No. 16-35665

IN THE UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

GALLATIN WILDLIFE ASSOCIATION, et al.,

Plaintiffs-Appellants,

v.

UNITED STATES FOREST SERVICE, et al.,

Defendants-Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
(Hon. Brian M. Morris)
Civil Case No. 15-27-BU-BMM

BRIEF OF AMICI CURIAE BIG WILD ADVENTURES AND NATURAL EXPOSURES IN SUPPORT OF APPELLANTS AND INJUNCTIVE RELIEF

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CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rules of Appellate Procedure 26.1 and 29(a)(4)(A), amici Big Wild Adventures and Natural Exposures state that neither has a parent corporation and that no publicly held corporation owns more than 10% of the stock in either entity.

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STATEMENT OF IDENTITY, INTERESTS, AND AUTHORITY OF AMICI

Amici are ecotourism businesses that depend on an intact Greater Yellowstone Ecosystem and its native species, including bighorn sheep.

Big Wild Adventures is a guide and outfitting company that has operated for 39 years and has led over 1000 guided trips in the Bitterroot, Lewis & Clark, Custer, Shoshone, Bridger-Teton, and Caribou-Targhee National Forests and in Yellowstone National Park and other areas of Federal public lands. Big Wild Adventures is licensed by the U.S. Forest Service, the National Park Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management, and is a leading backpacking company in the Western United States.

Natural Exposures is a tour company that has led nature photography tours in Yellowstone National Park since 2001. Founded by a world-renowned wildlife and nature photographer, the company specializes in the opportunity to witness and photograph the biological diversity of a cohesive and intact ecosystem.

This appeal has significant implications for the health of the Greater Yellowstone Ecosystem and its native species and for the businesses whose livelihoods are based on conserving the ecosystem. These amici have a particular interest in the Court's resolution of the issue of balance of harms and injunctive relief presented by appellants. An injunction would protect the bighorn sheep population and the economic interests of amici.

RULE 29(A)(4)(E)

Pursuant to Federal Rule of Appellate Procedure 29(a)(4)(E), these amici state that no party's counsel authored this brief in any part, no party or party's counsel contributed money that was intended to fund the preparation or submission of this brief, and no person other than these amici contributed money that was intended to fund the preparation or submission of this brief.

SUMMARY OF THE ARGUMENT

Bighorn sheep are a vital component of the Greater Yellowstone Ecosystem. If the Court does not enjoin domestic sheep grazing in the Gravelly Mountains, the viability of the bighorn sheep population will be compromised, leading to fragmentation of the ecosystem. Because amici's economic livelihoods rely on an intact ecosystem, they will be harmed by the loss of biodiversity. Amici urge this Court to enjoin domestic sheep grazing in the Gravelly Mountains.

ARGUMENT

THE BALANCE OF EQUITIES TIPS SHARPLY IN FAVOR OF ENJOINING DOMESTIC SHEEP GRAZING IN THE GRAVELLY MOUNTAINS OF THE BEAVERHEAD-DEERLODGE NATIONAL FOREST BECAUSE THE LOSS OF AN INTACT GREATER YELLOWSTONE ECOSYSTEM WILL PERMANENTLY HARM AMICI'S ECONOMIC INTERESTS.

The balance of equities tips in favor of granting an injunction when the harm faced by the parties in favor of the injunction is permanent, while those opposing the injunction face merely temporary delay. *League of Wilderness Defs./Blue*

Mountains Biodiversity Project v. Connaughton, 752 F.3d 755, 765 (9th Cir. 2014). As the U.S. Supreme Court has recognized, "[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration." *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987).

Domestic sheep grazing in the Gravelly Mountains of the Beaverhead-Deerlodge National Forest threatens the viability of bighorn sheep, a federally designated sensitive species that is vital to the biodiversity of the Greater Yellowstone Ecosystem. *See* Forest Service Manual, Rocky Mountain Region § 2672.11 Exhibit 01. Ecotourism, particularly wildlife-centered recreational activities, relies heavily on intact ecosystems like Greater Yellowstone. The loss of biodiversity results in the loss of recreational opportunities and, in turn, the loss of revenue for the businesses that provide outfitting, guiding, and other ecotourism-based services. When balanced against the temporary delay faced by the permit holders, the permanent and substantial economic harm that amici will sustain tips the scale in favor of enjoining domestic sheep grazing.

A. Bighorn Sheep Are A Vital Component Of An Intact Greater Yellowstone Ecosystem, And Domestic Sheep Pose A Threat To The Viability Of The Bighorn Sheep Population.

Encompassing nearly 35,000 square miles, the Greater Yellowstone Ecosystem "is one of the largest nearly intact temperate-zone ecosystems on

Earth." Nat'l Park Serv., *Yellowstone Resources and Issues Handbook* 53 (2016) [hereinafter "Yellowstone Handbook"]. The Greater Yellowstone Ecosystem supports one of the largest, most diverse, and abundant collections of free-roaming large mammals on Earth and the largest concentration of wild mammals in the contiguous 48 states. *Id.* at 172. Although over-hunting, disease, and other impacts to wildlife caused population declines, and even extirpation of species, during the 19th and 20th centuries, *see generally id.*, the Greater Yellowstone Ecosystem, through retention and restoration, now boasts "its full historical complement of vertebrate wildlife species." *Id.* at 60. Several large predators and ungulates (hoofed mammals) are native to the Greater Yellowstone Ecosystem, *id.* at 61-63, 172, and the Gravelly Mountains provide a sanctuary for grizzly bears, wolves, wolverines, bighorn sheep, and elk. U.S. Forest Serv., *Beaverhead-Deerlodge National Forest Land and Resource Management Plan* 127 (2009).

Each species within the Greater Yellowstone Ecosystem—from predator to prey to forage—is integral to the continued health and resilience of the ecosystem. *Yellowstone Handbook*, *supra*, at 60-61. While top predators directly alter the diversity and abundance of resources in the ecosystem through the trophic cascade, lower species can indirectly, but no less substantially, affect important ecosystem processes such as productivity, decomposition, and nutrient cycling. James G. Douglass et al., *Herbivore and Predator Diversity Interactively Affect Ecosystem*

Properties in an Experimental Marine Community, 11 Ecology Letters 598, 598 (2008); *see also* Kalyani Robbins, *Missing the Link: The Importance of Keeping Ecosystems Intact and What the Endangered Species Act Suggests We Do About It*, 37 Envtl. L. 573, 581-85 (2007) (describing variety of keystone species, in addition to top predators, that are indispensable to ecosystem health).

As grazers, wild ungulates play an active role in stimulating plant production and enhancing the protein content of plants. *Yellowstone Handbook*, *supra*, at 62-63; Douglas A. Frank, *Ungulate Regulation of Ecosystem Processes in Yellowstone National Park: Direct and Feedback Effects*, 26 Wildlife Soc'y Bull. 410, 416 (1998). Specifically, they accelerate nutrient turnover "by excreting nutrients in a form readily available for uptake by microbes and plants," and they can influence nutrient turnover "by modifying the quality and quantity of plant litter available for decomposition." N. Thompson Hobbs, *Modification of Ecosystems by Ungulates*, 60 J. Wildlife Mgmt. 695, 696 (1996). As such, wild ungulates are "an inextricable component of the web of energy and nutrient flows in grazing ecosystems," and their removal alters the functional character of the ecosystem, "transforming a consumer-controlled, rapidly cycling ecosystem into one that is detritivore based and slowly cycling." Douglas A. Frank et al., *The Ecology of the Earth's Grazing Ecosystems*, 48 BioScience 513, 520 (1998). Not only is it important to maintain a population of wild ungulates in the ecosystem, their

migratory routes across the landscape must also be preserved. *Id.* Fragmenting the grazing landscape alters the fundamental ecological character of the landscape. *Id.*

Bighorn sheep are native to the Greater Yellowstone Ecosystem. *Yellowstone Handbook*, *supra*, at 172. Once abundant in the Yellowstone region, bighorn sheep populations have declined sharply over the past century. *Bighorn Sheep Information*, Nat'l Park Serv., https://www.nps.gov/yell/learn/nature/bighorninfo.htm (last visited Feb. 21, 2017). Efforts to reintroduce bighorn sheep into the area have been complicated by disease, starvation, habitat loss, and disruption of migratory routes by road building and other human activities. *Id.*; *Impacts of Disease on Bighorn Sheep Management*, Fact Sheet (Wildlife Soc'y), Sept. 2014, http://wildlife.org/wp-content/uploads/2016/05/FS_Impactsof DiseaseonBighornSheepMgmt_FINAL.pdf. Several large die-offs placed a strain on bighorn sheep populations in the Greater Yellowstone Ecosystem, resulting in small, sedentary, isolated herds "at numbers far below the minimum viable population estimates." Nicholas J. DeCesare & Daniel H. Pletscher, *Movements, Connectivity, and Resource Selection of Rocky Mountain Bighorn Sheep*, 87 J. Mammalogy 531, 531 (2006); *see also* Ken L. Risenhoover et al., *Assessing the Rocky Mountain Bighorn Sheep Management Problem*, 16 Wildlife Soc'y Bull. 346, 348 (1988) (explaining that isolation and sedentariness increase susceptibility of bighorn herds to disease, predation, and forage deficiencies); Joel Berger,

Greater Yellowstone's Native Ungulates: Myths and Realities, 5 Conservation Biology 353, 356 (1991) (noting that bighorn sheep herds "with fewer than 50 individuals face high extinction probabilities"); U.S. Forest Serv., *Payette National Forest Final Supplemental Environmental Impact Statement* 3-92 (2010) (noting that "[s]mall, isolated populations are not optimal for [bighorn sheep]"). And their numbers are still in decline: a 2015 survey documented a 22% drop in bighorn sheep numbers in the northern Yellowstone area. *Bighorn Sheep Information*, *supra*.

Domestic sheep grazing has consistently been the biggest threat to the viability of bighorn sheep, particularly through disease transmission and displacement of habitat. *See* Mont. Dep't of Fish, Wildlife & Parks, *Montana Bighorn Sheep Conservation Strategy* 11-16 (2010). Evidence demonstrates that "[t]he large region where bighorn sheep extirpations have been so widespread coincides spatially with where domestic sheep have been grazing in North America, and temporally with the beginning of that grazing." Bureau of Land Mgmt., *Draft Cottonwood Resource Management Plan Amendment for Domestic Sheep Grazing and Supplemental Environmental Impact Statement* 3-5 (2014). Due to the extreme susceptibility of bighorn sheep to disease transmission from domestic sheep—and the high mortality rate from those diseases—state and federal officials and wildlife specialists have stressed that separating bighorn sheep from

domestic sheep allotments is "the most viable current management option." *Impacts of Disease on Bighorn Sheep Management*, *supra*.

The presence of grazing allotments in the Gravelly Mountains is impeding the reintroduction of bighorn sheep into the area. Even if this impediment is temporary, the effects to bighorn sheep and the Greater Yellowstone Ecosystem may be permanent. Bighorn sheep herds are extremely fragile, and even a temporary loss can have ripple effects throughout the ecosystem, undermining the viability of the already dwindling population, further complicating recovery, and leading to extirpation. It is well accepted that biodiversity decreases as habitat area is reduced, particularly through agriculture and other human land uses, and smaller habitats that support fewer individuals can lead to increased rates of extinction. Andrew J. Hansen, *Species and Habitats Most at Risk in Greater Yellowstone*, 17 Yellowstone Sci. 27, 29 (2009). Because bighorn sheep are critical to the health and functionality of the Greater Yellowstone Ecosystem, their population loss will undermine the integrity of the intact ecosystem.

B. An Intact Greater Yellowstone Ecosystem Has Substantial Recreational and Economic Value.

1. The Greater Yellowstone Ecosystem Provides Wildlife-Related Recreational Activities.

Yellowstone National Park lies at the heart of the Greater Yellowstone Ecosystem and receives more than four million visitors each year. *Tourism to*

Yellowstone National Park Creates $638.6 Million in Economic Benefits, Nat'l Park Serv. (Apr. 26, 2016), https://www.nps.gov/yell/learn/news/16021.htm (last visited Feb. 21, 2017). With the largest concentration of wild mammals in the contiguous 48 states, Yellowstone National Park offers a unique opportunity to participate in wildlife-related activities. *Yellowstone Handbook*, *supra*, at 172. Wildlife viewing has historically been an important part of the visitor experience to the park and remains one of the top recreational activities for park visitors. Mark A. Haroldson & Kerry A. Gunther, *Roadside Bear Viewing Opportunities in Yellowstone National Park: Characteristics, Trends, and Influence of Whitebark Pine*, 24 Ursus 27, 27 (2013) (noting that wildlife viewing "has been a highlight" for visitors to Yellowstone National Park since its creation); R. Gerald Wright, *A Review of the Relationships Between Visitors and Ungulates in National Parks*, 26 Wildlife Soc'y Bull. 471, 471-74 (1998) (observing that "large numbers of people go to parks to see wildlife, expect to see wildlife, and are generally not satisfied if they fail to see an anticipated species"). Wild ungulates and bears have long been a primary attraction for park visitors, Haroldson & Gunther, *supra*, at 27; Wright, *supra*, at 472, and wildlife enthusiasts and photographers particularly value the ability to view bighorn sheep. Bureau of Land Mgmt., *supra*, at ES-8.

Nonresident visitors to Montana rank wildlife viewing as the third most important tourism experience, behind only clean air and waterways. Mont. State

Parks, *Creating a Vibrant Future for Montana's Outdoor Recreation Heritage* 139 (2014). In 2012, there were 660,000 visitors to Montana's national wildlife refuges, nearly a 25% increase over a five-year period, and more than two thirds of refuge visitors participated in wildlife viewing and photography, a 43% increase over a five-year period. *Id.* at 65. Montana residents have also ranked wildlife viewing as important to their quality of life; more than 50% of households in Montana use wildlife viewing areas. *Id.* at 40.

2. The Greater Yellowstone Ecosystem Contributes To The Regional Economy And Provides Employment Opportunities.

Ecotourism is "the fastest growing market in the tourism industry" and one of the biggest economic drivers in Montana and the Greater Yellowstone Ecosystem. Norma P. Nickerson et al., *Montana's Outfitting Industry: Economic Impact and Industry-Client Analysis*, Inst. for Tourism & Recreation Research, Univ. of Mont. 1 (2007); Kara Grau, *2015 Economic Contribution of Nonresident Travel Spending in Montana Travel Regions and Counties*, Inst. for Tourism & Recreation Research, Univ. of Mont. 1 (2016) ("Nonresident spending is a significant contributor to Montana's economy."). Over 11 million tourists visit Montana each year, and these visitors spend nearly $4 billion on travel-related goods and services. Kara Grau et al., *The Economic Review of the Travel Industry in Montana: 2014 Biennial Edition*, Inst. for Tourism & Recreation Research, Univ. of Mont. iii (2014). These nonresident travel expenditures total 8.4% of

Montana's gross domestic product, and the percentage is expected to increase. *Id.* at 12. This tourism spending supported 48,000 jobs in 2013 and 55,000 in 2014. *Id.* at 14. Not only do these expenditures directly impact the business where the spending occurs, they "ripple throughout Montana's economy, both locally and regionally." Grau (2016), *supra*, at 1. For example, in 2015, visitors to Yellowstone National Park spent $493.6 million in communities near the park, supporting 7,737 jobs in the local area and generating a cumulative benefit to the local economy of $638.6 million. *Tourism to Yellowstone National Park*, *supra*. Due in part to the growth of geotourism (a form of ecotourism that focuses on the distinctive natural, cultural, and environmental values of a place), visitor spending in Montana has increased by 81% since 2002. Mont. State Parks, *supra*, at 137, 139. Notably, geotourists spend 30% more per day than non-geotourists. *Id.*

Outdoor recreation—"a growing and vitally important sector in Montana" and an important component of eco- and geotourism—generates $5.8 billion in consumer spending (18% of total consumer spending in the state), $403 million in state and local tax revenue, and $1.5 billion in wages and salaries, and supports over 64,000 jobs (14% of Montana's workforce). *Id.* at 9, 16. Wildlife-related recreation, in particular, "is a major driver" of the economy. *Wildlife Viewing*, Mont. Dep't of Fish, Wildlife & Parks, http://fwp.mt.gov/fishAndWildlife/non

gameWildlife/wildlifeViewing.html (last visited Feb. 21, 2017). In 2011, wildlife viewers spent nearly $55 billion nationally and $1.4 billion in Montana. *Id.*

Outfitters, guides, and other ecotourism-related businesses form the backbone of Montana's outdoor recreation industry. Of the $3.78 billion in nonresident spending in Montana in 2015, $268 million went to outfitters and guides, a figure that increased substantially from 2013 and 2014. Grau (2016), *supra*, at 1; Grau et al. (2014), *supra*, at 10-11. In 2015 in the Southwest Montana Travel Region, visitors spent over $400 million in travel-related expenses, with $37 million going toward outfitters and guides, and created 4,880 jobs. Grau (2016), *supra*, at 10. In the Yellowstone Country Travel Region, visitors spent over $1 billion in travel-related expenses, creating nearly 16,000 jobs, and spent over $118 million toward outfitters and guides. *Id.* at 11. With over 300,000 guided clients annually—clients who participate in wildlife viewing and photography, birding, fishing, and other wildlife-centered activities—the outfitting and guiding industries are important subsectors of Montana's travel industry. Nickerson, *supra*, at 6.

As one of the leading backpacking companies in the United States, Big Wild Adventures specializes in trips to remote areas for clients who seek a wilderness experience, including an opportunity to view native animals in their natural habitat. Annually, Big Wild Adventures grosses approximately $150,000 in revenue,

primarily from nonresident clients, and re-injects approximately $120,000 into the local economy through payments to its guides and other employees. Similarly, Natural Exposures specializes in nature photography tours that capitalize on the biodiversity of the Greater Yellowstone Ecosystem. The company emphasizes "the power of great imagery to tell the stories of the creatures and the land that have no voice," and the corresponding responsibility to conserve the animals and their habitats.

3. The Recreational And Economic Opportunities Depend On An Intact Greater Yellowstone Ecosystem.

The value of Montana's tourism industry relies heavily on the preservation of its natural resources, including wildlife. Montana has branded itself as having "more spectacular unspoiled nature than anywhere else in the lower 48 states." Grau et al. (2014), *supra*, 45. Montana's "highest priority" is the preservation of its public lands because the state's rich tapestry of wildlife and scenic wonders has "contributed significantly" to its economy. Mont. Governor's Office of Econ. Dev., *Montana Economic Development Report* 17 (2015). Wildlife conservationists and economists agree that "[t]he economic health of the Yellowstone region is tied directly to the natural setting," Robert B. Keiter, *Taking Account of the Ecosystem on the Public Domain: Law and Ecology in the Greater Yellowstone Region* 141, in *Environmental Policy and Biodiversity* (Edward R. Grumbine ed. 1994), and therefore have cautioned that reducing wildlife numbers

and biodiversity in the Greater Yellowstone Ecosystem would adversely impact the "multi-million dollar outfitting, hunting and wildlife viewing industry" in the region. Donald M. McLeod & Larry W. Van Tassell, *Economic and Policy Implications of Brucellosis in the Greater Yellowstone Area*, 18 Rangelands 145, 147 (1996); *see also Gibbs v. Babbitt*, 214 F.3d 483, 493-95 (4th Cir. 2000) (describing economic value of red wolves); *In re Delta Smelt Consol. Cases*, 663 F. Supp. 2d 922, 941 (E.D. Cal. 2009) ("Biodiversity's value is not ethereal; its preservation produces economic gain in even the most narrow sense.").

The loss of species in the Greater Yellowstone Ecosystem will permanently impact the recreational opportunities in the region. A decline in biodiversity will diminish wildlife viewing opportunities and other wildlife-related recreational activities. And as recreational opportunities diminish, tourism will decline and the local and regional economies will suffer. Therefore, an intact Greater Yellowstone Ecosystem is critical to the economic health of the region, and the fragmentation of that ecosystem will permanently harm the economic interests of amici.

CONCLUSION

Therefore, amici ask the Court to enjoin domestic sheep grazing in the Gravelly Mountains pending the outcome if this appeal.

Respectfully submitted this 22nd day of February, 2017.

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CERTIFICATE OF COMPLIANCE

I certify that pursuant to Federal Rule of Appellate Procedure 32(a)(5)(A) that this brief is proportionately spaced, has a typeface of 14 points or more and contains 3,065 words. I used Microsoft Word 2010.

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CERTIFICATE OF SERVICE

I certify that on February 22nd, 2017, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit using the appellate CM/ECF system.

I certify that all participants in this case are registered CM/ECF users and service will be accomplished by the CM/ECF system.

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