References to Royal Teton Ranch and Yellowstone bison in the Final Environmental Impact Statement, Volume I, Bison Management Plan for the State of Montana and Yellowstone National Park, August 2000. US Department of the Interior, National Park Service, US Department of Agriculture, US Forest Service, Animal and Plant Health Inspection Service.

"Since completion of the Draft Environmental Impact Statement, the federal Departments of the Interior and Agriculture and the Rocky Mountain Elk Foundation teamed in February and again in August 1999 to purchase lands and conservation easements totaling 6,131 acres between the Reese Creek boundary and Yankee Jim Canyon. The purchased lands would be under the jurisdiction of the Gallatin National Forest and available for use by wildlife. It is expected that bison would be able to use the acquired lands for winter range when a cattle lease currently in operation on part of this property expires in 2002." (Page xvii)

"Privately owned lands that are not part of allotments include both livestock holdings and nonranch residences. North of Yellowstone National Park, the largest of the livestock operations is in the Reese Creek area on the Royal Teton Ranch. It has about 100 cow-calf pairs on unallotted private land, in addition to 150 on allotted private and public land.

In the West Yellowstone area, there are four private holdings located in the Horse Butte region between Duck Creek and the Madison River, totaling about 1,250 acres. Only the largest, with an area of about 650 acres, has a summer cattle operation with about 215 cow-calf pairs. Including producers to the west and south of Hebgen Lake, there are an estimated 800 cow-calf pairs on private land in the West Yellowstone area that could be directly affected by the most extensive of the SMAs (alternative 2). Altogether, publicly and privately grazed cattle to the north and west of Yellowstone that could be directly affected are estimated to total about 2,019 cow-calf pairs. They comprise less than 4% of the cattle population of Gallatin and Park Counties." (Page xxxiii)

"The Yellowstone bison population uses three different wintering areas in the park: Pelican Valley (the smallest), Mary Mountain (the largest, in the Hayden Valley-Firehole River area), and the Lamar Valley or northern range (see Bison Winter Movements map). Individuals or small groups of bison (usually bulls) move to other areas of the park, or occasionally leave the park to the east, south, or southwest, but most movement from the park has been into Montana, along the Madison River to the west and the Yellowstone River to the north. Although at one time these groups were semidistinct subpopulations and continue to winter in these areas, the subpopulations are no longer distinct (Meagher et al. 1994).

Bison migrate from Yellowstone National Park during the winter into Montana in five general areas (also see Bison Winter Movements map). During some years, substantial numbers of bison move north across the Reese Creek boundary of Yellowstone National Park and onto adjacent private land along the Yellowstone River valley near Gardiner (the Gardiner Valley). These lands are leased to cattle operators who graze livestock year round. Bison have historically used the Gardiner Valley, and would likely migrate much farther north without agency or other controls. Through land purchase, exchange, and conservation easements, a portion of this land in the Reese Creek area has been made available for wildlife winter range (see Royal Teton Ranch Land Conservation Project map).

Large numbers of bison also move from Yellowstone National Park onto Gallatin National Forest in the Eagle Creek/Bear Creek area, northeast of Gardiner. Land use in this area emphasizes wildlife and precludes domestic livestock. Although most bison remain in this area all winter,

some may move north and west beyond the Little Trail Creek/Maiden Basin hydrographic divide and onto private land in the Gardiner Valley." (Page 30)

"In addition to the objectives, the agencies have also recognized, as noted in the "Need for Action" section, that Yellowstone National Park is not a self contained ecosystem for bison. Lower elevation range could provide areas for bison to winter adjacent to the park as well as additional management options. Three of the alternatives (2, 3, and 7) analyzed in this environmental impact statement include provisions for such possible acquisitions, and the modified preferred alternative already includes acquisition of lands to the north of the Reese Creek boundary on the Royal Teton Ranch (see Royal Teton Ranch Land Conservation Project map). Although the agencies agree any acquisition of grazing rights, easements, or property from willing sellers could be by a public entity, Yellowstone National Park has no plans for expansion of the park boundary." (Page 45)

"Alternatives 2, 3, 7, and the modified preferred alternative provide for agencies to pursue purchase of property or conservation easements from willing sellers for bison winter range and other bison management purposes and activities. Since the completion of the Draft Environmental Impact Statement, 4,623 acres in the impact area have been acquired through purchase from Royal Teton Ranch, with an additional 1,508 acres permanently protected from development through a conservation easement. Discussions and negotiations for additional lands are continuing. A primary purpose of acquiring these lands is their use as wildlife winter range, including for bison (see volume 2, "Bison: Special Management Area" for more information)." (Page 49)

"Since completion of the Draft Environmental Impact Statement, the federal Departments of the Interior and Agriculture and the Rocky Mountain Elk Foundation teamed in February, and again in August 1999, to purchase lands and conservation easements north of the Reese Creek boundary of the park. The purchased lands would be under the jurisdiction of the Gallatin National Forest. U.S. Forest Service lands are multiple use lands including use by wildlife. The Gallatin National Forest would also administer and monitor the terms and provisions of the conservation easement. However, as noted above, Montana approval may be required to establish SMAs to allow bison onto these lands." (Page 55)

"Since completion of the Draft Environmental Impact Statement, the federal Departments of the Interior and Agriculture and the Rocky Mountain Elk Foundation teamed in February and August 1999 to purchase lands and conservation easements north of the Reese Creek boundary of the park. The purchased lands would be under the jurisdiction of the Gallatin National Forest. U.S. Forest Service lands are multiple use lands including use by wildlife. The Gallatin National Forest would also administer and monitor the terms and provisions of the conservation easement. However, as noted above, Montana approval may be required to establish SMAs to allow bison onto these lands." (Page 90)

"Private property (the Royal Teton Ranch) abuts the Yellowstone National Park boundary at Reese Creek. Through a lease with property owners, approximately 250 cow-calf pairs graze in the Gardiner Valley during the winter from the Corwin Springs bridge for about 8–9 miles to the north end of the property just south of Yankee Jim Canyon (see alternative 1 map). A capture facility inside the park at Stephens Creek is within 2 miles of Reese Creek, and operates from November 1 to April 30. If bison approach the northern boundary at Reese Creek, agency personnel would first attempt to haze bison back into the park to reduce the need for lethal removal. For those bison that could not be hazed, wing fences and agency personnel would

guide bison toward the capture facility inside the park for capture and testing. NPS personnel would shoot bison that could not be hazed or captured at the park boundary." (Page 104)

"Since completion of the Draft Environmental Impact Statement, the U.S. Departments of the Interior and Agriculture and the Rocky Mountain Elk Foundation teamed in February and again in August 1999 to purchase some lands and conservation easements north of the Reese Creek boundary of the park. The purchased lands are under the jurisdiction of the Gallatin National Forest. U.S. Forest Service lands are multiple use lands including use by wildlife. The Gallatin National Forest also administers and monitors the terms and provisions of the conservation easement. However, as noted above, Montana approval may be required to establish SMAs to allow bison onto these lands." (Page 113)

"The alternative has three adaptive management steps each for the north and west boundary areas. In the north boundary area, the first step would continue the provisions of the interim plan at the Reese Creek boundary of the park. Some of the lands north of this boundary were purchased and easements acquired by the U.S. Departments of the Interior and Agriculture and the Rocky Mountain Elk Foundation in 1999 and 2000. Purchased lands are now under the jurisdiction of the Gallatin National Forest. When an existing cattle lease on the property expires in 2002, step 2 would begin. In the western boundary area, step 1 would be similar to the interim plan except that all seronegative bison (including pregnant females, which would be instrumented with telemetry devices) up to a tolerance level of 100 would be released, rather than sent to slaughter as they are now. Captured calves and yearlings would be vaccinated with a safe vaccine, and all bison in the West Yellowstone area would be managed in zones, with progressively more intense management the farther bison are from the park." (Page 178)

"Phase 2. There is no change in operation of the Stephens Creek facility. When current cattle leases end on the Royal Teton Ranch the agencies would experiment with test negative, vaccinated bison to assess the "holding capacity" management needs. This would be done through creation of zones. (Note criteria listed under Special Management Areas, Phase 2.) When adequate controls and an agreed upon number is reached, vaccinated bison would be allowed onto the property until the holding capacity is reached. If this occurs then all bison would be tested and seropositive removed. (See alternative XX map.)" (Page 202)

"Since completion of the Draft Environmental Impact Statement, the federal Departments of the Interior and Agriculture and the Rocky Mountain Elk Foundation teamed in February and again in August 1999 to purchase lands and conservation easements north of the Reese Creek boundary of the park.

The purchased lands total about 6,000 acres and are under the jurisdiction of the Gallatin National Forest and, like all U.S. Forest Service lands, are multiple use lands including for use by wildlife. The Gallatin National Forest also administers and monitors the terms and provisions of the conservation easement. However, Montana approval may be required to establish SMAs to allow bison onto these lands.

In alternatives 2, 3, and 7, land in the Gardiner Valley, from the park's northern boundary to Yankee Jim Canyon, is either partially or wholly included in an SMA. In alternatives 3 and 7, land to the west of the Yellowstone River in this valley is referred to as the Reese Creek SMA in this document. In alternative 2, land on both sides of the river becomes part of an SMA.

As noted above, the property designated for acquisition in alternatives 3 and 7 has been acquired by purchase of land and conservation easements. Phase 2 of these alternatives would begin when these lands are designated as a SMA.

For the modified preferred alternative, the purchased and conservation easement lands north of the Reese Creek boundary are identified as zone 2. Topography and natural features would help restrict bison to public lands or lands where no cattle graze in the Reese Creek portion of the northern boundary area. Yankee Jim Canyon (the northern extension of the Reese Creek boundary area) is a narrow, natural constriction point for bison movement that would permit the agencies to halt bison movement north. The steep rocky terrain that impinges immediately on the Yellowstone River at this point provides a pincer point for bison movement. The Yellowstone River, steep terrain, snow depth, and other features would also help restrict bison movement east or west." (Pages 269-270)

"Cattle operations on public and private lands are located north and northwest of the towns of West Yellowstone and Gardiner. Near West Yellowstone, there are five cattle allotments on public land and a few private holdings in the Hebgen Lake area (see Bison Winter Movements map). Northwest of Gardiner, several operators run livestock on public allotments on the Gallatin National Forest, and at least one large operator (and several smaller) on private lands (see "Livestock Operations" chapter). In some alternatives, the boundary on the west side extends as far north as Buffalo Horn Creek. Extensive private land holdings lie north of this boundary and out of the analysis area. Cattle operations in the West Yellowstone area and most of those in the Gardiner area are predominantly summer only. Cattle are maintained on a year-round basis on the privately owned Royal Teton Ranch adjacent to the park's Reese Creek border." (Page 276)

"In the Yellowstone area, the livestock industry is composed mainly of cow-calf operations with the exception of a few sheep producers. Privately owned land and leased public land grazing allotments provide summer pastures. After the first snowfall, or at the end of the allotment period in the fall, most cattle are returned to their home base, usually elsewhere in Montana or Idaho where snow depths are more shallow and hay sources are more accessible. Near Yellowstone National Park in the winter, the snow is too deep and the winters are too cold for cattle to graze, and extra feed is required to maintain their body heat. Cattle under lease are fed hay and retained at Royal Teton Ranch (adjacent to the park's northwestern boundary) year-round." (Page 304)

"Land to the north and west of Yellowstone National Park is primarily part of the Gallatin National Forest, with some areas of privately owned property. The two existing management areas designated in the Interim Bison Management Plan are located on national forest land adjacent to the park. The Eagle Creek/Bear Creek area, located northeast of Gardiner, has about 23,000 acres. The Horse Butte area, located northwest of West Yellowstone, is about 24,000 acres in size. The interim plan allows for the winter migration of bison into these two management areas (only ones tested seronegative in West Yellowstone).

Tables 22–25 represent the estimated number of cattle currently (1999) being grazed on private and public lands north and west of the park boundary. The tables also show the areas where bison might occupy lands and the number of cattle that may be affected. See the maps showing private and public lands where cattle are currently grazed. For maps which show the private land holdings, please refer to tables 22 and 24 for the landowner designation.

A total of 390 cattle on the northern boundary occupy lands where bison may potentially range if allowed. In areas where cattle are present in the winter, bison are not allowed.

NOTE: After April 2002, the number of cattle on the RTR Trestle Ranch and the Park and Sentinel Butte public allotments could change to zero cattle per the conservation easement agreement under the Royal Teton Ranch land purchase. Based on the current Green Lake allotment boundary, bison could potentially use less than approximately 100 acres of that allotment near Yankee Jim Canyon due to topography.

Privately owned land in the Reese Creek area that could be affected by one or more of the alternatives includes both livestock holdings and nonranch residences, with the latter, in particular, found along the Yellowstone River. The largest of the livestock operations in the Reese Creek area is the Royal Teton Ranch, with about 300 cattle grazed on public and private land. It has many buildings and improvements." (Page 305)

"The government sector would incur costs associated with any additional purchase of winter range. Although no appraisals have been conducted of lands under consideration, it is estimated by the U.S. Forest Service that purchase of affected private lands, not including holdings in the Denny Creek/South Fork area or the already secured Royal Teton Ranch, would require about \$15 million. Easement costs were not estimated but would likely be less than outright purchase." (Page 483)

"The estimated nonmarket value of winter range expansion under alternative 2 is conservative in two respects. First, the nonmarket value of \$4.43 million is an estimate for acquiring only the Royal Teton Ranch lands and their associated winter range capacity. Alternative 2 actually proposes increasing winter range beyond the Royal Teton Ranch acquisition, and therefore, a higher nonmarket value of winter range expansion would be expected. Second, if the nonmarket valuation estimate from the national population had been reliable, the aggregate nonmarket values from this population would have been much greater in comparison to the current estimate and would easily justify the purchase price for the proposed winter range expansions." (Page 486)

"Nonmarket benefits for acquiring winter range have been estimated, as discussed in "Affected Environment." Acquisition is proposed at several levels that vary with each alternative. The first level uses a total budget of \$29 million in the Draft Environmental Impact Statement and was primarily intended to purchase the Royal Teton Ranch and possibly other lands north of Reese Creek. The lands targeted in this budget have now been acquired; these costs are sunk costs and do not appear as costs in tables 64–72. The nonmarket present value of benefits of this action is estimated at \$4.2 million, assuming that the lands begin to serve their purpose as winter range in the year 2002. A higher level of acquisition has also been proposed (total budget of \$43 million or \$15 million net of the sunk costs). The benefits of this increment of winter range has not been estimated. It appears that neither of these levels of acquisition would be justified based on nonmarket values attributable to Yellowstone National Park visitors and regional (Idaho, Montana, and Wyoming) residents. However, if reliable estimates were developed for the national population, the estimated nonmarket benefits would likely exceed costs." (Page 536)

**Researched by**: Darrell Geist & Associates

PO Box 7941 Missoula MT 59807

(406) 531-9284 z@wildrockies.org