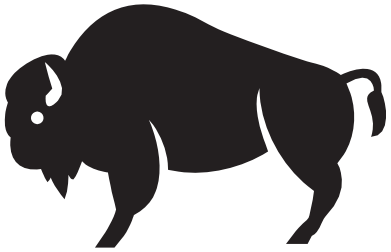
FINAL ENVIRONMENTAL ASSESSMENT

BISON TRANSLOCATION

Bison Quarantine Phase IV



February 2010

Montana Fish, Wildlife & Parks

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Draft Environmental Assessment

Bison Translocation

December 2009

PREFACE

There has been a long history in North America of restoring wildlife populations by capturing animals from robust populations and transplanting them to new habitats or augmenting existing populations near extinction. In the Greater Yellowstone Ecosystem, there is an extensive history of capturing, holding, transporting and relocating wildlife as a species conservation strategy. Yellowstone elk were routinely captured and widely distributed in the mid 1900s to restore wild elk throughout North America. Bison and antelope have been captured and moved from Yellowstone to create or augment populations elsewhere. Yellowstone has also been a recipient of such transplanted wildlife during restoration efforts including Rocky Mountain wolves from Canada and bison from Texas and northern Montana.

One challenge regarding the transplanting of bison is the potential for those bison being hosts to *Brucella abortus.* It is well documented that, in cattle, *Brucella abortus* (brucellosis) may infect calves and remain serologically undetectable or be only transiently detectable until sexual maturity. Heifers, during their first pregnancy, may seroconvert and abort an infected fetus. Anecdotal evidence in bison (three animals from a privately owned South Dakota herd and one animal originating from Yellowstone National Park) suggests that latent infection may occur in bison calves. It was important to determine if this commonly occurs in bison, since it would impact future management actions involving capture, quarantine, and release of seronegative animals outside Yellowstone National Park (YNP).

In 2004, Montana Fish, Wildlife & Parks (FWP), the National Park Service (YNP), and USDA Animal and Plant Health Inspection Service (APHIS) investigated the implementation and logistics of a bison quarantine facility to determine if seronegative bison calves can be serially tested and efficiently screened to determine the presence of brucellosis while maintaining them in a secure environment. The construction and execution of this research has been in accordance with the Interagency Bison Management Plan (IBMP) and the 2000 Bison Management Environmental Impact Study (EIS).

The IBMP cooperating agencies agree that capture and relocation of bison to other suitable habitats would be an appropriate alternative to lethal removal of bison that exceed the population objectives for YNP, as defined by the IBMP. Relocation of bison also would provide an opportunity to coordinate the IBMP with a broader North American bison conservation strategy by establishing new public and tribal bison herds and augmenting

existing public and tribal bison herds with quarantine feasibility study (QFS) bison. However, the Brucellosis Uniform Method and Rules (UM&R) (USDA APHIS, VS 1998) discourage the movement of animals from brucellosis-affected herds unless the animals have first cleared quarantine to certify that each animal is free of brucellosis.

In 2005, FWP and APHIS established a bison quarantine facility to begin a 5-year research program to determine the latent expression of brucellosis in bison and test the sensitivity of quarantine procedures for detecting the bacteria in multi-generations of bison. If at the completion of the program the remaining bison are found to be seronegative for brucellosis, the cooperating partners have considered disposition of the bison to tribal or non-tribal organizations. Bison released at the end of their quarantine and testing would be considered brucellosis-free.

During the public comment period for the environmental assessments of the Feasibility Studies of Phase I and Phase II/III, numerous comments were received by FWP regarding what would happen to the bison coming out of the quarantine facility. Comments submitted were focused on appropriate locations be chosen for reestablishment of herd on tribal and public lands, the desire to maintain the bison in the public ownership, and need for a unified bison conservation plan.

1.0: NEED AND PURPOSE FOR ACTION

North American plains bison, which in the 17th century numbered over 25 million and occurred over much of the continental United States, southern Canada and northern Mexico, were by the end of the 19th century limited to less than 30 animals in Yellowstone National Park and isolated individuals in zoos or private captivity (DOI, Bison Conservation Initiative). As of the early 21st century, a variety of efforts have succeeded in bringing plains bison back to relative abundance, with over 500,000 animals now present in North America, mostly in private ownership. The current plains bison population in North America reflects its disparate roots. Most of the herds number fewer than 1000, are contained by fences, and show evidence of cross-breeding with domestic cattle at some point in their ancestry. Conservation efforts to date have essentially developed two lines of the same species: the domestic bison, subjected to the selection and breeding schemes common in livestock management; and a wild bison, subject to natural breeding and selection to the degree that space and management constraints allow (DOI, Bison Conservation Initiative).

A large-scale genetics study, conducted from 1999 – 2002 screening for prevalence and site of introgressed loci, allelic diversity, and frequency of private alleles, found no cattle gene introgression in bison at Yellowstone. Since YNP's bison are only one of a limited genetically "pure" population within the U.S., they are important to bison conservation efforts throughout the U.S. The prevalence of brucellosis in the herd's population restricts the use of individual animals in conservation efforts for other wild bison herds.

The quarantine protocols and research data gathered at the bison quarantine facilities in Gardiner have established processes and monitoring methods that have yielded bison that are seronegative for brucellosis, and that can finally be used to supplement genetic variation of existing wild bison herds or establish new herds on the American Plains where appropriate.

As part of the quarantine feasibility study, a total of 100 bison calves that originated in YNP were brought into the quarantine facilities in 2005 and 2006. During the study, a portion of the research herd, sufficient to detect at the 95% confidence level the prevalence of brucellosis in 5% or more of the herd, was culled and extensively tested for brucellosis. The remaining animals were moved into Phase II of the study, which included the breeding of the cows with the bulls during spring 2007.

In March 2009, FWP completed an environmental assessment for the placement of the first group of bison from the quarantine facility in Gardiner, MT (41 bison - 21 cows, 16 calves, and 4 bulls) on the Northern Arapaho Tribe at the Wind River Reservation in Wyoming. Before this translocation could be completed, the Tribe rescinded their proposal due to difficulties securing the needed facilities for the bison. Thusly, the bison remained at the quarantine facility.

As of November 2009, the quarantine facility's maximum capacity was reached which included the original group of bison, their offspring, the second half 2005-6 group of bison accepted into the research program, and another 100 bison calves that were brought into the facility in the winter of 2008 for a second repetition of the quarantine protocol.

For the research to continue and to ensure the health of the bison in the study there is an immediate need to translocate 88 bison to another location so the final group of bison can progress through the quarantine protocol.

1.1 Objectives of the Proposed Action

1.1.1 Complete the Quarantine Feasibility Study that seeks to determine whether it is possible, using the quarantine protocols, to certify that individual or groups of Yellowstone National Park bison are free from brucellosis, including latent infections of brucellosis.

1.1.2 Establish and monitor newly established genetically pure herds for non-native diseases, such as brucellosis.

1.1.3 Provide brucellosis-free bison for future conservation and restoration efforts.

1.2 Authorities

Montana statute section 87-1-201, Montana Code Annotated (MCA), authorizes the Montana Fish, Wildlife and Parks Commission to set the policies for the protection, preservation, and propagation of the wildlife, fish, game, furbearers, waterfowl, nongame species, and endangered species of the state 87-1-201 MCA. Within the policies established by the Commission, FWP is responsible for supervising the management and

public use of all the wildlife, fish, game, furbearing animals, and game and nongame birds of the state.

FWP has a long history of successfully transplanting wildlife within the state and supporting species-specific conservation efforts in other states (MCA 87-5-701). The authority for the transplantation is derived from both wildlife management responsibilities and the transplantation duties under the statutes cited above. The transplantation has traditionally been to place transplanted species with Tribes, States, private owners and others depending upon the status of the species, such as the research status of a quarantined bison and whether they have facilities to effectively manage the species. Since the early 20th century, FWP has been proactive in restoring native wildlife species to ecosystems where they once existed or used transplanting as a way to manage population densities for the benefit of the species and the natural resources it relies on.

In 2007, fish and game agencies for Colorado, Idaho, Montana, Utah, and Wyoming signed the *Memorandum of Agreement on the Management of Multi-state Wildlife Resources in Boundary Habitats of Colorado, Idaho, Montana, Utah, and Wyoming*. This agreement addresses both legal and policy considerations involving wildlife species management, including the introduction, relocation, and management of interstate wildlife populations in the adjacent states. The agreement enables the involved states to cooperate effectively on issues of land management, wildlife disease surveillance and control, wildlife relocations, and the genetic impacts of such actions.

The Montana Department of Livestock (DoL) has authority to manage bison entering Montana from YNP as a species requiring disease control. DoL is authorized to remove or destroy publicly owned bison that come from a herd that is infected with a dangerous disease or whenever those bison jeopardize Montana's compliance with state or federally administered livestock disease control programs (81-2-120 M.C.A.). DoL is an active partner and signatory for the Interagency Bison Management Plan (IBMP) and has been involved with and supportive of the bison quarantine feasibility study.

1.3 Request for Proposal Process

In June 2009, FWP published a news release in statewide papers and sent the announcement to interagency partners announcing a Request for Proposal was available to those organizations interested in the brucellosis-free bison from the quarantine facility (QF) near Gardiner, MT. Request for Proposal (RFP) packet explained the goals of the translocation effort and criteria for the facilities and management of the QF bison. The deadline for proposals was August 10, 2009. Seven proposals were received by FWP from Fort Belknap Indian Community, Turner Enterprises Inc., Chicago Zoological Society (zoo consortium), Billings Zoo, Wildlife Conservation Society, and two private entities.

During the evaluation of those proposals, fundamental questions arose regarding possible privatization of bison, importance of genetic conservation efforts, and QF bison progeny. Since clarification was necessary for both the evaluation process and for the proposal criteria, the RFP process was opened again with clarifications. The second RFP effort was

distributed on October 9th directly to those organizations previously expressing interest QF bison and had a submission deadline of November 2nd. A new proposal was submitted from Wyoming State Parks and Cultural Resources and modified proposals were submitted by Wildlife Conservation Society (zoo consortium), Fort Belknap Indian Community, and Turner Enterprises Inc.

1.4 Relevant Documents and Plans

1.4.1 Bison Management Plan for Montana and Yellowstone National Park (2000)

The State of Montana was a co-lead with the Departments of the Interior and Agriculture in the development of the Interagency Draft Environmental Impact Statement (DEIS) and Bison Management Plan. A federal Final Environmental Impact Statement (FEIS) for Bison Management for the State of Montana and Yellowstone National Park, which included the IBMP, was published in August 2000. In November 2000 the state Final Environmental Impact Statement (FEIS) (State of Montana 2000a) for the IBMP was completed. The final state of Montana (2000b) and federal (USDOI et al. 2000b) Records of Decision were published in December 2000 pursuant to the requirements of the Montana Environmental Policy Act (MEPA) and National Environmental Policy Act (NEPA). These documents anticipated the addition of quarantine as a method for live distribution of bison that otherwise would be sent to slaughter. This EA is, therefore, tiered to the Bison Management Plan EIS and the following documents.

1.4.2 Interagency Bison Management Plan (November 2007, current version)

The IBMP provides the Bison Management EIS's cooperating partners guidance on the day-to-day management of bison leaving Yellowstone National Park (YNP). The operating procedures of the IBMP were designed to meet the management principles of the EIS.

1.4.3 Bison Quarantine Feasibility – Phase I, Environmental Assessment (2004)

FWP prepared an environmental assessment for the proposal to implement a bison quarantine feasibility study. The study called for establishing a bison quarantine research facility under approved design, location, and operational parameters. Based on the completion of the environmental assessment and analysis of the comments, the decision was made to establish this facility near Corwin Springs, Montana. Phase I of the study stressed the culturing of tissue samples from bison to determine if they harbor brucellosis after several seronegative tests.

1.4.4 Bison Quarantine Feasibility – Phase II/III, Environmental Assessment (2005)

Phase II/III of the feasibility study analyzed in this assessment went to further the research and testing protocols initially implemented in Phase I. The basis for Phase II/III was based on the successful results of Phase I. Completion of the study is expected to provide insight to the feasibility of quarantine protocols as one component of a broader bison conservation strategy.

1.4.5 Bison Conservation Initiative, U.S. Department of Interior (2008)

The Department of Interior (DOI) put forth a framework that would establish steps for addressing health and genetic composition of DOI bison herds and would acknowledge the ecological and cultural role of bison on the American landscape. Through the initiatives partners, including federal, state, and tribal representatives, work to establish new herds with no cattle introgression and develop guidance for disease surveillance and herd health monitoring programs.

1.5 Overlapping Jurisdictions

1.5.1 Montana Department of Livestock

The Montana Legislature has designated bison that originate from YNP as a species requiring disease control. The Montana Department of Livestock (DoL) is authorized to remove or destroy publicly owned bison that enter Montana from a herd that is infected with a dangerous disease or whenever those bison jeopardize Montana's compliance with state or federally administered livestock disease control programs (81-2-120 (1-4) M.C.A.). The DoL regulatory authority for the administration of the control of bison that emigrate from YNP is identified in Montana Administrative Rule (A.R.M. 32.3.224). The Montana legislature has found that bison pose a significant potential for transmission of infectious disease to persons or livestock and for damage to persons or property (87-1-216 (1) M.C.A.). FWP is required to cooperate with the Department of Livestock in the management of these bison (87-1-216 M.C.A). FWP also is authorized to enter into cooperative agreements with other agencies to promote wildlife research (87-1-210 M.C.A.).

1.5.2 USDA Animal and Plant Health Inspection Service, Veterinary Services (APHIS VS)

APHIS, VS has regulatory authorities under the Animal Health Protection Act (AHPA) (7 U.S.C. 8301 et seq.). Through this act, APHIS is authorized to carry out animal disease eradications programs, such as the National Brucellosis Eradication Program. Pursuant to the AHPA, Congress authorized the Secretary of Agriculture to cooperate with state authorities to carry out the provisions of the AHPA and to administer its regulations. Thus APHIS enters into cooperative agreements with individual states for a brucellosis eradication program. This program is premised on the Code of Federal Regulations and UM&R. The UM&R describes

minimum standard procedures for surveillance, testing, quarantine, and interstate transport. As part of its authority, APHIS, VS has the federal regulatory authority to approve quarantine protocols.

The removal of bison from the quarantine research study and the actions that APHIS will be continuing after their removal fall within the class of actions that have been categorically excluded under APHIS' National Environmental Policy Act (NEPA) Implementing Procedures in 7 Code of Federal Regulations, section 372.5(c)(1), Routine Measures. Routine measures under the APHIS procedures include identifications, inspections, testing, quarantines, removals, and monitoring employed by agency programs to pursue their missions and functions.

APHIS VS will facilitate the submission of necessary veterinary information to both the Montana and Wyoming Departments of Livestock to obtain all required permits for the translocation of the bison to the Green Ranch in Montana and Guernsey State Park in Wyoming.

1.5.3 Wyoming Department of Livestock

As with its counterpart in Montana, Wyoming Department of Livestock (WDL) is tasked with the oversight of livestock and livestock related diseases within the state. WDL has the authority to take necessary steps to ensure brucellosis is not passed from wildlife to livestock and work with relevant parties, including federal agencies, when required (WSA § 11-19-405). Those bison not found in the Absaroka wild bison management area and the Jackson wild bison herd area are designated as either privately owned or bison running at large (Wyoming Administrative Regulations, Chapter 41).

1.5.4 Wyoming Game & Fish

As previously acknowledged, a signed Memorandum of Agreement (MOA) exists between Wyoming Game & Fish (WGF) and FWP. As defined in the MOA, FWP will consult with WGF on the movement of wildlife species between the states.

WGF per Wyoming State Statue 23-1-103 grants the department the authority over all wildlife in the state to provide an adequate and flexible system for control, propagation, management, protection, and regulation of those species. "Wildlife" means all wild mammals, birds, fish, amphibians, reptiles, crustaceans and mollusks, and wild bison designated by WGF commission and the Wyoming livestock board (WSA § 23-1-101 (xiii)). Wild bison are found in the Absaroka wild bison management area and Jackson wild bison herd area, and accordingly are considered wildlife. Otherwise, bison within the state are considered livestock (WSA § 11-20-101 (iv)).

1.5.5 U.S. Bureau of Reclamation

Wyoming State Parks has a Memorandum of Understanding with the Bureau of Reclamation for Guernsey State Park property. The Bureau plans to do an environmental

impact analysis on the area to ensure compliance before the transport of the bison into the State Park. As of the distribution of this assessment, the Bureau's environmental assessment has not been initiated.

1.6 Decision That Must Be Made

The decision to be made is whether FWP should approve the disposition of the QFS bison from the quarantine facility to a location that meets the criteria of the RFP. This EA discloses the analysis and environmental consequences associated with implementing each of the alternatives. This EA will provide information and analysis to determine whether an action results in a significant effect and would, therefore, require the completion of an environmental impact statement (EIS). If an EIS is not required, a Decision Notice will document the decision and the rationale for it.

2.0: ALTERNATIVES

2.1 Alternative A: Proposed Action, Translocate 74 bison to the Green Ranch in Montana and 14 bison to the Guernsey State Park in Wyoming.

Montana Department of Fish, Wildlife, and Parks (FWP) proposes to translocate wild bison resulting from the bison quarantine facility near Gardiner, Montana to the Green Ranch (Turner Enterprises Inc.) in Gallatin and Madison Counties, Montana and to the Guernsey State Park in Platte County, Wyoming.

Of the 88 animals available, the following is a summary of the age, sex, and which location the animals would move to:

	Cows	Yearlings	Calves	Bulls	TOTAL
Green Ranch	31	12	25	6	74
Guernsey State Park	3	4	6	1	14

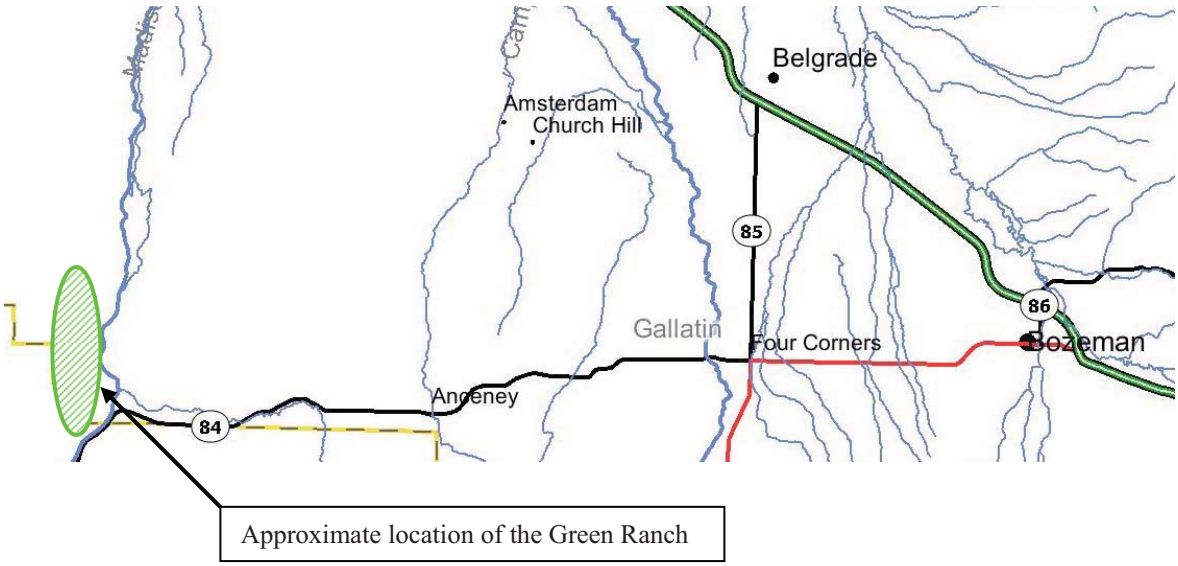
These locations and management proposals by Turner Enterprises and the Wyoming State Parks met the criteria described in the RFP, established by FWP and APHIS (with input from experts including the Interagency Bison Restoration Committee), for the distribution of YNP bison from the quarantine feasibility study and the use of those bison in restoration efforts. Criteria considered for the transplant location are included as *Appendix A*.

As part of the proposed action, each organization would be required to hold the translocated bison in fenced pastures for five years and make those bison and their offspring available for testing by USDA Animal and Plant Health Inspection Service, Veterinary Services (APHIS VS). Each organization would be required to agree to a brucellosis monitoring protocol developed by APHIS VS.

The following information is a summary from each of the proposals.

Green Ranch, Montana

The Green Ranch is a sub-ranch of the Flying D Ranch owned by Turner Enterprises, Inc. (TEI) located 20-miles west of Bozeman, Montana, in Gallatin and Madison Counties. The property consists of approximately 12,000 acres of intermountain grassland. The majority of the parcel is deeded land, with 2,577 acres leased land from the Montana Department of Natural Resources and Conservation. The Green Ranch is separated from the main portion of the Flying D Ranch by the Madison River.



Herd Management: (from their proposal)

The 12,000-acre parcel is perimeter fenced for bison, and also cross-fenced to divide the parcel into grazing management unit. Between the perimeter fencing and the cross-fencing, two fences will generally separate the QF bison herd from any livestock on adjoining properties. In the event a QF bison escapes, and it cannot be safely retrieved by traditional methods, the animal will be immobilized by TEI's staff wildlife veterinarian and transported back to the facility. In the event that effort is unsuccessful, the animal will be euthanized in a humane manner.

The parcel has a carrying capacity of 400 animal units, which provides ample margin for the needs of the QF bison in Groups 1 and 2, as well as their offspring, for the 5-year duration of the plan without any need for forage supplementation. In the event of severe prolonged drought that reduces the carrying capacity of the rangeland below the level required for the entire complement of bison, the parcel also has irrigated hay production that can be used as a safety net.

During the 5-year period, the QF bison will run as one mixed-age herd and be rotated through the parcel's 14 pastures (ranging from 300 to 3000 acres in size), consistent with TEI's established rest-rotation strategy of grass and habitat management.

The quarantine bison will be processed and tested according to the FWP/USDA APHIS protocols attached to the RFP. Upon receipt, TEI will hold the QF bison in a quarantine pasture for 45 days to observe their health status and to allow the animals to acclimate to new surroundings. Unless the QF bison are already electronically identifiable, TEI will apply an electronic identification tag to each animal, as well as a dangle tag, to aid in monitoring, testing, and management. All vaccinated females will be given a bangs tag. At the end of the initial quarantine period, the bison will be released into one of the grazing units on the parcel.

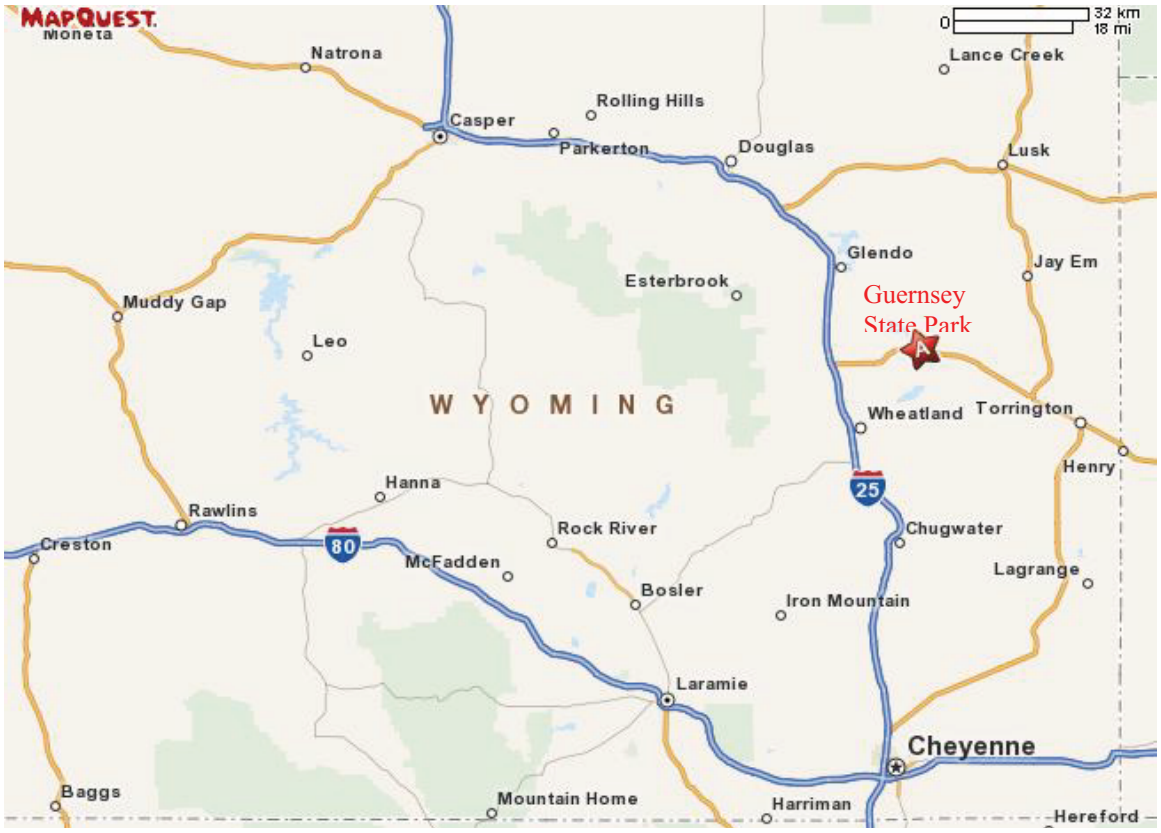
During the 5-year study period, composite fecal examinations will be conducted 4 times per year, and the animals will be treated for parasites as necessary. All animals will be worked and tested according to the brucellosis quarantine protocol. Blood samples will be drawn yearly from over 50% of the adult bison for viral and bacterial disease titer testing to monitor exposure to environmental pathogens. All QF bison that die during the 5-year period will be necropsied, and the tissue samples will be delivered to the Montana State Diagnostic Laboratory in Bozeman. Genetic testing will be conducted on all QF bison transferred into the TEI quarantine facility. Computerized records will be kept on all the QF bison, and those records will made available to the State and Federal agencies as required until the end of the study period.

Since the Green Ranch has the capacity for the original 88 bison and their progeny (estimated 340 bison) at the end of the 5 years, there will not be a need to employ hunting as a population control.

At the end of the 5-year research period
By the authorities cited in section 1.2 above, FWP has the ability to transplant and place species into facilities that will serve the agency's objectives. Under the broad authority and discretion FWP has for management of the research herd, FWP will receive 100% of the research herd and 10% of their progeny back into its direct management and allow the remainder of the progeny to go into private ownership. This portion of the proposed action will help serve the objectives of the research project, will serve to propagate a brucellosis-free herd of bison, and will encourage partners of this research project to carry out future conservation and restoration efforts of Yellowstone bison. In the case of TEI, the remaining QF progeny may be used to increase the genetic diversity of TEI's Castle Rock bison herd in northern New Mexico. That herd, which originated in Yellowstone Park in the 1930s, has been managed as a closed herd since then and has been identified by Texas A&M as genetically "pure" and unique.

Guernsey State Park, Wyoming

Guernsey State Park is located in Platte County, Wyoming approximately 98-miles north of Cheyenne. It contains 6,227 land acres, 2,382 water acres, and has an elevation of 4,420 feet. The Park is largely used for recreation opportunities, such as boating, water skiing, swimming, camping, picnicking, hiking, wildlife viewing, and selected hunting. The proposed Phase I bison area consists of an 800-acre pasture and is surrounded on three (3) sides by the Guernsey Reservoir and the North Platte River. An additional 400 acres will be added to the bison area as Phase II in two to three years.


MapQuest.
Moneta
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Rolling Hills
Parkerton
Douglas
Lance Creek
Lusk
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Jay Em
Esterbrook
Guernsey
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Muddy Gap
Leo
WYOMING
Wheatland
Torrington
Henry
Hanna
Rawlins
Creston
80
Rock River
McFadden
25
Chugwater
Lagrange
Bosler
Iron Mountain
Laramie
Cheyenne
Baggs
Mountain Home
Harriman
Hereford
0
32 km
18 mi

MapQuest.
0
1600 m
4800 ft
Proposed
Bison Area
270
Sunrise
Guernsey
State Park
Powell Mtn.
Guernsey
26

See *Appendix B* for additional maps of Guernsey State Park.

Herd Management (from their proposal):

The State of Wyoming will manage the bison through a hands-off approach, unless intervention is needed, to coincide with the long-term goal of conservation for the species and would manage the animals as much as possible as wildlife.

Initially the bison would be relocated to a temporary constructed paddock of 200 acres, with temporary fencing and housed there for an acclimation period of two-four weeks. After the acclimation period, the temporary fence will be dropped and the bison will then be allowed to range in an approximately 800-acre pasture.

The entire bison pasture perimeter will be enclosed with a double fence. To the north, the site will be separated from cattle by a 6' "field fence" (woven wire) and an interior electrical fence. All other perimeter fencing will consist of 6' tall seven (7)-wire barbwire fencing with electric fence on the interior. Fencing will be constructed to allow ingress and egress of other wildlife (pronghorn and mule deer).

In the case of escape, bison will be rounded up by park personnel and returned to the bison range. If needed, chemical immobilization or lethal removal will be used. No predator conflicts (i.e. grizzly bears) are anticipated. Guernsey State Parks is located outside the Brucella endemic area of Wyoming.

The housing area for the bison herd will be left in its natural state. Animals will be on range, not provided supplemental feed except under extreme circumstances such as drought, fire, etc. Guernsey State Park will store hay prior to obtaining the bison and will provide supplemental feed and "cake" to the bison only if it becomes necessary due to severe conditions.

Vaccinations and use of dewormers will not be routinely practiced, but will be done only on an as needed basis (as per agreement with the Wyoming State Veterinarian's Office.) Guernsey State Park will comply and assist with the brucellosis monitoring plan by daily observation for abortions and animal health and rounding up and working with the bison annually. Should serologically positive animals be detected in 2010 or subsequent years, Guernsey State Park will assist USDA/APHIS/VS in the collection of samples from positive animals. If *B. abortus* infection is confirmed in the herd, Guernsey State Park will cooperate with the Wyoming State Veterinarian's Office and APHIS epidemiologists in developing and implementing an appropriate disease management plan. This plan may consist of vaccination and rigorous testing, and possible slaughter, to whole herd depopulation.

No additional bulls will be incorporated with the Guernsey herd during the surveillance period. After the surveillance period, and under the advisement of bison geneticists and the American Bison Society, animals and translocation sites will be selected for optimum genetic diversity.

At the end of the 5-year research period
Long-term management plans for conservation herds on state lands in Wyoming may include hunting as a population control method. Guernsey State Park currently allows hunting of deer and turkey. The State anticipates that it can easily incorporate hunting of bison under the advisement of bison geneticists and the State of Wyoming Game and Fish.

At the end of the five years, QF bison and their progeny will serve the long-term greater conservation needs of plains bison by providing for augmentation and establishment of other conservation herds on public and or tribal lands. Under the direction of bison geneticists and the American Bison Society (Wildlife Conservation Society), genetic diversity will be maintained by importing and exporting genetics from other genetically pure bison conservation herds.

Logistics of Transporting Bison
When the bison are moved to their new locations, they would be transported in sealed horse trailers or other livestock-appropriate trucks.

The most direct route will be chosen from Montana to the release site depending upon existing road and weather conditions at the time. The bison will be treated humanely throughout their move with an effort to maintain family units.

All bison to be moved will be tested for brucellosis within 30-days of being translocated, per APHIS rules, to ensure they are still negative for brucellosis.

Costs
Each organization accepts all costs associated with the movement of bison to their respective locations, fencing, and management of the QF bison. APHIS VS will be responsible for brucellosis testing during the 5-year period.

2.2 Alternative B: No Action, 30 Bison Remain at the Quarantine Facility and 58 are Slaughtered

Under the No Action alternative no bison would be translocated to a new location outside the Greater Yellowstone Ecosystem. The original feasibility study was tailored to accommodate a limited number of bison held at the quarantine facility with the expectation that when a group was ready for disposition, an organization meeting FWP and APHIS's criteria would be chosen and the bison would be moved off-site to complete the monitoring component of the study. Because the need to remove the 88 bison from the quarantine facility is critical for the continuance of the feasibility study, under this alternative approximately 58 bison would likely be slaughtered in order to provide enough space for the remaining animals and the progression of study.

Additionally, if a portion of this group of bison were kept at the quarantine facility, funding would need to be secured by APHIS and FWP to cover the costs for the leased property and hay for those animals through the winter or until an alternate location can be

selected. FWP annually contributes approximately $24,700 to the Quarantine Feasibility Study. This amount does not include APHIS funds used for the study.

The feasibility study would continue as described on page 5 of this document and further discussed in the EA completed for Phases II/III.

2.3 Alternative C: Fourteen Bison are Translocated to the Guernsey State Park in Wyoming and the Remaining Bison are Processed as Described in Alternative B

This alternative would translocate 14 bison from the quarantine facility to the Guernsey State Park in southeast Wyoming and the remainder would be managed as described in Alternative B.

2.4 Alternative D: All 88 Bison are Translocated to the Green Ranch near Bozeman, Montana

This alternative would translocate all the available bison leaving the quarantine facility to the Green Ranch. The management of the herd would be the same as described under Alternative A with the exception at the end of the five years the Green Ranch would return the original QF bison and 25% of their offspring to FWP and retain the remaining offspring.

2.5 Alternatives Considered but Eliminated from Further Consideration

2.5.1 Translocation of Bison to a Different Location

All the proposals received during the RFP process were evaluated on the organization's ability to meet the objectives and criteria of the quarantine feasibility study. Additionally, proposals were evaluated on if the required bison handling facilities would be available to receive bison by the end of February 2010. Although the proposals from Wildlife Conservation Society (zoo consortium) and Fort Belknap could meet many of the quarantine monitoring requirements, neither organization could accept the bison in the necessary time frame.

The proposals from other private entities were eliminated from additional consideration because they did not meet the translocation criteria were requesting the bison for solely commercial interests.

2.5.2 Returning Brucellosis-Free Bison to Yellowstone National Park (YNP)

This option was originally discussed in the environmental assessment completed for Phase II/III and with in its Decision Notice. In both those documents, FWP, APHIS VS, and other cooperating partners believed the placement of the brucellosis-free bison back in the Park would be an inappropriate use of the QF bison since there were no areas within the park that did not already have an established bison herd, the exposure of the brucellosis-free bison to known infected herds would likely reinfect the returned bison with the bacteria, and the population of the existing bison herds in YNP is already at or above the

carrying capacity of the resources. Thus, if they moved beyond YNP boundaries they would be managed under the guidance of the IBMP.

2.5.3 Translocation of the 88 Quarantine Facility Bison to a FWP Wildlife Management Area (WMA)

This option has not been fully evaluated by FWP for both the short-term impacts and long-term implications at this time. Before placing bison on a WMA, FWP believes it is necessary to first evaluate the role of wild bison in Montana, as well as specific potential impacts (social, political, and biological) in the area of the WMA. Presently, no WMAs have the required facilities to manage bison as specified in the RFP. Infrastructure that is lacking includes bison-proof fencing to ensure their movements are contained within the WMA and adequate bison handling equipment necessary for continuing APHIS VS testing. Most WMAs were purchased to address specific wildlife objectives (e.g., big game winter range). None were considered as possible bison habitat at the time they were acquired to the exclusion of other wildlife.

FWP has begun the preparation of a statewide evaluation of bison's role as wildlife on the Montana landscape, which would likely include an investigation and discussion of the possibility for translocating bison to WMAs in the future if deemed appropriate and socially acceptable.

3.0: AFFECTED ENVIRONMENT & PREDICTED ENVIRONMENTAL CONSEQUENCES

Section 3 describes the physical, biological, and human resources of the environment that may be affected by the alternatives presented in the previous section and the environmental effects that the alternatives may have on those resources. Affected environment and environmental consequences have been combined into one chapter to give the reader a more concise and connected depiction of what resources exist in the project area that are directly associated with the proposed action.

3.1 Description of Relevant Pre-Existing Factors

Guernsey State Park

Guernsey State Park encompasses 6,227 land acres and 2,375 water acres. The park is designed to accommodate multiple uses including, overnight camping, picnicking, hiking, swimming, boating, and fishing. The Civilian Conservation Corps built many of the park's buildings during the 1930s with local natural materials and hand forged iron. In 2008 during the peak summer season (June-August), over 47,000 visitors enjoyed the outdoor opportunities of this state park.

The proposed location of the bison area is on a peninsula that juts out into the Guernsey Reservoir. The area is undeveloped except for a gravel road whose route takes visitors to

scenic points along the peninsula's perimeter. The nearest park facility is the Long Canyon West Campground, which is just northeast of the bison area boundary.

Green Ranch

Since 1990, the Flying D Ranch has had a commercial bison business within the boundaries of its Green Ranch. Until recently, a bison herd of 4500 has utilized the 14 pastures of the property in a rest-rotation strategy for the benefit of grass and habitat management. The remain bison from this group has been moved to different pastures on the east side of the Madison River to ensure this bison group and the QF bison do not mingle.

3.2 Relevant Resources

3.2.1 Brucellosis & Cattle

The challenges related to cattle and the possible transmission of brucellosis to cattle is an emotional and economic issue for many livestock owners and wildlife organizations. The Interagency Bison Management Plan (IBMP) currently provides guidance to cooperating agencies for the management of YNP bison moving beyond the Park's boundaries within the Greater Yellowstone Ecosystem.

Considerable research and analysis on bison distribution and movements, management of the spread of brucellosis, methods to manage emigrating bison, economic impacts to the cattle industry, and potential affects on other resources were completed for the Final Bison Management Plan EIS. This EA will reference findings from that document where appropriate but will not reproduce the EIS's complete discussions and analyses on those issues. Please refer to http://liv.mt.gov/AH/diseases/brucellosis/gya.asp for a copy of the entire EIS.

As previously noted in the Preface Section, FWP completed two environmental assessments, with APHIS participation on the Phase II/III EA, for the planning and establishment of a bison quarantine facility to establish protocols to test and screen QFS bison for brucellosis.

The bison to be translocated have been involved in the brucellosis research program since 2006. As testing protocols were established and refined, these bison were screened multiple times for brucellosis. As of March 2009, the adult bison waiting transplantation have been screened between 10-14 times and the calves have been screened three times for brucellosis.

Wyoming currently maintains a class-free status. (Personal communication with APHIS 2/09) Before QFB are moved to Wyoming, they would be tested one more time. As dictated by the IBMP and the quarantine protocols, only brucellosis-free bison would be available for translocation and conservation efforts.

During the first 5-years after placement, the bison herd will be categorized as a "research herd" by APHIS. Should any of the bison subsequently test positive for brucellosis, neither state's brucellosis status would be affected. Both Montana and Wyoming currently maintain a class-free status. (Personal communication with APHIS 11/09)

Predicted Consequences of Alternative A

Both proposed locations are not being used for cattle grazing. The Green Ranch's property has always been used for grazing bison. The nearest cattle operation to Guernsey State Park is immediately north of the proposed bison area, and there are neighboring property owners to Green Ranch that graze cattle.

The separation of cattle and bison follows the temporal and spatial management of the two species that is in the IBMP. Additionally, this separation criteria is required by FWP and APHIS VS for a location for the brucellosis-free bison leaving the quarantine facility. See 5.0 Monitoring for specific information about future monitoring of the bison after translocation is complete.

FWP does recognize the possibility that the originating species for brucellosis is elk. There are approximately 100 elk that use the Green Ranch and the area around it. There are no known elk herds using or migrating through the proposed bison area at Guernsey State Park. The closest known wild elk herd to the State Park utilizes private and Army National Guard lands north and east of the Park boundary.

The EIS identified many methods to address the risk of transmission between bison and cattle, but the IBMP primarily relies on enforcement of spatial and temporal separation of potentially infectious bison or their birth products and susceptible cattle. Although the translocated bison will be brucellosis-free, monitoring protocols for their first 5 years at their new location will maintain spatial separation between the species.

Based on the history of the bison at the quarantine facility and that they were tested numerous times by APHIS VS, FWP believes there is a very low probability the translocated bison harbor brucellosis and that there is a risk of transmission to cattle.

Should brucellosis be detected in the translocated QF bison in 2010 or subsequent years, the positives will be sacrificed, necropsied, and specimens collected for culture. If brucellosis infection is confirmed, whole-herd testing will be necessary. With results of the whole herd test, a disease management plan will be developed in cooperation with the State Veterinarian's office and APHIS epidemiologists. Depending on testing results, the disease management plan may consist of vaccination and rigorous test and slaughter, to whole herd depopulation.

Predicted Consequences of Alternative B

If the bison are not moved to a new location, 65% of the current quarantine facility (QF) bison group would be destroyed in order to provide space at the quarantine facility to continue the protocol research while ensuring proper housing conditions for the remaining bison in the program. The existence of brucellosis in native wildlife populations will

remain a threat to livestock interests and ongoing state and federal programs will continue to monitor for infections in cattle populations within Montana and Wyoming. The facility would still be operating at greater than desired capacity and would also require FWP's continued financial support for continued leasing of paddock areas and operational expenses.

Predicted Consequences of Alternative C

Under this alternative, the consequences of placing a small group of QF bison at Guernsey State Park would be a minimal threat to livestock interests as previously explained for Alternative A. The remaining QF bison would be affected by a population reduction (a portion is slaughtered) in order to remain at the quarantine facility for the immediate future.

Predicted Consequences of Alternative D

Consequences of choosing Alternative D would be the same as described as outcomes of Alternative A.

3.2.2 Access to Bison

In Montana:

As acknowledged in Section 1.2, the management of wild bison in Montana is a joint endeavor by FWP and DoL, because this species of wildlife is potentially a carrier of brucellosis. Section 1.5.1 specifically describes DoL's authority to control livestock diseases in Montana. The Interagency Bison Management Plan's (IBMP) adaptive management strategy of spatial and temporal separation works to eliminate bison and cattle from commingling in the same area or adjacent areas at the same time and maintaining a specific period between the time bison are moved from an area and when cattle are moved onto those lands.

In addition to the IBMP, in 2005 FWP authorized the state's first permitted bison hunt in 15 years. The hunt is considered a positive population management tool to the methods established in the IBMP. Since the initiation of a bison hunting season in 2005 through the 2008 season, 316 permits were issues by FWP to Montana hunters (tribal and non-tribal). Those hunters removed 135 bison.

Furthermore, under their 19th century treaty rights (Steven's Treaty), members of the Nez Perce and Salish Kootenai Tribes can hunt bison on public lands, such as Forest Service (FS) property adjacent to YNP. Additionally, FWP recognized the hunting rights of the Shoshone-Bannock Tribes in 2009. Other Tribes are also claiming hunting rights that have yet to be recognized.

In Wyoming:

Presently, wild bison are only found in the Absaroka wild bison management area and Jackson wild bison herd area, and accordingly, are considered wildlife. Otherwise, bison within the state are considered livestock.

Since 2007 the Wyoming Game and Fish Commission has approved Wyoming's wild bison hunting season held approximately from September 1st through January 3rd on lands in Fremont, Hot Springs, Lincoln, Park, and Sublette Counties.

Predicted Consequences of Alternative A

If the QF bison were translocated to the Guernsey State Park and Green Ranch, this group of bison would be initially lost to tribal groups and the general public for conservation efforts of the species. However, as this group and its offspring progress beyond the 5-year monitoring period, there is the possibility that some of those animals would be dispersed through the InterTribal Bison Cooperative (ITBC) to tribal lands in Montana or to other public entities in Montana or elsewhere for conservation purposes.

Furthermore, if there was ever a catastrophic event effecting Yellowstone National Park's (YNP) bison herd, individuals from the QFS bison herd could be used to help strengthen the gene pool of the remaining YNP animals for the survival of the species within the ecosystem.

Opportunities to hunt bison would remain available to Montana and Wyoming hunters through the licensing system administered by FWP, because bison migrating past YNP's boundaries is expected to continue.

The group of 14 translocated to Guernsey State Park and their progeny may be available for hunting only if population control is required and if Wyoming's Game and Fish Commission approves of the effort. If hunting is not implemented, the Park may decide to offer some of the bison to public and private organizations for conservation efforts at different locations.

FWP recognizes the contentious issue of public wildlife versus private wildlife. In the context of the proposed action, FWP expects the placement of QF bison at the Green Ranch and the subsequent relinquishment of some of the QF bison progeny at the end of the 5th year of quarantine study to TEI will be controversial to those interested in bison.

Predicted Consequences of Alternative B

Under the No Action alternative, a portion of the QF bison would be lost to Montanans because they would slaughtered in order to make room for the induction of the next group of bison into the feasibility study.

Predicted Consequences of Alternative C

The outcome of Alternative C would be a blend of the previously stated effects of Alternatives A and B in that the quarantine protocols would still be tested through the remaining bison groups at Guernsey State Park and at the quarantine facility but approximately 58 bison would be destroyed.

Predicted Consequences of Alternative D

Anticipated effects of Alternative D would be similar to those described if Alternative A were implemented only all the QF bison would be at the Green Ranch.

3.2.3 Wildlife

Guernsey State Park
Wildlife in the area includes whitetail deer, mule deer, pronghorn, coyotes, porcupines, red fox, chipmunks, ground squirrels, rabbits, and the deer mice. Avian species include prairie grouse, Hungarian partridge, wild turkeys, blue-winged teal, mallards, Canada geese, red-tailed hawk, prairie falcon, and turkey vultures.

Green Ranch
The parcel of land available to the QFS bison also sustains antelope and deer populations, upland game birds, and other non-game species. No conflict with wildlife has arisen in the past with bison grazing on the parcel. There is no resident elk herd on the parcel and elk have rarely been observed on the parcel.

Predicted Consequences of Alternatives A, C, and D
The proposed action will not result in the deterioration of wildlife habitat for the following reasons: 1) replacement of bison will likely not change the overall amount of forage currently available for ungulates and other species, 2) the level of grazing use by a small number of bison might have a limited positive impact on the habitat, since the AUM capacity is higher than the actual pressure, and 3) the Park's and Ranch's management philosophy to balance the needs of wildlife and vegetation resources will continued with the placement of bison.

There will be an increase in wildlife diversity and abundance with the addition of bison on the landscape at the Guernsey State Park. Since the area where the translocated herd will be moved into is required to be fenced by the Park, some wildlife movement may be impaired depending on the fence's design.

FWP does not expect any changes to the diversity or movement of wildlife at the Green Ranch because the ranch has grazed bison over recent years, fencing already exists along its boundary that wildlife navigate around or through it.

FWP does not anticipate any significant changes in diversity or abundance of non-game species at either proposed location because this proposal is unlikely to change wildlife habitats or ecological relationships in noteworthy ways.

Predicted Consequences of Alternative B
There would be no affects to game and non-game species if this alternative were implemented because no QF bison would be translocated to a new location. Status quo would be maintained at the existing quarantine facility.

3.2.4 Vegetation

Guernsey State Park
The habitat in Guernsey State Park is very typical of the Front Range and Great Plains. Vegetation includes sagebrush, Kentucky bluegrass, western bluegrass, and Indian paintbrush.

Juniper and Ponderosa Pine are common conifers in the area. Habitat is managed under the direction of the Natural Resources Conservation Service (NRCS) Range Program.

Green Ranch

Intermountain prairie grassland is the dominant habitat type at the ranch. Vegetation species include a mix of rough fescue, Idaho fescue, bluebunch wheatgrass, needle-and-thread grass, and other grasses and forbs in lesser quantities.

Predicted Consequences of Alternative A, C, and D

In impacts reported in the Bison Management Plan EIS (2000) noted bison and other ungulates had significantly changed the sagebrush, riparian, aspen, and low elevation conifer communities within the Yellowstone Northern Winter Range, but had much less impact on grassland communities. Data used in those environmental analyses noted that bison removed large quantities of forage and may have influenced productivity, and even distribution of some habitats. However, the research showed those impacts do not necessarily represent an abnormal ecological state. In ecological systems where ungulates are abundant, grazing and trampling from animals are normal ecological processes and are expected to influence plan communities. Furthermore, no data was found to prove that 2,000-5,000 bison, the range of population size for YNP over the past 20 years, have had long-term negative impacts on plant communities.

Historically, bison moved through open plains, grasslands, and woodlands. Because of concerns from the livestock industry about transmission of brucellosis, the Yellowstone bison have been confined to a limited range. Bison are grazers and feed on grasses, forbs, and sedges. The massive head is used to sweep snow away from forage. They possess a greater digestive capacity than cattle.

Historically bison have had important ecological values on the landscape. Bison consume large quantities of grasses and sedges and may contribute to new plant growth by distribution of seeds, breaking up soil surfaces, and fertilizing by recycling nutrients through their waste products. Those influences to the natural environment were considered when the interagency partners drafted the IBMP. Those same impacts are likely to occur if the proposed action were implemented.

Since fencing is required at Guernsey State Park for the bison, there will be some displacement of vegetation due to the new postholes and installation equipment. These disturbances are not expected to measurably alter the diversity or abundance of native vegetation. The presence of bison on the landscape will affect some vegetation but most species available within the designated bison area are ones historically adapted to grazing pressure. FWP and Park staff expected there would be no negative long-term impacts to the diversity of the present species. Short-term impacts are expected to range from reduction in existing wildfire fuels, trampling and disturbances of some areas by bison movements, and reduction of forage for some resident wildlife.

Based on the vegetation resource data used in the EIS and that the number of bison initially placed on the Green Ranch property will be a limited number and the vegetation is adapted

to the grazing pressure of bison, FWP expects there will be no short or long-term impacts to the vegetation.

Predicted Consequences of Alternative B

There are no anticipated impacts under this alternative because no QF bison would be moved and bison remaining at the quarantine facility would be fed hay.

3.2.5 Public Recreation

Guernsey State Park

The Guernsey State Park is one of six state parks located in the southeastern portion of Wyoming. The park's facilities provide visitors with numerous water and land-based recreation opportunities such as: boating, fishing, hiking, camping, wildlife viewing, and walking through the park museum. In 2008 during the peak summer season (June-August), over 47,000 visitors enjoyed the recreational opportunities of this state park.

Green Ranch

The Green Ranch is a privately owned component of the Flying-D Ranch. Public access is allowed only with the landowner's permission.

Predicted Consequences of Alternative A

Existing public recreation activities would not altered at Guernsey State Park if QF bison were placed there. The prospect of viewing bison at the park would provide the public with an additional educational opportunity about the species and wildlife conservation, which could be reflected in higher visitation. The only change in the public's access to all the Park's acres would be the closure of the existing gravel road that access the 800-acre bison area. This road would be kept strictly as a staff service road for maintenance and observation of the bison.

FWP anticipates there would be no changes in public recreation at the Green Ranch if the QF bison were placed there. Presently, there is no public access permitted onto the ranch's properties.

Predicted Consequences of Alternative B

Under this scenario, there would be no impact to public recreation. The remaining bison would still be visible at the quarantine facility to travelers along State Highway 191.

Predicted Consequences of Alternative C

The outcome of Alternative C would be a blend of the previous stated effects of Alternatives A and B.

Predicted Consequences of Alternative D

FWP anticipates there would be no changes in public recreation at the Green Ranch if the QF bison were placed there.

4.0: RESOURCE ISSUES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

The Montana Environmental Policy Act (MEPA) provides for the identification and elimination from detailed study of issues, which are inconsequential or which have been covered by a prior environmental review, narrowing the discussion of these issues to a brief presentation of why they will not have a significant effect on the physical or human environment or providing a reference to their coverage elsewhere (ARM 12.2.434(d)). While these resources are important, they were either unaffected or mildly affected by the proposed action, or the effects could be adequately mitigated.

A few issues were found not to be significant to the decision and were eliminated from further detailed analysis. In general, the reasons for eliminating these issues included:

- Experience and/or analysis from other bison management related documents have demonstrated that effects related to these issues are not noteworthy.

4.1 Soil & Geologic

The soil composition at the Guernsey State Park is a mix of Alice-Bayard and Featherlegs-Greenhope fine sandy loams and Casacjo-Taluce-Badland complexes. Most of slopes within the property do not exceed 15%, but there are areas of the Badland complexes that can be up to 40%.

There are over 25 different soil types within the 12,000 acres of the Green Ranch, which include a mix of loams (clay, sandy, cobbly, and silt). The predominant soils present are Blocko silt loam, Trimad cobbly loam, Varney cobbly loam, and soil complexes of Anceney-Trimad-Meagher, Blacksheep-Kalsted-Scravo, and Crago-Musselshell. Throughout the ranch the slope angles can range from 0% near the Madison River to 60% in the foothills.

Some soil groundbreaking activities will be required for the installation of the fence posts and cattle guards at Guernsey State Park. These impacts will be in limited areas and are not expected to impact any geological features or cause irreversible influences to soil qualities. No new soil disturbing activities are anticipated at the Green Ranch because all the necessary bison handling facilities and infrastructure already exist.

4.2 Water Resources

The Guernsey Reservoir surrounds the designated location for the translocated bison on three sides. The reservoir holds water from the North Platte River and is managed by the Bureau of Reclamation for the storage of irrigation water. At operating levels the reservoir has maximum depth of approximately 60 feet at its deepest point (river channel at the dam). The reservoir surrounding the “bison range” probably averages 12 feet deep in the river channel at operating levels.

The reservoir's water will be the primary water source for the bison within the Park. No impacts to water quality are expected with the placement of the bison. The likelihood that the bison's movements will change the existing bank conditions is low since the number of bison traveling on the property will be limited and the bison are expected to move along while foraging.

Water resources at the Green Ranch for bison to access range from the Green Ranch Ditch, Madison River, and numerous unnamed creeks. Previous bison herds that have been kept on the ranch have utilized wells and springs, with an irrigation ditch available if those resources run dry.

4.3 Aesthetics

The proposed bison area with Guernsey State Park is currently unfenced and the installation of a new fence is expected to be only minor distraction of the landscape's natural beauty in that area of the park. Other portions of the park will remain in their present developed or undeveloped state. The addition of bison to the park's landscape is expected to be an asset and opportunity for new educational opportunities for park visitors.

The would be no changes of the viewshed at the Green Ranch with the addition of the QF bison since the ranch has had bison there intermittently over the past 20 years and no new facilities are required to be installed.

4.4 Cultural & Historic

Prior to the arrival of Europeans to America, Native Americans hunted bison to supply them with food and materials to make clothing, tools, cultural artifacts, and shelters. Many Plains tribes followed the bison as part of their subsistence, and the bison became entwined to many of their cultural and ceremonial traditions.

By the mid-1800s, the expansion of European settlers in the west, the population losses due to small pox epidemics, and lack of food because bison herds had become commercially hunted for their hides signaled the end of the historic ways of the Plains Indians.

In Wyoming, the only remaining wild herds are found on the Absaroka and Jackson bison management areas. In Montana, wild bison only exist within the designated bison-tolerant zones near Yellowstone National Park.

Both proposed locations for the QF bison are within the historic range used by the species prior to the expansion of European settlements. Native Americans utilized areas just north of the park. Cultural surveys completed on the National Guard properties just north of the park did show considerable historic usage. Knowing that, it seems very likely that Native Americans would have traveled through and utilized the proposed bison area as well. The Park will have the cultural survey completed of the proposed bison area as part of their requirements with the Bureau of Reclamation.

There are documented tipi rings on public lands south of the Green Ranch but not within the ranch. Small historic sites are known to exist at the Green Ranch, but use of the property by previous bison herds have not been known to disturb those areas.

5.0 MONITORING PROTOCOLS

Each organization will maintain the translocated bison in one or more fenced pastures, approved by Federal and State animal health officials, on site until fall of 2010. During winter and spring, bison will be observed daily for abortions. Any aborted fetuses will be reported immediately to investigators and submitted to the state veterinary diagnostic laboratory for an abortion work-up and *Brucella* culture. In fall of 2010, all bison (cows, yearlings, and calves) will be worked through a chute and blood samples collected by APHIS for brucellosis serology testing. If animals are negative on serology, fences can be removed and the animals allowed to range.

Serologic tests will include the following: fluorescence polarization assay, standard card, standard tube, standard plate, complement fixation, rivanol, and BAP A. Interpretation of tests will be done by the designated brucellosis epidemiologist and the regional epidemiologist. Assuming an approximate 50% male/50% female calf crop each year and assuming that the slight majority of females will first breed as two-year-olds to calve as 3-year-olds and that animals will calve every year thereafter, it is anticipated that 88 bison will be tested in December 2009 and the maximum population in the following 4 years will be 338.

As part of the requirements of the project to ensure that latent infection is not present in the translocated bison, it is necessary to monitor the population for 5 years following translocation. During the first year (2010), every animal will be serologically tested by APHIS as described above. Thereafter, a percentage of adult or adolescent bison will be tested by APHIS. Using a calculation to determine a 5% or greater prevalence with 95% confidence, a figure of 45 to 53 bison will need to be tested each year as the population grows. Animal capture can be accomplished by setting up a trap and working them through a chute or by chemical immobilization delivered by dart, or by helicopter capture or a combination of techniques.

Should serologically positive animals be detected in 2010 or subsequent years, the positives will be sacrificed, necropsied, and specimens collected for culture. If brucellosis infection is confirmed, whole-herd testing will be necessary. With results of the whole herd test, a disease management plan will be developed in cooperation with the State Veterinarian's office and APHIS epidemiologists. Depending on testing results, the disease management plan may consist of vaccination and rigorous test and slaughter, to whole herd depopulation.

It is anticipated that if the translocated herds remain seronegative for 5 years following quarantine, continued regular monitoring would not be required as a condition of the Quarantine Feasibility Study.

6.0 POTENTIAL LONG-TERM CONSEQUENCES

The placement of the brucellosis-free bison at Guernsey State Park and the Green Ranch and their availability of them for further monitoring will provide APHIS VS with important data to add to the research information gathered through the efforts at the bison quarantine facility for the testing and screening for brucellosis in bison.

The completion of the 5 years of monitoring is expected to validate the protocols developed at the quarantine facility and potentially provide another tool to further the objective of establishing genetically pure herds of plains bison for future conservation and restoration efforts.

The completion of a Statewide Bison Management Plan will assist in the determination of potential locations for the returned QF bison and the habitat criteria needed to ensure their success.

7.0 PUBLIC PARTICIPATION AND COLLABORATORS

7.1 Public Involvement

During the previous two environmental assessments (EA) associated with the quarantine facility, the public was invited to submit comments through scoping and public meetings, as well as during public comment periods for each EA. Those comments and responses from FWP, which did include some related to the placement of brucellosis-free bison, are available at: http://fwp.mt.gov/publicnotices/notice_1127.aspx and http://fwp.mt.gov/publicnotices/notice_739.aspx .

For this EA the public will be notified in the following manner to comment on this EA, the proposed action and alternatives:

- Two public notices in each of these papers: *Helena Independent Record and The Bozeman Chronicle;*
- One statewide press release;
- Direct mailing to adjacent landowners and interested parties in Montana; and
- Public notice on the Fish, Wildlife & Parks web page: *http://fwp.mt.gov*.

Copies will be available for pubic review at FWP Region 3 Headquarters and at the FWP Headquarters office in Helena.

FWP plans to schedule a public meeting in Bozeman within the comment period where there will be an opportunity to speak with FWP on the proposed translocation of bison. Announcements for when the meeting is scheduled will be posted on FWP's website and in local newspapers.

In addition to the FWP public meeting, Guernsey State Park plans to participate in a public meeting hosted by the Wyoming Livestock Board in mid-December where the proposed introduction of the bison at the park will be introduced.

This level of public notice and participation is appropriate for a project of this scope.

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m., January 12, 2010 and can be mailed to the address below:

Bison Translocation
Montana Fish, Wildlife & Parks
1420 E. 6th Ave.
Helena, MT 59601
Or email comments to: QFBison@mt.gov

7.2 Collaborators - Other Agencies/Offices that Contributed to the EA

Montana Department of Livestock, Helena MT
Montana Fish, Wildlife and Parks, Helena MT
- Legal Bureau
- Wildlife Division

Turner Enterprises, Inc.
U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services, Ft. Collins CO
U.S. Fish and Wildlife Service, Bozeman MT
U.S. National Park Service, Yellowstone National Park WY
Wyoming Game & Fish, Wildlife Division, Cody WY
Wyoming State Parks and Cultural Resources, Cheyenne WY

8.0 ANTICIPATED TIMELINE OF EVENTS

Public Comment Period on EA: Mid-December until Mid-January 2010
Decision Notice Published: End of January
Begin Translocation Efforts: By late February 2010

9.0 DETERMINATION IF AN ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED

Based upon the above assessment, which has identified a limited number of minor impacts to the physical and human environment FWP concludes that none of the impacts associated with either alternative would have a significant impact on the human environment. In

determining the significance of each impact, the criteria defined in the State of Montana's Administrative 21.2.431 was used.

This environmental assessment is therefore the appropriate level of analysis for the proposed action and an environmental impact statement is not required.

10.0 EA PREPARER

Rebecca Cooper, FWP MEPA Coordinator Helena, MT

References

Montana Fish, Wildlife & Parks. 2004. Bison Quarantine Feasibility Study Phase I and Decision Notice. http://fwp.mt.gov/publicnotices/notice_696.aspx and http://fwp.mt.gov/publicnotices/notice_739.aspx

Montana Fish, Wildlife & Parks. 2005. Bison Quarantine Feasibility Study Phase II/III and 2006 Decision Notice. http://fwp.mt.gov/publicnotices/notice_987.aspx and http://fwp.mt.gov/publicnotices/notice_1127.aspx

National Park Service. 2000. Bison Management for the State of Montana and Yellowstone National Park, Final Environmental Impact Statement. National Park Service, Washington, D.C., NPS D-655a. http://liv.mt.gov/AH/diseases/brucellosis/gya.asp

U.S. Department of Agriculture, Animal and Plant Health Inspection Service. 1998 Brucellosis Uniform Method and Rules. www.aphis.usda.gov/lpa/pubs/bruumr.pdf

U.S. Department of Interior. 2008. Bison Conservation Initiative. http://www.doi.gov/initiatives/bison.html

Appendices

A – Quarantine Bison Criteria as Defined in the Request for Proposals Announcement
B – Guernsey State Park – Map of Designated Bison Area
C – Guernsey State Park Facility Map
D – Green Ranch Property Map

APPENDIX A

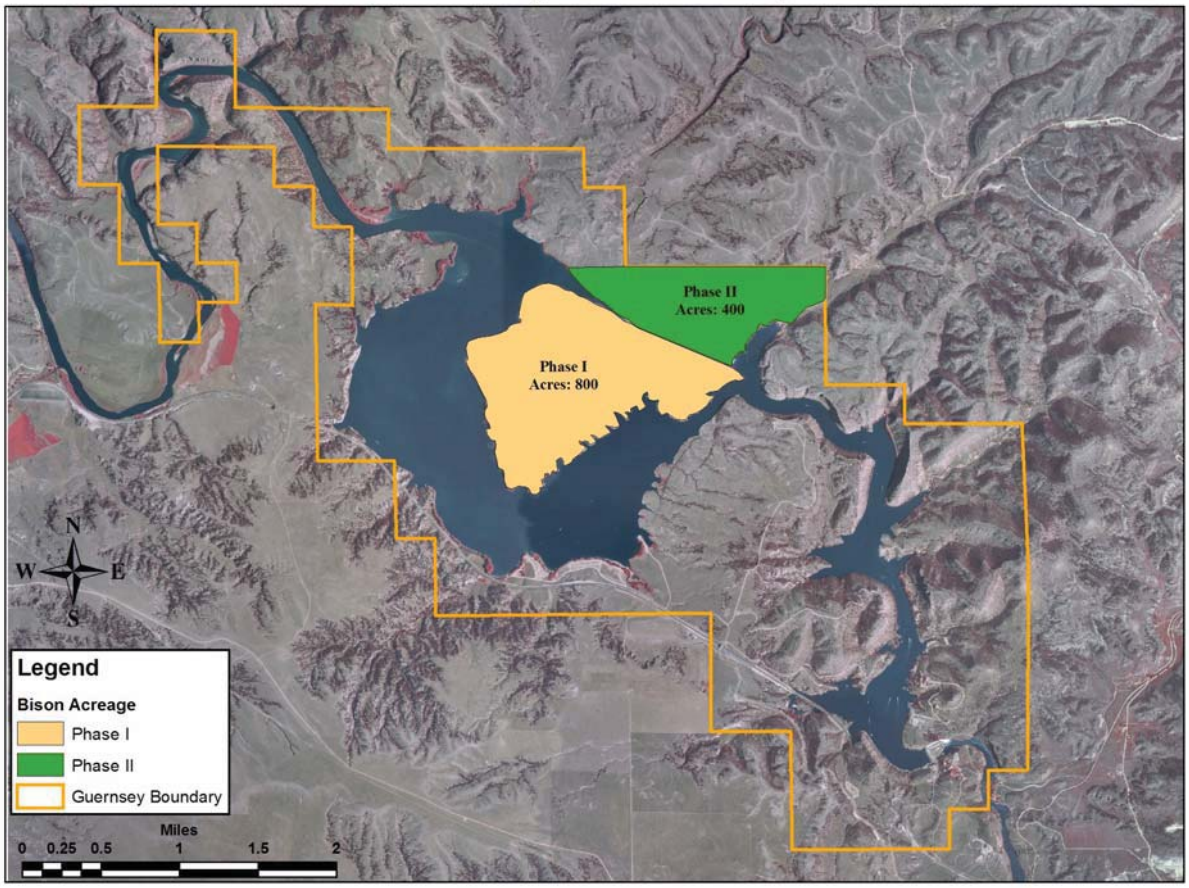
Translocation Criteria as Described in RFP Announcement

The following criteria for quarantine bison apply to all sites/scenarios:

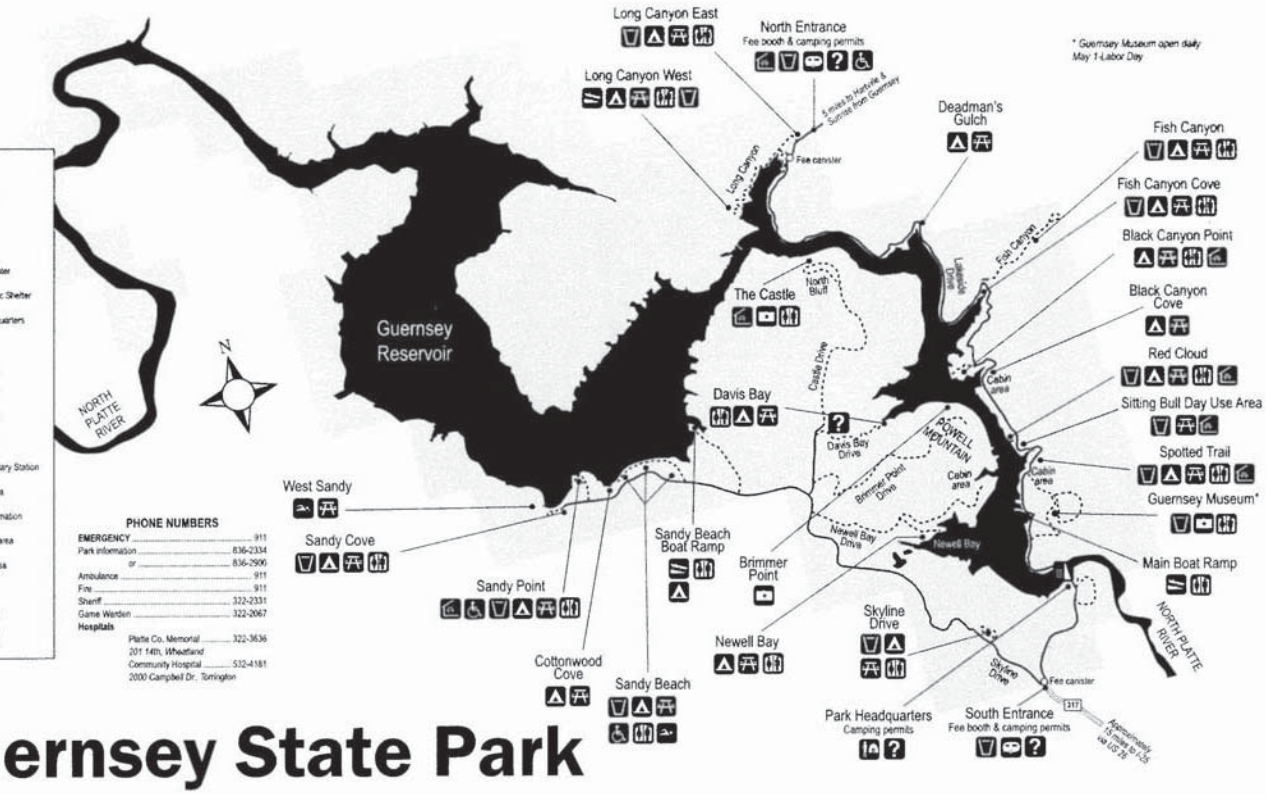
- Proposals must meet the research goals of the feasibility study.
- All applicable import rules and laws apply.
- The quarantine bison and their offspring must be maintained in a closed herd for 5 years, isolated from domestic cattle or other bison, and contained in a pasture where they can be readily accessible for continued intensive monitoring for the next year. Each group of bison must remain in a closed herd for four additional years, and be sufficiently contained to enable continued brucellosis surveillance following the monitoring and surveillance protocol. Agreement and signature of a Memorandum of Agreement to a surveillance and monitoring plan, and a response protocol developed by APHIS (attached) if brucellosis is detected.
- Any decision to translocate quarantine bison for the purpose of establishing new or augmenting existing conservation herds requires the consent of the entity that receives the bison and that entity's commitment to manage the bison in a manner that supports the purposes of the North American Bison Conservation Strategy.
- During the 5-year surveillance period following translocation, the bison may not be used for commercial purposes – i.e., sold as livestock (vs. ecotourism, outfitting, etc.). It is desired that these quarantine bison contribute to conservation of wild, genetically pure bison. Therefore, proposals with long-term management plans most in keeping with these ideals will be given priority. (See Note and reference above).
- Applicants should clearly describe how bison will be managed after the 5-year monitoring period.
- On public land, a suitable comprehensive management plan to address population management, control of distribution, management of wildlife conflicts and habitat management within the project area would be required.
- As much as is practical, hunting should be part of the population management program (as appropriate) on any restoration area.
- All restoration projects must comply with environmental regulations of recipient jurisdictions.
- A public involvement process must be completed to assure a degree of social acceptance of the project.
- Intent is to enable expansion of founders rather than hold them at the number initially dispersed.

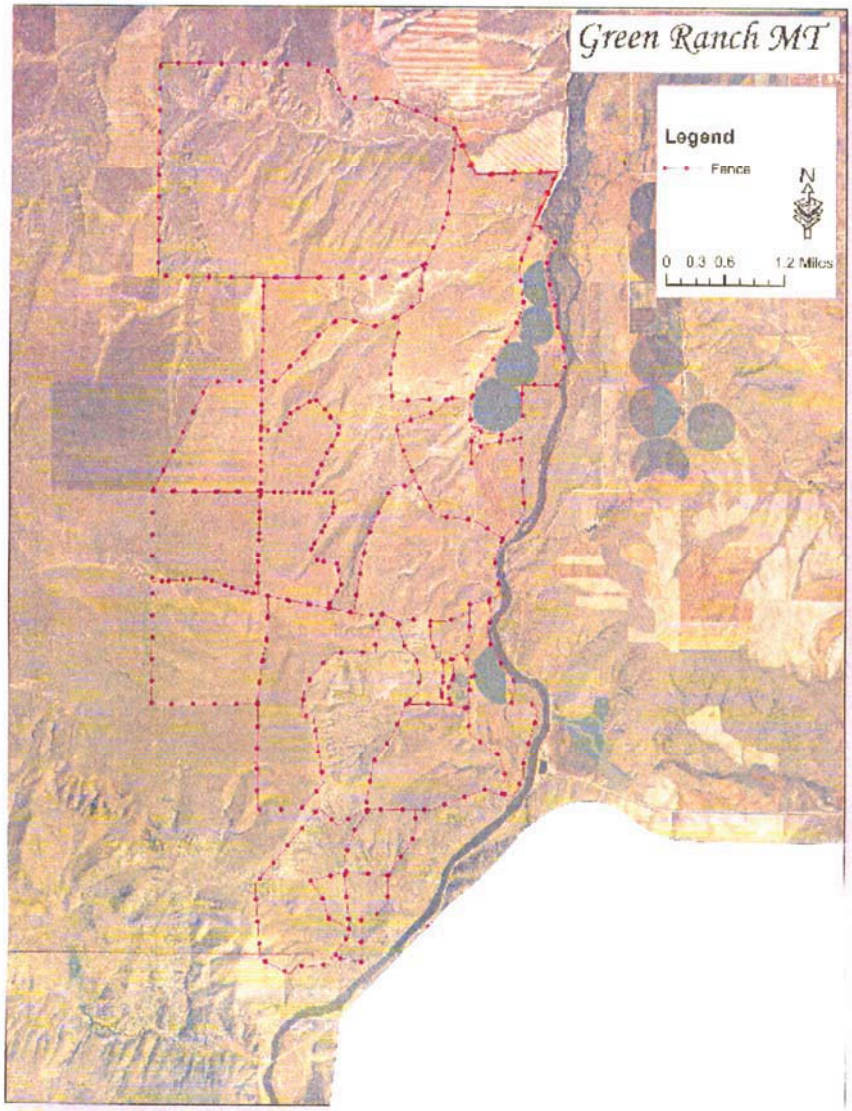
APPENDIX B

Guernsey Bison Herd Map



APPENDIX C


Long Canyon East
North Entrance
Fee booth & camping permits
Long Canyon West
5 miles to Hartville & Sunrise from Guernsey
Fee canister
Long Canyon
Deadman's Gulch
* Guernsey Museum open daily May 1-Labor Day
Fish Canyon
Fish Canyon Cove
Black Canyon Point
Black Canyon Cove
Red Cloud
Sitting Bull Day Use Area
Spotted Trail
Guernsey Museum*
Main Boat Ramp
NORTH PLATTE RIVER
Guernsey Reservoir
The Castle
North Bluff
Lakeside Drive
Fish Canyon
Castle Drive
Cabin area
Davis Bay
Davis Bay Drive
POWELL MOUNTAIN
Brimmer Point Drive
Newell Bay Drive
Newell Bay
West Sandy
Sandy Cove
Sandy Beach Boat Ramp
Brimmer Point
Sandy Point
Skyline Drive
Newell Bay
Cottonwood Cove
Sandy Beach
Fee canister
Park Headquarters
Camping permits
South Entrance
Fee booth & camping permits
317
Approximately 12 miles to I-25 via US 26
N
PHONE NUMBERS
EMERGENCY 911
Park Information 836-2334
or 836-2906
Ambulance 911
Fire 911
Sheriff 322-2331
Game Warden 322-2067
Hospitals
Platte Co. Memorial 322-3636
201 14th, Wheatland
Community Hospital 532-4181
2000 Campbell Dr., Torrington
ernsey State Park

APPENDIX D

Boundaries of Bison Pastures at the Green Ranch Are Marked in Red