



**THE FUND FOR ANIMALS, INC., Plaintiff-Appellant, v. MANUEL LUJAN, JR., in his official capacity as Secretary of the United States Department of the Interior; CLAYTON YEUTTER, Secretary of Agriculture; K.L. COOL, in his official capacity as Director of the State of Montana Department of Fish, Wildlife and Parks; LES GRAHAM, in his official capacity as Director of the State of Montana Department of Livestock and the State of Montana, by and through Marc Racicot, Attorney General, Defendants-Appellees.**

**No. 91-35283**

**UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT**

*962 F.2d 1391; 1992 U.S. App. LEXIS 8428; 92 Daily Journal DAR 5755; 22 ELR 21194*

**March 4, 1992, Argued and Submitted, Seattle, Washington  
April 29, 1992, Filed**

**PRIOR HISTORY:** [\*\*1] Appeal from the United States District Court for the District of Montana (Missoula). D.C. No. CV-90-0142-M-CCL. Charles C. Lovell, District Judge, Presiding.

**COUNSEL:** W. Craig James, Sinner, Fawcett & Mauk, Boise, Idaho, for the plaintiff-appellant.

Andrew C. Mergen, Appellate Section, Environment & Natural Resources Division, Department of Justice, Washington, D.C., for United States defendants-appellees.

Robert J. Brooks, Assistant United States Attorney, Butte, Montana, for United States defendants-appellees.

Norman C. Peterson, Agency Legal Services Bureau, Montana Department of Justice, Helena, Montana, for State defendants-appellees.

R. J. "Jim" Sewell, Jr., Helena, Montana, for amici curaie, Montana Stock Growers Assoc.

**JUDGES:** Before: Eugene A. Wright, and Arthur L.

Alarcon, Circuit Judges, Harold M. Fong, District Judge.

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\* Honorable Harold M. Fong, Chief Judge, United States District Court for the District of Hawaii, sitting by designation.

Opinion by Judge Alarcon.

**OPINION BY: ALARCON**

**OPINION**

[\*1394] OPINION

ALARCON, Circuit Judge:

The Fund for Animals, Inc. (the Fund) appeals from the denial of preliminary injunctive relief against the Secretary of the Interior and the Secretary of Agriculture [\*\*2] (Federal defendants), and the director of Montana's Department of Fish, Wildlife, and Parks (MDFWP), the director of Montana's Department of Livestock, and "the State of Montana, by and through Marc Racicot, Attorney General" (State defendants). The Fund claims that the defendants violated the National Environmental Policy

Act, 42 U.S.C. §§ 4321 *et. seq.* (NEPA) and the Montana Environmental Policy Act, *Mont. Code Ann. §§ 75-1-101 et. seq.*, (MEPA) by failing to prepare an environmental impact statement before adopting a plan to kill bison that leave Yellowstone National Park (Yellowstone).

The Fund asserts that the district court abused its discretion in denying a preliminary injunction. We affirm because the *Eleventh Amendment* bars the Fund's action against the State defendants for violations of MEPA. We also determine that the federal involvement in the bison management plan is insufficient to enjoin the State defendants for a NEPA violation. We further conclude that the district court did not abuse its discretion in ruling that the Fund did not carry its burden of demonstrating a likelihood of success on the merits and a possibility of irreparable injury, or the existence [\*\*3] of serious questions on the merits and a balance of hardships tipping in its favor.

#### *Pertinent Facts*

In January 1991, there were between 2,500 and 3,000 bison in Yellowstone. [\*1395] Three herds of bison live and graze in separate parts of Yellowstone. The Fund is primarily concerned about the treatment of the northern herd. There were between 600 and 800 bison in the northern herd in October 1990. The bison in the northern herd migrate out of Yellowstone each winter onto public land owned by the United States Forest Service and private land in the State of Montana. Private hunters and agents of the State of Montana have killed bison after they have crossed Yellowstone's boundaries for many years.

In October 1990, the National Park Service (NPS) solicited comment on an environmental assessment (EA) that described ways Montana and the federal government could manage the migrating bison until an Environmental Impact Statement (EIS) was prepared. The EIS would consider a long-term, more permanent planning effort. After receiving public comment on the alternative proposals described in the EA, the NPS published a finding of no significant impact (FONSI) on December 3, 1990.

The proposal adopted [\*\*4] by the FONSI contemplated that the MDFWP and the NPS would work together in managing the migration of bison from Yellowstone. Under the plan, bison cows and bulls leaving Yellowstone would be killed by private hunters

or state wardens. Bison calves would be captured, neutered and sold at public auctions. The 1990 bison management plan provides for the preservation of a core population of 200 bison in the northern herd. Once this number is reached, the plan requires that precautions be taken to protect the remaining bison from being killed or sold off. These precautions include hazing, harassment, slower harvest rates, selective removals of bison closest to domestic cattle, and the selection of special management zones where bison would be tolerated.

On December 5, 1990, the Fund filed a complaint alleging that the defendants had violated NEPA by failing to prepare an EIS to evaluate the 1990 bison management plan. On January 7, 1991, the Fund amended its complaint to include a claim that the State defendants' failure to prepare an EIS violated MEPA. The district court conducted a two day evidentiary hearing that commenced on January 10, 1991. The parties presented evidence concerning [\*\*5] the effect of the management plan on the northern herd and the danger of the transmission of brucellosis to Montana cattle by the migrating bison.

In its January 15, 1991 order denying a preliminary injunction, the district court concluded that the doctrine of res judicata and collateral estoppel barred the Fund's claims against the Federal defendants. It held that collateral estoppel and the *Eleventh Amendment* barred the Fund's claims against the State defendants. Alternatively, the district court held that the Fund had not raised serious questions regarding the merits of its claim or demonstrated that the balance of hardships favored the issuance of a preliminary injunction. On January 25, 1991, the district court filed a supplemental memorandum to explain its ruling more fully.

#### *DISCUSSION*

##### *I. Standing.*

The Federal defendants contend that the Fund does not have standing to maintain this appeal because it failed to show that its members suffered an injury as a result of the killing of the bison that leave Yellowstone. The Fund asserts that it has standing to contest the 1990 bison management plan because of the diminished opportunity for its members to view bison in Yellowstone. [\*\*6] In addition, the Fund asserts that the emotional distress suffered by its members after viewing the shooting of bison established its standing. We review de novo

whether an appellant has standing. *Northern Plains Resource Council v. Lujan*, 874 F.2d 661, 668 (9th Cir. 1989).

To establish standing, an appellant must demonstrate a personal injury that is fairly traceable to the appellee's conduct. *Allen v. Wright*, 468 U.S. 737, 751, 82 L. Ed. 2d 556, 104 S. Ct. 3315 (1984); *Alaska Fish & Wildlife Fed'n and Outdoor Council, Inc. v. Dunkle*, 829 F.2d 933, 937 (9th Cir. 1987), cert. denied, 485 U.S. 988, [\*1396] 99 L. Ed. 2d 501, 108 S. Ct. 1290 (1988). An organization may bring an action on behalf of its members if (1) the individual members would otherwise have standing to sue in their own right; (2) the interests being protected are relevant to the organization's purpose; and (3) the individual members are not required to participate in the lawsuit. *Id.* at 937-938 (quoting *Hunt v. Washington State Apple Advertising Comm'n*, 432 U.S. 333, 343, 53 L. Ed. 2d 383, 97 S. Ct. 2434 (1977)). The Federal defendants argue that the Fund has not met the first prong of the test on this appeal.

[\*\*7] The record shows that its individual members have standing to enjoin the appellees from adopting the 1990 bison management plan. At the evidentiary hearing, Wayne Pacelle, the National Director of the Fund for Animals, testified that Fund members had fewer opportunities to view wild bison in Yellowstone as a result of the defendants' actions.<sup>1</sup>

<sup>1</sup> The Federal defendants assert that Pacelle's testimony at the hearing could not establish standing because the Fund failed to call any of its members. The Fund was prepared to present another witness to testify about standing, but the district court asserted that it had "heard all of the standing testimony that the Court will receive." Because the Federal defendants failed to raise this issue before the district court, we will not consider it on appeal. *Smith v. United States Parole Comm'n*, 875 F.2d 1361, 1369 (9th Cir. 1989) (en banc); *Bolker v. Comm'r of Internal Revenue*, 760 F.2d 1039, 1042 (9th Cir. 1985).

Harm to a plaintiff's [\*8] "aesthetic and environmental well-being" has long been recognized as a cognizable injury. *Sierra Club v. Morton*, 405 U.S. 727, 734, 31 L. Ed. 2d 636, 92 S. Ct. 1361 (1972). For example, in *Alaska Fish*, 829 F.2d at 937, the Alaska Fish and Wildlife Conservation Fund contended that its members had suffered an injury because the defendants

allowed Alaskan Natives to hunt certain species of migratory birds. *Id.* at 937. We agreed, noting that the decrease in the number of migratory birds injured "those who wish to hunt, photograph, observe, or carry out scientific studies on the migratory birds." *Id.* We concluded that the Alaska Fish and Wildlife Conservation Fund had standing to challenge the actions of the director of the United States Fish and Wildlife Service and the Commissioner of the Alaska Department of Fish and Game on behalf of its members. *Id.* at 938. Likewise, in our case, the diminished opportunity of the Fund's members to view the northern bison herd in Yellowstone establishes standing to challenge the 1990 bison management plan.

The record also demonstrates that the Fund's members had standing to sue because of the psychological [\*9] injury they suffered from viewing the killing of the bison in Montana. Mr. Pacelle testified that several Fund members had been emotionally harmed when they saw bison "who were just standing outside the boundary of the park shot and crumbled [sic] to their feet." We have pointed out that "the NEPA zone of interests does not create a cause of action in persons claiming a psychological impact from a particular action, unless, perhaps, the psychological injury arises 'out of the direct sensory impact of a change in the [plaintiff's] physical environment.'" *Animal Lovers Volunteer Ass'n, Inc. (ALVA) v. Weinberger*, 765 F.2d 937, 938 (9th Cir. 1985) (quoting *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 779, 75 L. Ed. 2d 534, 103 S. Ct. 1556 (1983) (Brennan, J., concurring)).

In *Humane Soc'y of the United States v. Hodel*, 268 App. D.C. 165, 840 F.2d 45 (D.C. Cir. 1988), the court concluded that the Humane Society had standing to protest hunting on wildlife refuges. *Id.* at 53. In supporting its conclusion that standing existed, the court noted that the members' opportunities to view wildlife were diminished by the hunting of wildlife and [\*10] they were forced to "witness animal corpses and environmental degradation." *Id.* at 52.

The distress experienced by Fund members viewing bison being killed is distinct from that suffered by the public at large. Fund members, who presumably visit national parks and forests to view free-roaming bison, suffered a psychological injury beyond a generalized concern for the bison's [\*1397] welfare. They suffered an injury arising from a "direct sensory impact of a

change in [their] physical environment." *ALVA*, 765 F.2d at 938. We are persuaded that the Fund has standing to prosecute this appeal.

## II. Eleventh Amendment.

The State defendants assert that the *Eleventh Amendment* bars the Fund's NEPA and MEPA claims. The Fund does not address the MEPA issue, but contends that the *Eleventh Amendment* does not bar its NEPA action against the State defendants.

In *Pennhurst State School and Hospital v. Halderman*, 465 U.S. 89, 79 L. Ed. 2d 67, 104 S. Ct. 900 (1984), the Court held that the *Eleventh Amendment* precludes federal courts from hearing claims that a state or its officials violated state law in carrying out their responsibilities. *Id.* at 121. The [\*11] state's immunity under the *Eleventh Amendment* may be waived only where the state gives an unequivocal indication that it has consented to suit in a federal court. *Atascadero State Hospital v. Scanlon*, 473 U.S. 234, 247, 87 L. Ed. 2d 171, 105 S. Ct. 3142 (1985). The record does not demonstrate that the State of Montana consented to be sued in federal court for alleged violations of MEPA. The *Eleventh Amendment* bars the Fund from proceeding in federal court against either the state or its officers for violations of MEPA.

Although the federal judiciary cannot hear claims against a state or its officers that arise from state law, the *supremacy clause* mandates that federal courts have the power to enjoin state officials for violations of federal statutes. *Almond Hill School v. United States Dep't of Agric.*, 768 F.2d 1030, 1034 (9th Cir. 1985). The *Eleventh Amendment*, however, bars an action alleging a violation of federal law if brought directly against a state or one of its agencies. *Id.* at 1034-35. Accordingly, we must dismiss the Fund's NEPA claim against the State of Montana.

## III. Applicability of NEPA to the State Defendants.

The State defendants urge [\*12] us to dismiss the Fund's NEPA claims because the statute applies only to "agencies of the Federal Government." 42 U.S.C. § 4332. Nonfederal defendants may be enjoined if "federal and state projects are sufficiently interrelated to constitute a single 'federal action' for NEPA purposes." *Friends of the Earth, Inc. v. Coleman*, 518 F.2d 323, 329 (9th Cir. 1975). For example, we have held that a nonfederal actor

that receives federal financial assistance may be enjoined for failing to comply with NEPA. *Homeowners Emergency Life Protection Comm. v. Lynn*, 541 F.2d 814, 818 (9th Cir. 1976). In addition, a nonfederal actor that enters into a partnership or joint venture whereby the federal government provides goods, services, or financing may be enjoined from violating NEPA. *Macht v. Skinner*, 286 App. D.C. 296, 916 F.2d 13, 20 (D.C. Cir. 1990); see *Sierra Club v. Hodel*, 544 F.2d 1036, 1044 (9th Cir. 1976) (allowing construction of a magnesium plant by nonfederal defendant to be enjoined because the nonfederal defendant agreed that a federal agency would construct a transmission line and supply power to the plant). Nonfederal actors [\*13] may also be enjoined under NEPA if their proposed action cannot proceed without the prior approval of a federal agency. See *Found. on Economic Trends v. Heckler*, 244 App. D.C. 122, 756 F.2d 143, 155 (D.C. Cir. 1985) (holding that federal court could enjoin nonfederal actor where the nonfederal action cannot lawfully begin or continue without the prior approval of a federal agency); see also *Biderman v. Morton*, 497 F.2d 1141, 1147 (2nd Cir. 1974) (holding that where nonfederal action cannot lawfully begin or continue without the prior approval of a federal agency, nonfederal actor may be enjoined under NEPA).

State actors may not be enjoined under NEPA simply because a state project involves major federal action. *Macht*, 916 F.2d at 18. Allowing nonfederal actors to be enjoined for NEPA violations "undermines the autonomy left by NEPA to [\*1398] state and local officials." *Friends of the Earth*, 518 F.2d at 329.

In this matter, the State of Montana has not received federal financial support to hunt and kill northern herd bison. Montana has not entered into a partnership or joint venture that involves the receipt of goods or services [\*14] from a federal agency. Bison are not a threatened or endangered species protected by the Endangered Species Act, 16 U.S.C. §§ 1531 *et. seq.* Therefore, federal approval to kill bison on state lands is not required. The record shows that Montana hunters have been killing a significant number of bison within that state's boundaries for many years.

An injunction against the State defendants for a NEPA violation under the circumstances presented in this matter would be inequitable. After independently managing the bison problem within its boundaries for a

number of years, Montana has voluntarily agreed to cooperate with the federal government in a plan that limits the number of northern herd bison that will be killed. Montana should not be penalized for consenting to participate in a plan designed to limit the killing of northern herd bison.

#### IV. *Res Judicata* - Claim Preclusion

The Federal defendants assert that the Fund's present action is barred by the doctrine of *res judicata* or claim preclusion because the NEPA claim at issue here is identical to the one previously asserted in a 1985 lawsuit. An appellate court reviews the availability of the defense of *res judicata de novo*. *State of Nevada Employees Ass'n Inc. v. Keating*, 903 F.2d 1223, 1225 [\*\*15] (9th Cir.), cert. denied, 112 L. Ed. 2d 565, 111 S. Ct. 558 (1990).

"A final judgment on the merits bars a subsequent action between the same parties or their privies over the same cause of action." *Davis & Cox v. Summa Corp.*, 751 F.2d 1507, 1518 (9th Cir. 1985). Claim preclusion bars the assertion of any theory of recovery that could have been asserted in the first action. *Robi v. Five Platters, Inc.*, 838 F.2d 318, 322 (9th Cir. 1988).

The Federal defendants assert that the 1985 action brought by the Fund for Animals against the Secretary of the Interior, the Director of the National Park Service, and the Superintendent of Yellowstone, in their official capacities, precludes this suit. In the 1985 action, the Fund alleged that the named defendants allowed bison to leave Yellowstone knowing that hunters, ranchers, and state game wardens in Montana were killing these animals. In an unpublished memorandum, the district court held against the Fund and in favor of the named defendants in ruling on cross motions for summary judgment.

The 1985 summary judgment was a final judgment on the merits. Although the two actions name different federal defendants, [\*\*16] "there is privity between officers of the same government so that a judgment in a suit between a party and a representative of the United States is *res judicata* in relitigation of the same issue between that party and another officer of the government." *Sunshine Anthracite Coal Co. v. Adkins*, 310 U.S. 381, 402-03, 84 L. Ed. 1263, 60 S. Ct. 907 (1940); *Scott v. Kuhlmann*, 746 F.2d 1377, 1378 (9th Cir. 1984).

The defense of *res judicata* is inapplicable, however, because the Federal defendants have not demonstrated that the 1985 action and the matter before us involve the same cause of action. In determining whether successive lawsuits involve the same cause of action, we have considered the following factors:

(1) whether rights or interests established in the prior judgment would be destroyed or impaired by prosecution of the second action; (2) whether substantially the same evidence is presented in the two actions; (3) whether the two suits involve infringement of the same right; and (4) whether the two suits arise out of the same transactional nucleus of facts. The last of these criteria is the most important.

*C.D. Anderson & Co. v. Lemos*, 832 F.2d 1097, 1100 (9th Cir. 1987) [\*\*17] (citations omitted).

After reviewing the record in both proceedings, we conclude that the Fund's current claim is not precluded by the district [\*1399] court's judgment in the 1985 action. In the 1985 action, the Fund alleged that the defendants' failure to prevent bison from leaving Yellowstone required the preparation of an EIS. The district court held in the 1985 action that the named federal defendants were not required to prepare an EIS because "allowing migration of some bison out of the boundaries of the park is not an irreversible or irretrievable commitment of resources."

In the present action, the Fund is challenging a bison management plan that will be carried out jointly by the State and Federal defendants. Although the Fund once again contends that an EIS must be prepared, the 1990 bison management plan differs significantly from the passive conduct of the named federal defendants in 1985 in failing to prevent bison from leaving Yellowstone. In this matter, the Federal defendants are active participants in a plan that attempts to achieve specific goals in managing the northern herd with the cooperation of the State of Montana. The Federal defendants' proposal to prevent the State [\*\*18] defendants from reducing the northern herd to a number less than 200 is clearly different from the claim that the federal agencies failed to take any action to prevent bison from leaving Yellowstone. See *American Horse Protection Ass'n v. Andrus*, 608 F.2d 811, 814-15 (9th Cir. 1979) ("While interim action involving removal of horses for the protection of the range pending issuance of an EIS may

be felt to be insignificant or not 'major,' it would not follow that the ultimate decision to remove horses in order to maintain the horse population at a permanent level would be equally insignificant."). The 1990 bison management plan provides that bison cows, bulls and calves that leave Yellowstone will be treated differently. In the 1985 action, the Fund alleged that the named defendants passively acquiesced in the shooting of all bison that entered the State of Montana from Yellowstone.

The present action challenges the adequacy of the EA prepared regarding the interim 1990 bison management plan. The 1985 action concerned different governmental conduct. The defense of res judicata does not apply in this action. The district court erred in ruling that the Fund's claim [\*\*19] was precluded by the decision in the 1985 action.

#### V. Collateral Estoppel - Issue Preclusion

Both the State and Federal defendants assert that the district court's ruling in the 1985 action that an EIS was not required precludes the Fund from litigating the requirement of an EIS for the 1990 bison management plan. The doctrine of collateral estoppel bars the relitigation of issues that were resolved in a prior proceeding, even if the later suit involves a different cause of action. *Greater Los Angeles Council on Deafness, Inc. v. Baldrige*, 827 F.2d 1353, 1360 (9th Cir. 1987).

The doctrine of collateral estoppel applies only when the issues presented in each matter are identical. The doctrine is inapplicable if the issues are merely similar. *Shapley v. Nevada Bd. of State Prison Comm'rs* 766 F.2d 404, 408 (9th Cir. 1985). We review de novo the availability of the defense of collateral estoppel. *Bates v. Union Oil Co. of California*, 944 F.2d 647, 649 (9th Cir. 1991).

In *South Delta Water Agency v. United States*, 767 F.2d 531 (9th Cir. 1985), the defendants attempted to use a 1963 Supreme Court case, [\*\*20] which held that the operation of a dam conformed to statutory requirements, to estop the plaintiffs from asserting that the present operation of the dam was improper. *Id.* at 538-39. We held that collateral estoppel did not apply because the defendants' current operation of the dam presented a different issue from the one the Supreme Court decided in 1963. *Id.*

The issues presented in this matter are different from those before the district court in the 1985 action. The 1985 action did not determine whether the 1990 interim plan for the management of cows, bulls and calves that migrate from Yellowstone required the preparation of an EIS. The district court erred in concluding that the [\*1400] Fund was collaterally estopped from prosecuting this action.

#### VI. Preliminary Injunction.

In reviewing the denial of a preliminary injunction, we must determine whether the district court abused its discretion in applying the law or whether it clearly erred in formulating its findings of fact. *Sierra Club v. Penfold*, 857 F.2d 1307, 1321 (9th Cir. 1988).

In order to obtain a preliminary injunction, a party must demonstrate either (1) a likelihood of success [\*\*21] on the merits and a possibility of irreparable injury, or (2) the existence of serious questions on the merits and a balance of hardships tipping in its favor. *Half Moon Bay Fishermans 's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 507 (9th Cir. 1988). These two legal standards are not distinct, but rather extremes of a single continuum. *Id.* In cases where the public interest is involved, the district court must also examine whether the public interest favors the plaintiff. *Caribbean Marine Services Co. v. Baldrige*, 844 F.2d 668, 674 (9th Cir. 1988); *Northern Alaska Environmental Center v. Hodel*, 803 F.2d 466, 471 (9th Cir. 1986).

Because we hold that the district court did not abuse its discretion in determining that the Fund had not shown either irreparable injury or a balance of hardships tipping in its favor, we need not determine whether the district court erred in concluding that the Fund had failed to raise serious questions concerning whether the Federal defendants complied with NEPA in preparing the EA and the FONSI. Merely establishing a procedural violation of NEPA does not compel the issuance of a preliminary [\*\*22] injunction. *Sierra Club*, 857 F.2d at 1318; *Northern Cheyenne Tribe v. Hodel*, 851 F.2d 1152, 1158 (9th Cir. 1988).

The district court cured any alleged inadequacy in the EA by holding an evidentiary hearing to determine the environmental impact of the plan to kill bison cows and bulls, and to capture and sell bison calves. *cf.* *Northern Cheyenne Tribe*, 851 F.2d at 1158 (remanding case for an evidentiary hearing because district court

balanced the equities based only on an inadequate EIS). At the hearing, the district court received evidence regarding factual questions that the Fund contended the Federal defendants ignored in preparing the EA.

The Fund contends that the district court abused its discretion in denying preliminary injunctive relief because it relied on clearly erroneous factual findings. The Fund specifically challenges the district court's findings that the migrating bison pose a serious risk of transmitting brucellosis to Montana cattle and that the northern herd is not genetically unique. The Fund contends that the court's findings "stand in naked contrast to the testimony offered at the hearing." A review [\*\*23] of the evidence demonstrates that the district court's findings are not clearly erroneous.

An appellate court may overturn the findings of a district court when "although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed." *Anderson v. City of Bessemer*, 470 U.S. 564, 573, 84 L. Ed. 2d 518, 105 S. Ct. 1504 (1985) (quoting *United States v. United States Gypsum Co.*, 333 U.S. 364, 395, 92 L. Ed. 746, 68 S. Ct. 525 (1948)). An appellate court cannot reverse a finding, however, "simply because it is convinced that it would have decided the case differently." *Id.*

In challenging the district court's finding that bison infected with brucellosis pose a risk to domestic cattle, the Fund relied on the uncontested fact that no case has been reported of the transmission of brucellosis from Yellowstone bison to domestic cattle. The Fund's argument ignores the evidence in the record which supports the district court's finding that the "uncontrolled migration of potentially brucellosis-infected bison into Montana causes a real and present danger to the livestock industry of Montana as well as a significant health risk [\*\*24] to humans."

The record shows that brucellosis is a serious disease that causes miscarriages in [\*1401] cattle and can result in death to humans who contract undulant fever from infected cattle. The district court received evidence of a study conducted at the Texas A & M School of Veterinary Medicine that demonstrated infected bison could transmit brucellosis to cattle in a controlled environment. The record also shows that approximately half of the Yellowstone bison herd have tested positive for brucellosis. The court's expert, Dr. David Cameron,

testified that bison have a greater possibility of transmitting brucellosis to cattle if the two species come into close contact. Domestic cattle are most likely to be infected with brucellosis by ingestion, either directly by contact with a newborn bison calf or fetus, or indirectly through ingesting contaminated feed.

The district court did not clearly err in finding that the migrating Yellowstone bison pose a serious health risk. Although no documented case of transmission from infected Yellowstone bison to cattle has been verified, the evidence presented at the hearing supports the district court's finding that a serious potential for such transmission [\*\*25] exists.

In addition to brucellosis, bison pose a serious threat to human safety. The court found that bison react aggressively to human encroachment and can cause considerable property damage. Because fences and other preventive measures are ineffective at controlling the bison's movement, they have wandered into Montana towns located near the Park. The towns of Gardiner, West Yellowstone and Corelaine Springs report that during the winter months, bison roam through their main streets.

The Fund also challenges the district court's finding that the three bison herds in Yellowstone are not genetically or biologically unique. The Fund argues that the district court erred in concluding that the entire Yellowstone bison population should be examined to determine the environmental impact of the 1990 bison management plan.

A review of the facts presented at the evidentiary hearing supports the district court's finding that the northern herd of Yellowstone bison is not genetically unique. The Fund's expert, Dr. Dirk Van Duren, testified that the northern herd of Yellowstone bison is not a distinct subspecies. He further stated that he saw "no immediate threat to [the genetic uniqueness of [\*\*26] the Yellowstone bison]."

Dr. Mary Meagher, the Yellowstone bison biologist, testified that any unique characteristics of the original herd of twenty to fifty Yellowstone mountain bison that remained in the park in 1902 have been diluted by breeding with plains bison from other areas. Dr. Meagher also stated that extensive interbreeding had occurred among the three herds in Yellowstone. Accordingly, Yellowstone has "the same gene pool, whatever that gene pool is, throughout the park not just the Northern Range."

Dr. Cameron testified that it is "reasonably safe from a population genetic point of view to think of the herds as all one." He further stated that "there's a sufficient mixing of the genes of these separate populations that it's very unlikely that there is a significant holding of peculiar or necessary variance of that population in the northern herd."

We conclude that the district court's finding that the northern herd of Yellowstone bison is not genetically unique is well supported by the testimony presented at the evidentiary hearing. The Fund's contention that the district court abused its discretion in relying on clearly erroneous factual findings is without merit.

[\*\*27] VII. *Public Interest*

The district court found that the public interest supported the adoption of the 1990 bison management plan, "given the serious threat of brucellosis, the large number of excess bison, and the lack of feasible alternatives to control bison migrating out of the park." The record supports this finding. Evidence was presented that brucellosis is a serious disease, creating a risk of death in humans, and causing abortions in diseased cattle. Montana has spent 30 million dollars to eradicate brucellosis in its cattle herds. It obtained a "brucellosis [\*1402] free" status from the United States Department of Agriculture in 1985. This "brucellosis free" status allows Montana to export cattle without testing. A loss of its "brucellosis free" designation would require Montana to spend over two million dollars a year for the testing of its cattle.

The evidence presented at the hearing demonstrated

that the Federal defendants had attempted to use other alternatives to control the bison migration without success. The NPS tried to herd the bison with helicopters, installed fences to impede the bison's movement across Yellowstone's boundaries, and used audio and visual scare devices, [\*\*28] such as firecrackers, sirens, flashing lights and wolf howls. In addition, the NPS also tried to stop the bison from migrating by using pain-inflicting devices, bird shot, and rubber bullets.

The evidence at the evidentiary hearing also demonstrated that various control actions have not decreased the number of bison roaming free in Yellowstone. The size of the herd has fluctuated from 20 to 50 animals in 1902, 1500 animals in 1954, and 397 animals in 1967. In 1988, there were approximately 2800 bison in Yellowstone. In the winter of 1988-89, 569 bison were killed. Since 1989, the size of the herd has increased to between 2500 and 3000 head. The herd's ability to increase its numbers, notwithstanding the killing of bison that has occurred in Montana, demonstrates that the 1990 bison management plan will not have a significant impact on the environment. On the other hand, failure to manage the migration of the herd will be detrimental to the health of Montana's citizens and its livestock.

The Fund has failed to demonstrate that the 1990 bison management plan will result in irreparable harm to the human environment. The record shows the balance of hardships tips in favor of the appellees. [\*\*29] The district court did not abuse its discretion in denying a preliminary injunction.

AFFIRMED.