

Table 1: Summary Comparison of Alternative Actions

| Action | Alternative 1: No Action – Continuation of the Current Interim Bison Management Plan | Alternative 2: Minimal Management | Alternative 3: Management, with Emphasis on Public Hunting | Alternative 4: Interim Plan with Limited Public Hunting and Quarantine | Alternative 5: Aggressive Brucellosis Control within Yellowstone National Park through Capture, Test, and Removal | Alternative 6: Aggressive Brucellosis Control within Yellowstone National Park through Vaccination | Alternative 7: Manage for Specific Bison Population Range | Modified Preferred Alternative | State of Montana October 24, 1999 Preferred Alternative | Implement Interim Plan outside Yellowstone National Park, Modified Preferred Alternative inside Yellowstone National Park |
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| Bison population range | No range specified in existing interim plan | Allow natural forces to determine herd size | Manage herd within range of natural variation: 1,700–3,500 | Same as alternative 3 | Manage herd size to prevent loss of genetic integrity and ensure success of disease control | Same as alternative 5 | Manage herd within range of 1,700 to 2,500 | Manage for overall population limit of 3,000 bison | Same as alternative 1; assume management would maintain herd within 1,700–3,000 | Same as alternative 1; assume management would maintain herd within 1,700–3,000 |
| Capture, test, and slaughter operations | Reese Creek: West Yellowstone: capture, test, and ship seropositive males and females and all pregnant females to slaughter; test and release seronegative male and nonpregnant females on public land; capture facilities on national forest and/or private land used during winter months | Phase 1 same as alternative 1; phase 2 nocapture, test, and slaughter operations | Reese Creek: in phase 1, ship all seropositives to slaughter, seronegatives to quarantine; in phase 2, capture facility between Yankee Jim Canyon and Reese Creek as backup to hunting; West Yellowstone: no capture facilities | Capture facilities same as alternative 1, except ship seronegatives from Reese Creek to quarantine | Temporary capture facilities throughout park; test; ship all seropositives to slaughter and release all seronegatives within park; Stephens Creek facility remains | Reese Creek: ship all captured bison to slaughter; West Yellowstone capture facility at Seven-Mile Bridge area inside park; test and ship seropositives to slaughter; test, vaccinate, and release all seronegatives onsite; phase 2 capture facilities same as alternative 5 | Reese Creek: in phase 1, ship all seropositives to slaughter, seronegatives to quarantine; in phase 2, capture facility between Yankee Jim Canyon and Reese Creek; West Yellowstone: same as alternative 1, except quarantine all seronegatives at high population levels and all seronegative-pregnant bison at population mid range; capture facility at Horse Butte | Step 1- Reese Creek: same as alternative 1; West Yellowstone: capture bison, ship seropositives to slaughter, release all seronegatives on public land up to 100 tolerance; Step 2 - Reese Creek: capture bison, ship seropositives to slaughter, release seronegatives on public and conservation easement lands up to 100 tolerance; West Yellowstone: same as Step 1; Step 3 - Reese Creek: allow untested bison on public and conservation easement lands up to 100 tolerance, capture and release seronegatives when >100, <45 day separation, >3,000 bison; West Yellowstone: allow untested bison up to 100 tolerance, capture and release seronegatives when >100, <45 day separation, >3,000 bison | Capture facilities same as revised alternative 1 except hold calves instead of all seronegatives at Stephens Creek facility; possibly shipseronegatives to quarantine in phase 1 and phase 2 same as alternative 4; West Yellowstone: same as alternative 1 | Capture facilities same as either revised alternative 1 or 4 in step 1 (depending on whether quarantine is available); in steps 2 and 3, Stephens Creek facility would only be used to hold up to 125 overwintering seronegative bison if total population numbers were 3,000 or below. West Yellowstone - assumed to be same as alternative 4 in all steps. |
| Contingency Plan | None specifically identified. Actions common to all alternatives identifies that when the population approaches 1,700, agencies would more aggressively employ | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 but bison population could go below 1,700 | Same as alternative 1 | Same as alternative 1 | Detailed plan to reduce the number of bison that are killed as part of bison management actions and to provide for a generally stable bison population should large numbers of bison attempt to move outside the park in | "Agency implemented lethal controls would decrease as population approaches 1,700 and cease at 1,700 in certain areas."- same as or similar to alternative 1 | Same as alternative 1 and hold up to 125 seronegative bison over the winter if population levels at 3,000 or below. |
| Contingency Plan (Continued) | nonlethal methods to encourage bison to remain within management boundaries; lethal control would still | | | | | | | response to severe winter weather; actions emphasize hazing, capture, and release of seronegative bison to tolerance level, and holding seronegative bison for | | |

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| | occur for bison posing greatest risk of transmission | | | | | | | spring release; if hazing ineffective and tolerance levels exceeded, additional bison sent to quarantine, to slaughter, or shot. | | |
| Agency Shooting | Agency personnel would shoot bison that could not be hazed, evaded capture, or were deemed unsafe to handle (usually large adult males) | Agency personnel would shoot bison that could not be hazed and attempted to move beyond SMA boundaries, threatened human safety, or were identified for removal from private property | Same as alternative 1 | Same as alternative 1 | Bison would be shot if they attempted to move beyond the park boundary and were unresponsive to hazing | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Not specifically addressed, but assumed to be the same as alternative 1 | Same as alternative 1 in step 1; in steps 2 and 3, Montana might choose to continue to shoot bison to enforce boundaries or facilitate capture |
| Quarantine operations | No quarantine operations | No quarantine operations | Quarantine operations -take seronegatives from Stephens Creek in phase 1; relocate capture facility in phase 2 | Quarantine operations -Reese Creek: quarantine all seronegatives; West Yellowstone: quarantine seronegative-pregnant females | No quarantine operations | No quarantine operations | Quarantine operations – take seronegatives from Stephens Creek in phase 1; West Yellowstone: quarantine seronegative-pregnant females; if population high, quarantine all seronegatives | Quarantine operations, if available; take seronegative bison from Reese Creek and West Yellowstone under the following circumstances: 1) when bison tolerance levels of 100 were exceeded, 2) when overall population >3,000, 3) to enforce 45-day separation period | Quarantine operations Reese Creek quarantine all seronegatives until whole-herd (including adult) vaccination initiated; West Yellowstone: quarantine seronegative pregnant females. Same as alternative 4 | Quarantine operations used in step 1, if available; Montana may continue to use quarantine for captured seronegative, nonpregnant bison in steps 2 and 3 |
| Monitoring of bison | Aerial and ground reconnaissance of bison in and adjacent to park | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 and monitor bison to facilitate capture inside park | Phase 1, same as alternative 1; phase 2, same as alternative 5 | Same as alternative 1 | Aerial and ground reconnaissance of bison in and adjacent to Yellowstone National Park; telemetry of pregnant bison; additional staff to enforce zone management boundaries | Not specifically addressed; assumed to be similar to alternative 1 | Same as alternative 1 |
| Bison hunting | No hunt | No hunt | If legislature approves, state of Montana institutes fair-chase hunt on public and private land in all SMAs; public hunt during winter (Oct.–Feb.) primary method to control population numbers and distribution | If legislature approves, state of Montana institutes fair-chase hunt on public lands; public recreational hunt during winter (Oct.–Feb.) | No hunt | No hunt | If legislature approves, state of Montana institutes fair-chase hunt on public lands at Eagle Creek/Bear Creek; in phase 2, hunting could be allowed on public lands in all SMAs | No hunt | No hunt | No hunt |
| Bison management on public lands adjacent to Yellowstone National Park | Allow bison on public lands in Eagle Creek/Bear Creek except north of Little Trail Creek/Maiden Basin hydrographic divide; do not allow bison north of Reese Creek; do not allow bison in West Yellowstone area beyond May and until November 1 | Allow bison on public lands in Eagle Creek/Bear Creek; in Gardiner Valley south of Yankee Jim Canyon; and south of Buffalo Horn Creek and east of Hebgen Lake | Allow bison on public lands in Eagle Creek/Bear Creek except north of Little Trail Creek/Maiden Basin hydrographic divide; do not allow bison in West Yellowstone area beyond May and until November 1; in phase 1, bison not allowed north of Reese Creek; phase 2, bison allowed between Reese Creek and Yankee Jim | Same as alternative 1 | Do not allow bison outside park; haze to return bison to interior of park | Same as alternative 1 | Allow bison on public lands in Eagle Creek/Bear Creek except north of Little Trail Creek/Maiden Basin hydrographic divide; do not allow bison in West Yellowstone area beyond May and until November 1; in phase 1, bison not allowed north of Reese Creek; in phase 2, bison allowed between Reese Creek and Yankee Jim | Allow bison on public lands in Eagle Creek/Bear Creek area except north of Little Trail Creek/Maiden Basin hydrographic divide; Reese Creek: step 1 - do not allow bison north of Reese Creek; step 2 - allow seronegative bison on public and conservation easement lands up to 100; then after 2 years (step 3) allow untested bison up to 100; | Same as alternative 1 except state veterinarian would consult with agencies, use weather and other criteria to determine haze back date within 30–60 day window (e.g., the date may vary between April 1 and May 1). | Same as alternative 1 |

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| | | in western area | Canyon | | | | Canyon | for steps 2 and 3, do not allow bison beyond zone management boundaries at Yankee Jim Canyon. Haze to return to park in spring; West Yellowstone: step 1, 2 - release all seronegative bison on public land in Horse Butte area during winter up to 100; step 3 - allow untested bison on public land during winter, up to 100; do not allow bison in West Yellowstone area past mid-May to enforce 45-day separation; | | |
| Bison management on public lands adjacent to Yellowstone National Park (Continued) | | | | | | | | beginning approximately November 1, do not allow bison beyond management zone boundaries during winter | | |
| Bison management on private lands adjacent to Yellowstone National Park | Remove bison at landowner request | Same as alternative 1 | Bison hunted with landowner permission; remove at landowner request | Remove bison at landowner request; possible bison hunt under special and limited circumstances | Same as alternative 1 | Same as alternative 1 | Same as alternative 3 | Remove, preferentially by hazing, at landowner request | Same as alternative 1 | Same as alternative 1 |
| Surveillance testing of cattle | No change in existing cattle surveillance requirements | Require testing of susceptible cattle in SMA | Require testing of cattle in contact with bison | Same as alternative 3 | Same as alternative 1 | Require testing of cattle in high-risk areas in West Yellowstone | Whole herd surveillance protocols for cattle within SMAs recommended by APHIS | APHIS would cooperate with Montana to conduct additional testing and vaccination of cattle that graze in areas that bison might occupy in the winter; APHIS would offer livestock operators option of having cattle certified as brucellosis free; federal agencies would provide funds for direct costs of additional testing in unlikely event bison commingle with cattle | Not specifically addressed; assumed to be same as alternative 1 | Same as alternative 1 |
| Vaccination of cattle with RB51 | Encourage calfhood vaccination of cattle adjacent to park | Encourage vaccination of all susceptible female cattle calves within SMA, adjacent to park or within 20-mile radius of either | Same as alternative 2 | Same as alternative 2 | Same as alternative 1 | Same as alternative 2 | Same as alternative 2 | Montana would encourage vaccination of cattle that may graze in areas that bison might occupy in winter; if voluntary compliance was not 100%, Montana would make it mandatory; federal government would reimburse direct cost of vaccination | Mandatory vaccination if 100% compliance not met by May 2001; cost reimbursed by federal government | Mandatory vaccination if 100% compliance not met by May 2001; cost reimbursed by federal government |
| Vaccination of bison | Vaccinate bison calves after vaccine is developed that is safe and effective for bison using capture facilities and remote means | Same as alternative 1, using remote means only | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Vaccinate all captured vaccination-eligible bison (initially calves and yearlings) with safe vaccine; possible remote vaccination with safe vaccine, safe/effective | Vaccinate captured bison with safe vaccine for that age/class of bison in phases 1 and 2; vaccinate whole herd with safe and | Vaccinate all captured vaccination-eligible bison (initially calves and yearlings) with safe vaccine; possible remote vaccination with safe vaccine, safe/ |

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| | | | | | | | | delivery system on untested bison tolerated at West Yellowstone; when safe and effective vaccine and safe and effective delivery available, conduct remote parkwide vaccination on eligible bison | effective vaccine for all bison with a safe and effective remote delivery system in phase 2 | effective delivery system on untested bison tolerated at West Yellowstone; when safe and effective vaccine and safe and effective delivery available, conduct remote parkwide vaccination on eligible bison - same as modified preferred alternative |
| Modify national forest grazing allotments | No modification of national forest grazing allotments | Modification of national forest grazing allotments may occur | No modification of national forest grazing allotments expected in phase 1, but may occur in phase 2 | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Same as alternative 3 | If needed, modify public land-grazing start date to ensure 45-day temporal separation between bison use of public lands in winter and cattle grazing on public lands in summer and fall | Same as alternative 1 | Same as alternative 1 |
| Change in land use, easement, or acquisition of additional wildlife habitat. | No change in existing land use/ownership FEIS NOTE: Land north of Reese Creek designated as wildlife habitat has been acquired; a cattle lease on this land remains in effect until 2002 | Easement or acquisition of additional winter wildlife habitat; or change from breeder cattle (susceptible cattle) to steers/spayed heifers within SMA | Similar to alternative 2, with reduced acquisition | Same as alternative 1 | Same as alternative 1 | Same as alternative 1 | Phase 1, no change; phase 2, acquire additional winter range north of Reese Creek; no changes in cattle operations | Same as revised alternative 1 | Same as revised alternative 1 | Same as revised alternative 1 |
| Winter road grooming | No change in existing winter road management FEIS NOTE: (Changes in winter road management made as a result of separate planning efforts would be implemented | Eliminate winter grooming and snowmobile use of some trails; research effects of closures on population numbers and on ability to keep bison within park boundaries | Research effects of road closures on bison | Same as alternative 1 | Plow roads in winter for access to bison capture facilities | Phase 1 - plow road to Seven-Mile Bridge capture facility; phase 2 -plow roads same as in alternative 5 | Same as alternative 1 | No changes in winter road management proposed | Same as revised alternative 1 | Same as revised alternative 1 |
| Total annual cost of alternative (includes one-time only costs such as quarantine, capture facilities, and land acquisition) | <ul style="list-style-type: none"> • NPS – \$660,500 • USFS – \$16,500 • State of MT – \$154,000-\$451,000 • APHIS – \$201,300 | <ul style="list-style-type: none"> • NPS – \$420,700 • USFS – \$187,000 • State of MT – \$165,000 • APHIS – \$36,300 • Shared costs (up to \$44.1 million) | <ul style="list-style-type: none"> • NPS – \$709,800 • USFS – \$44,000 • State of MT – \$247,500 • APHIS – \$1,026,300-\$1,356,300 • Shared costs (up to \$33.1 million) | <ul style="list-style-type: none"> • NPS – \$643,800 • USFS – \$27,500 • State of MT – \$448,800 • APHIS – \$1,185,800-\$1,515,800 | <ul style="list-style-type: none"> • NPS – \$2,815,290 • USFS – \$16,500 • State of MT – 0 • APHIS – \$56,100 | <ul style="list-style-type: none"> (phase 2) \$1,1013,860 – phase 1; \$2,377,160 – phase 2 • USFS – \$16,500 • State of MT – \$156,700–phase 1; \$192,500–phase 2 • APHIS – \$24,700–phase 1; \$29,700–phase 2 | <ul style="list-style-type: none"> • NPS – \$1,071,700 • USFS – \$33,000 • State of MT – \$443,020 • APHIS – \$1,216,300-\$1,546,300 • Shared costs (up to \$29.1 million) | <ul style="list-style-type: none"> • NPS – \$1,071,700 • USFS – \$22,000 • State of MT – \$388,020 • APHIS – \$1,538,800 • Shared costs (up to \$29.1 million) | Costs not included. Assumed to be similar to alternative 4 | In step 1 - same as alternative 1; in steps 2 and 3 - NPS costs would be reduced; Montana’s may be increased |

[Next Table](#)