of FPA as an indicator of active brucellosis infection in bison improves as animals are tested closer to parturition. Thus, some infectious pregnant bison may be shipped to slaughter during the third trimester of pregnancy. The NPS has signed an agreement with the ITBC to provide them with bison for direct transfer to approved slaughter facilities and subsequent distribution of meat, hides, horns, and other bison parts to support tribal nutrition and culture. Similar agreements may be reached with American Indian tribes or other organizations in the future. The Secretary of the Interior is authorized in his discretion to dispose of surplus bison (16 USC 36) or destroy animals that may be detrimental to the use of parks, monuments, or reservations (16 USC 3).

Prior to the transfer, the NPS will notify the Governor of Montana's office, the State Veterinarian of Montana, and a local representative of APHIS of the pending transfer and arrange for inspectors to certify the transfer. The APHIS, ITBC, or MDOL will contact one or more slaughter establishments (based upon the size, number, and sex of the bison captured) to determine the number of bison each plant may be capable of handling on a particular day. The NPS with help from the other appropriate agencies will load all bison consigned to slaughter from the Stephens Creek facility into transportation vehicles. A local representative of the State of Montana and/or APHIS will certify the numbers, sexes, and age categories (e.g., calf, adult) of bison loaded and secured in each trailer. APHIS Veterinary Services Form 1-27 will be completed by these representatives for all shipments. Copies of the form will be provided to the NPS and the ITBC. The NPS will provide APHIS, the State Veterinarian of Montana, and the ITBC with the results of testing for brucellosis from each bison that is transferred. The ITBC will assume ownership of the bison at capture facilities or local quarantine facilities in or near Yellowstone National Park once the transfer is approved by the NPS and the bison are loaded and secured into trailers or other vehicles that the NPS and the ITBC agree are appropriate for

transporting bison to the intended destination(s). The NPS will provide the ITBC with documentation indicating that ITBC has ownership of the bison.

The bison will be transported by the ITBC in trailers that are owned or leased by the ITBC directly to their destination as agreed-upon by the NPS and the ITBC. As necessary, APHIS, MDOL, and the NPS will assist ITBC with arranging transport of bison to slaughter or providing appropriate personnel for security while animals are in transit. A meat inspection agency representative will certify that bison are delivered to slaughter facilities. Personnel from APHIS or the Montana Department of Livestock will certify that bison are delivered to quarantine facilities. Slaughter facilities will be notified of the passive integrated transponder (PIT) tags in bison prior to delivery. The collection of blood and tissue samples at slaughter establishments is an important part of brucellosis surveillance and will help validate/modify criteria for selective culling. Thus, NPS staff will coordinate with ITBC, MDOL, and APHIS to make a good faith effort to send some groups of bison to smaller, local slaughter facilities in Montana (e.g., Big Timber, Columbus) to facilitate obtaining samples of high quality. The APHIS, ITBC, NPS, and State of Montana will use their own respective funding sources to accomplish their respective tasks.

Bison at the Stephens Creek facility that are not consigned to slaughter may be temporarily held and released when winter weather moderates in spring or earlier to provide operational space and shorten confinement. All calf, yearling, and non-pregnant adult female bison released from the capture facility will be vaccinated for brucellosis via syringe with a safe vaccine (Strain RB51), regardless of their disease testing status (i.e., seropositive or seronegative).

Long-term decreases in seroprevalence will be difficult to achieve without vaccine protection for all age classes of females, including adults. However, animals vaccinated with *Brucella* vaccine should not be consumed within 21 days of vaccination, and the hunting season coincides with the opportunity to vaccinate adults during November through February. Thereafter, many females are in middle to late gestation when some studies suggest vaccination could induce some abortions. The NPS may conduct studies to evaluate these potential effects by vaccinating some adult females, including animals vaccinated as calves and yearlings that should therefore be less likely to abort. The NPS may also vaccinate and mark young bison less than 2 years old, and provide booster vaccinations to older bison during mid-gestation, to evaluate if these animals are less likely to subsequently have a vaccine-induced abortion. These studies may include vaccinating females during middle to late gestation with reduced dosages of vaccine to evaluate if that reduces the risk of abortions, but still stimulates protective immune responses.

Lethal Removal of Bison - Risk Management

The NPS is the lead agency to implement lethal removal operations within Yellowstone National Park, while the MDOL is the lead agency outside the park for risk management purposes.

MFWP is the lead agency for lethal removal of bison for private property and public safety reasons. The NPS, MDOL, and MFWP may request assistance from employees or personnel from other federal and/or state agencies. For example, assistance from the USFS may be requested for public safety purposes during removal operations in Montana. Inter-agency requests for assistance before a shooting operation occurs will be as timely as possible to plan for carcass salvage. When possible, lethal control officers will operate in teams (e.g., 2 teams with 2 persons per team, for a total of 4 persons).

All reasonable attempts will be made to salvage carcasses that result from management actions according to 81-2-120(2) MCA (Appendix 2) for human consumption or research purposes. The MDOL will be responsible for field slaughter, dress, and transport of bison carcasses that are removed outside the park, but may request assistance from other IBMP agencies. After veterinary inspection, carcasses that are deemed unfit for human consumption will be condemned. Indian tribal governments and/or charitable organizations would receive carcasses fit for human consumption for distribution through their social service system. Indian tribal organizations or their designees may receive the bison heads and hides. Bison carcasses, heads, and hides may also be sold as provided for in Montana law (MCA 81-2-120(3)). In addition, some bison carcasses may be designated for research purposes and transported to appropriate facilities.

The MDOL and the landowner shall determine whether to leave bison offal on-site on private land. Only designated agency personnel shall remove offal, fetuses, or stillborn calves. Every attempt will be made to remove offal from sites near residences or used for livestock operations when grizzly bears may be present to avoid human-bear conflict. All gravid uteruses and stillborn calves will be disposed.

Transfer of Surplus Bison

The Secretary of the Interior is authorized to ship surplus Yellowstone bison to other authorities (16 USC 1V § 36) and destroy animals that may be detrimental to the use of parks, monuments, or reservations (16 U.S.C. § 3). Some Yellowstone bison are infected with brucellosis, a non-native disease that induces abortions, reduces bison pregnancy rates, and poses a risk of transmission to cattle, which limits tolerance for migration of bison to essential low-elevation winter ranges in Montana and prevents relocations elsewhere to enhance conservation of the species. In light of this limited tolerance for migration of bison out of Yellowstone National Park, as well as the limited amount of winter range and forage for bison inside Yellowstone National Park and the need to manage and cull likely infectious bison, the NPS finds that there are surplus bison available for distribution and that there may be such surplus bison available from time to time for the foreseeable future.

The NPS will consider transferring some surplus Yellowstone bison to the ITBC or American

Indian Tribes for direct transport to slaughter facilities and subsequent distribution of meat and other products to support their nutrition and culture. To enhance conservation of the bison genome, the IBMP agencies will also work with the ITBC, American Indian tribes, and state animal health officials to develop suitable protocols and facilities for transferring brucellosis-free bison to tribal lands and/or establishing quarantine facilities on tribal lands and/or within the designated surveillance area for brucellosis, in accordance with applicable state (81-2-120 MCA), federal, and tribal codes.

All research activities conducted by the agencies will satisfy applicable permitting processes. The agencies will mutually keep each other informed of progress and results. The MDOL and APHIS will be responsible for the collection of blood and tissue samples from bison captured outside the park. Inside the park, the NPS will be responsible for collection of blood and tissue samples. These agencies may also collect blood and tissue samples from bison at slaughter facilities. Copies of the results of all analyses will be shared with the other IBMP agencies.

The NPS with assistance from APHIS and MFWP will evaluate operational quarantine as a method to provide a source of live, brucellosis-free bison for tribal governments and other requesting organizations. The NPS, MFWP, and APHIS will provide annual summaries of bison sent to quarantine and bison transported from quarantine to suitable restoration sites.

The NPS may provide 50 to 100 bison to APHIS for research regarding contraception at the quarantine pastures in Corwin Springs. Per NPS research permit conditions, these animals will not be returned to the park, but bison testing negative for brucellosis exposure at the end of the study will be considered brucellosis-free and used for conservation purposes. During the study, surplus bison (e.g., calves) testing negative for brucellosis may be moved into quarantine facilities.

Vaccinating Cattle

By June 15, APHIS and MDOL will determine and document the vaccination status of all at-risk cattle in or coming into the Hebgen and Gardiner basins. These agencies will use existing regulations and/or incentives to ensure 100% of adult cattle in the Hebgen and Gardiner basins are calf-hood and/or adult vaccinated. If the vaccination status of adult cattle in these areas is not 100%, then vaccination or other to-be-determined actions will be taken to achieve 100% status as determined by the Montana State Veterinarian.

Safety

The safety of all personnel and the public is paramount in all aspects of bison management operations. No actions will be taken which compromise the safety of any personnel. Personnel involved will take all precautions to protect the security of operations. Bison may be lethally

removed at the discretion of the Operations Chief if the safety of personnel is in jeopardy. Conditions attached to hazing, lethal removal, and/or retrieval of dead bison on private lands will be made clear to the hazing or lethal removal teams and those individuals responsible for slaughtering, field dressing, or transporting bison carcasses. Under the leadership of the MDOL, when feasible, reasonable attempts will be made to notify affected private landowners prior to operations.

The IBMP agencies will continue education and awareness of the social, public safety, and private property impacts of bison tolerance in areas with residences or used for livestock operations. They will also continue to explore ways to reduce or eliminate human safety or property damage problems related to bison on a case-by-case basis.

Access/Approval to Operate on National Forest System Land

The MDOL will make a reasonable attempt to contact a representative from the USFS prior to the time when bison are to be hazed, captured, shot, or otherwise removed from national forest system lands. The MDOL will make a reasonable attempt to contact a representative from the USFS to obtain authorization for the use of motorized vehicles on national forest system roads, trails, or areas otherwise closed. This authorization may be either written or verbal, to be followed by a timely written authorization. The USFS may also provide direction, including requirements for the retrieval and field dressing of dead bison on national forest system lands. Agencies involved in hazing, capture or removal operations will follow protective measures for bald eagles, grizzly bears, and wolves that are in place on National Forest and Park Service lands.

Assurance of General Security

The MDOL will contact NPS, USFS, MFWP, and if necessary and appropriate, Gallatin and/or Park County Sheriff's offices and the Montana Highway Patrol to ensure that necessary and appropriate actions are taken to provide for the general security of all personnel involved in hazing, capturing, shooting, or processing bison outside the park. Security of the west boundary capture facilities will be the responsibility of the MDOL. A security agency may be contracted by the MDOL and/or other IBMP agencies to provide general security, if necessary.

Security for bison management operations inside the park will be the responsibility of the NPS. The Stephens Creek administrative area, which includes the corral operations infrastructure and pasture, stored government equipment, park vegetation nursery, a park residence, a law enforcement firearms range, and the bison capture facility, is closed to the public year-round due to public safety issues and the need to protect government property, equipment, livestock, and infrastructure. Lands surrounding the Stephens Creek administrative area may be temporarily

closed during periods when the capture facility is operational and captured bison are being held, handled or processed and associated hazing operations are ongoing. When implemented, this temporary closure provides for public and employee safety and ensures that hazing actions are effective, safe, and humane. Hazing actions in the northern management area are extremely dynamic and it is impossible to sweep the area to remove members of the public before operations commence.

Maintenance of Records and Accountability for Bison Removal

The MDOL and NPS will be responsible for the accountability of bison management records for activities outside and inside the park, respectively, including hazing, capturing, testing, and vaccination.

Adaptive Management Review, Evaluation, and Modification

Each year, the cooperating agencies will meet to review, evaluate, and modify, if deemed necessary by the agencies, the operating procedures for accomplishing the objectives of the IBMP. These procedures may be modified at any time, with the agreement of the agencies, to facilitate and/or improve the operations procedures to accomplish the objectives of the IBMP.

Table 1. Agency resource levels that may be necessary to conduct an array of bison management activities described in the Interagency Bison Management Plan.

Operation Size / Resources	MDOL	MFWP	NPS	APHIS	USFS	NPT	CSKT	ITBC
<i>Media relations / Public information</i>	√	√	√	√	√	√	√	√
<i>Monitoring bison movements/distribution</i>	√	√	√	NA	NA	NA	NA	NA
<i>Human safety and property damage</i>	√	√	√	NA	NA	NA	NA	NA
Hunting								
Biologists (modeling / recommendations)	NA	√	√	NA	NA	√	√	NA
Game wardens	NA	√	NA	NA	NA	√	√	NA
Law enforcement officers	NA	NA	√	NA	√	NA	NA	NA
Hazing 1-25 bison								
Horses and riders	√	√	√	√	NA	NA	NA	NA
ATVs	√	√	NA	√	NA	NA	NA	NA
Snowmobiles	√	√	NA	√	NA	NA	NA	NA
Law enforcement officers	√	√	√	NA	√	NA	NA	NA
Hazing >25 bison								
Helicopter	√	NA	NA	NA	NA	NA	NA	NA
Horses and riders	√	√	√	√	NA	NA	NA	NA
ATVs	√	√	NA	√	NA	NA	NA	NA
Snowmobiles	√	√	NA	√	NA	NA	NA	NA
Law enforcement officers	√	√	√	NA	√	NA	NA	NA
Shooting								
Law enforcement officers	√	√	√	NA	√	NA	NA	NA
Lethal control teams	√	√	√	NA	NA	NA	NA	NA
ATVs	√	√	NA	NA	NA	NA	NA	NA
Snowmobiles	√	√	√	NA	NA	NA	NA	NA

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Tissue sample collectors	√	√	√	√	NA	NA	NA	NA
<i>Capture</i>								
Horses and riders	√	√	√	NA	NA	NA	NA	NA
ATVs	√	√	NA	NA	NA	NA	NA	NA
Snowmobiles	√	√	√	NA	NA	NA	NA	NA
Law enforcement officers	√	√	√	NA	√	NA	NA	NA
Testing personnel	√	√	√	√	NA	NA	NA	NA
Bison handlers	√	√	√	NA	NA	NA	NA	NA
Vaccination	√	NA	√	√	NA	NA	NA	NA
<i>Bison transfer and transport</i>								
Inspectors	√	NA	NA	√	NA	NA	NA	NA
Vehicles, trailers, and drivers	√	√	NA	NA	NA	NA	NA	√
Distribution of meat, hides, etc.	√	NA	NA	√	NA	NA	NA	√
<i>Research and disease surveillance</i>	√	√	√	√	NA	NA	NA	NA
Quarantine operations	√	√	√	√	NA	NA	NA	√
Monitoring cattle turn-on and/or vaccination	√	NA	NA	√	√	NA	NA	NA

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Appendix 1. Managing the Abundance of Yellowstone Bison, Winter 2013

Observers counted approximately 4,200 bison in July 2012, including about 2,600 bison in the northern breeding herd and 1,600 bison in the central breeding herd. This is the largest number of bison ever observed in northern Yellowstone, while the sex ratio of bison in the central interior is skewed towards males.

Population and movement models for bison were developed to explore strategies for gradually reducing bison numbers towards an end-of-winter target of 3,000, while progressing towards equal abundance in each herd and sex ratios of 50% adult males and 50% adult females in each herd. Population and movement models input with average snow pack and forage values predicted with high certainty that approximately 300 bison will migrate to the north boundary of Yellowstone during the coming winter and 440 bison will migrate to the west boundary. With above-average winter conditions, peak migration predictions were up to 1,400 bison in the northern area and 1,500 bison in the western area.

Model-generated predictions of the number of bison surviving winter 2013 (November 2012-May 2013) without any hunting or management removals averaged about 3,990. The certainty of total abundance being more than 3,500 bison at the end of winter was 86%, with a 98% chance of there being more than 3,000 bison. Hunting and management removals of approximately 400 bison per year would provide a high certainty of approaching all desired conditions within five years.

For winter 2013, National Park Service biologists recommended the harvest of approximately 450 bison—primarily females from the northern herd to reduce abundance and growth potential in this herd. Biologists recommended not harvesting many female bison from the central herd because numbers of bison in that herd are near the desired condition (1,500 bison) and the sex ratio is skewed towards males. However, it is inevitable that some bison from the central herd will be inadvertently removed in the northern management area (Gardiner basin).

Removals could be implemented through harvest by public and treaty hunters and, after the general hunt ends in mid-February, through selective culling at capture facilities for shipment to quarantine or research facilities, terminal pastures, or slaughter facilities. Additional bison could be removed if there is a mass migration out of the park or if bison resist efforts to return them from Montana to Yellowstone National Park during spring or summer. If the proposed removals are not realized this winter, then there is a 50% chance of more than 4,875 bison in the population entering winter 2014.

Appendix 2. 81-2-120. Management of wild buffalo or wild bison for disease control

(1) Whenever a publicly owned wild buffalo or wild bison from a herd that is infected with a dangerous disease enters the state of Montana on public or private land and the disease may spread to persons or livestock or whenever the presence of wild buffalo or wild bison may jeopardize Montana's compliance with other state-administered or federally administered livestock disease control programs, the department may, under a plan approved by the governor, use any feasible method in taking one or more of the following actions:

(a) The live wild buffalo or wild bison may be physically removed by the safest and most expeditious means from within the state boundaries, including but not limited to hazing and aversion tactics or capture, transportation, quarantine, or delivery to a department-approved slaughterhouse.

(b) The live wild buffalo or wild bison may be destroyed by the use of firearms. If a firearm cannot be used for reasons of public safety or regard for public or private property, the animal may be relocated to a place that is free from public or private hazards and destroyed by firearms or by a humane means of euthanasia.

(c) The live wild buffalo or wild bison may be taken through limited public hunts pursuant to 87-2-730 when authorized by the state veterinarian and the department.

(d) The live wild buffalo or wild bison may be captured, tested, quarantined, and vaccinated. Wild buffalo or wild bison that are certified by the state veterinarian as brucellosis-free may be:

(i) sold to help defray the costs that the department incurs in building, maintaining, and operating necessary facilities related to the capture, testing, quarantine, or vaccination of the wild buffalo or wild bison; or

(ii) transferred to qualified tribal entities that participate in the disease control program provided for in this subsection (1)(d). Acquisition of wild buffalo or wild bison by a qualified tribal entity must be done in a manner that does not jeopardize compliance with a state-administered or federally administered livestock disease control program. The department may adopt rules consistent with this section governing tribal participation in the program or enter into cooperative agreements with tribal organizations for the purposes of carrying out the disease control program.

(e) Proceeds from the sale of live, brucellosis-free, vaccinated wild buffalo or wild bison must be deposited in the state special revenue fund to the credit of the department.

(f) Any revenue generated in excess of the costs referred to in subsection (1)(d)(i) must be deposited in the state special revenue fund provided for in 87-1-513(2).

(2) Whenever the department is responsible for the death of a wild buffalo or wild bison, either purposefully or unintentionally, the carcass of the animal must be disposed of by the most economical means, including but not limited to burying, incineration, rendering, or field dressing for donation or delivery to a department-approved slaughterhouse or slaughter destination.

(3) In disposing of the carcass, the department:

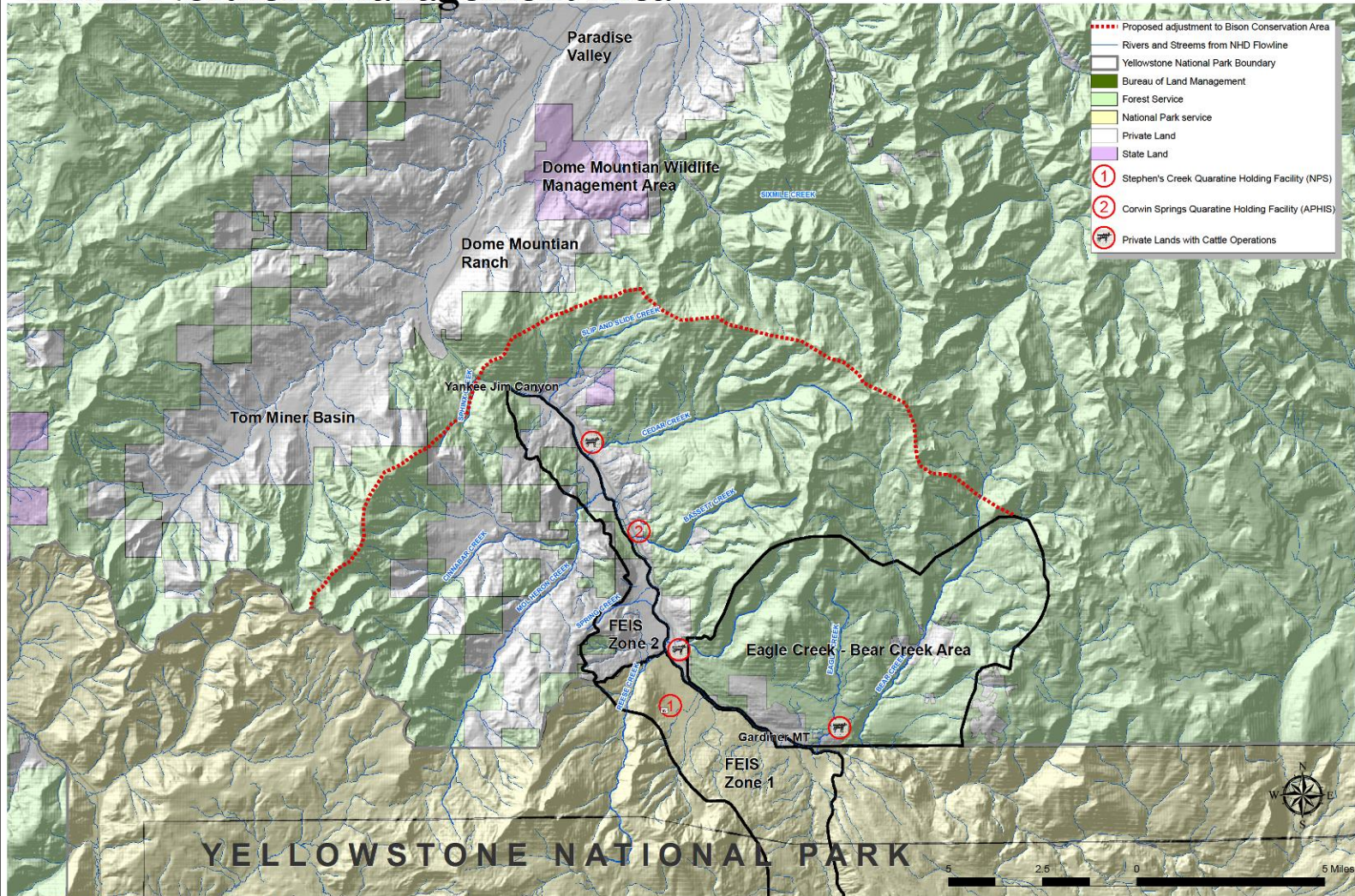
(a) as first priority, may donate a wild buffalo or wild bison carcass to a charity or to an Indian tribal organization; or

(b) may sell a wild buffalo or wild bison carcass to help defray expenses of the department. If the carcass is sold in this manner, the department shall deposit any revenue derived from the sale of the wild buffalo or wild bison carcass to the state special revenue fund to the credit of the department.

(4) The department may adopt rules with regard to management of publicly owned wild buffalo or wild bison that enter Montana on private or public land and that are from a herd that is infected with a contagious disease that may spread to persons or livestock and may jeopardize compliance with other state-administered or federally administered livestock disease control programs.



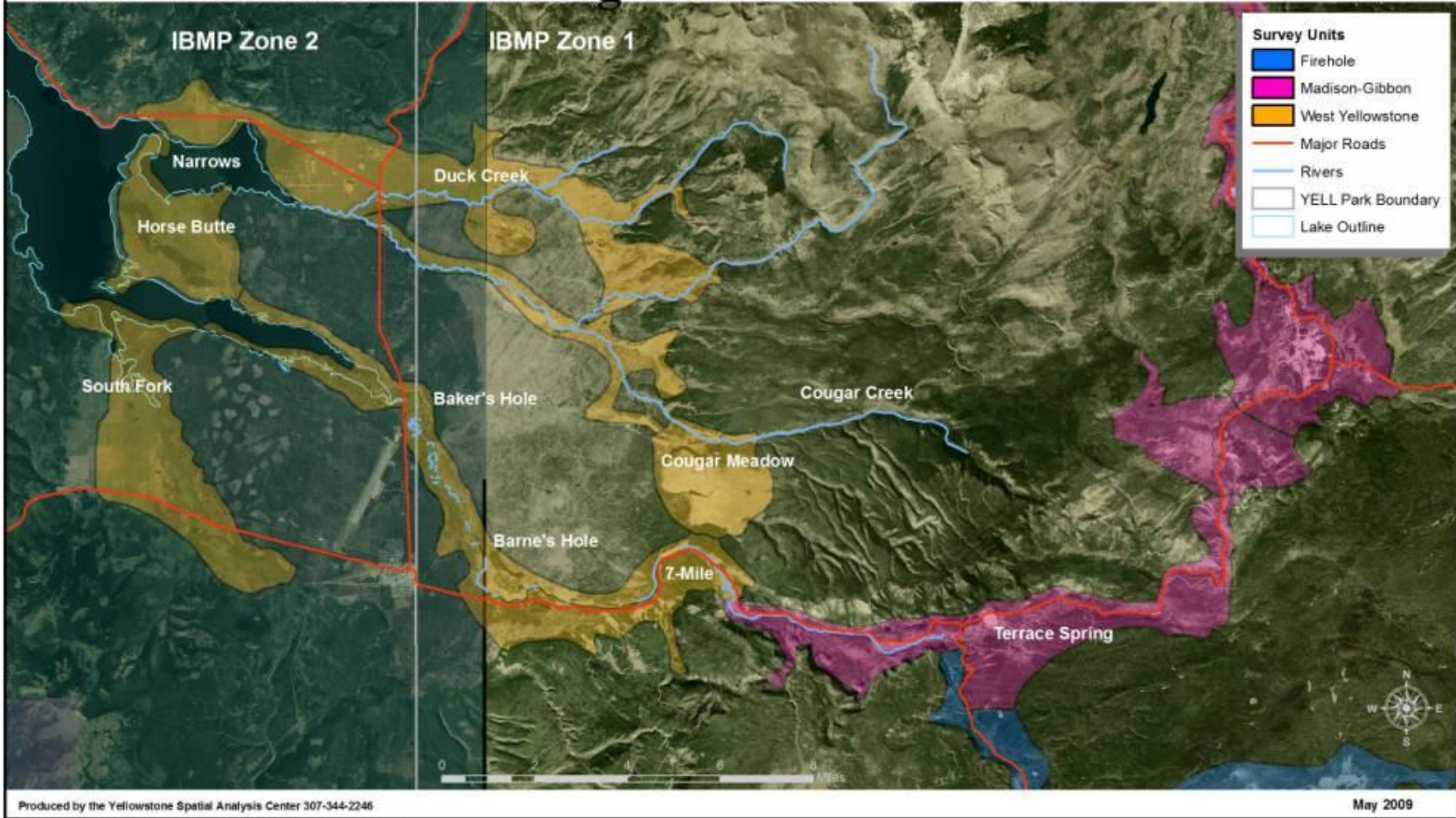
IBMP Northern Management Area



Produced by the Yellowstone Spatial Analysis Center 307-344-2246
FILE: X-Bison_EIS/Bison_EIS/arcmap_projects/IBMP_meeting_Oct2008_Northern_Management_Area_update_03_11.v1

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IBMP Western Bison Management Area



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