



# Wilderness and Extractive Industries

*An Economic Transition in the Rockies*

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THE 2008 COLORADO COLLEGE STATE OF THE ROCKIES REPORT CARD

## Key Findings

- With regional population growth, the share of public land per person in the Rockies is steadily decreasing
- Over 60 percent of public land and almost half of all designated Wilderness within the contiguous United States is in the Rockies region.
- In 2005, natural resource extraction accounted for 3 percent of total GDP in the Rockies; the services industry made up 75 percent of total GDP.
- “New West” economies based upon cultural services have emerged from “Old West” economies that relied on natural resource extraction.
- National forests, Wilderness areas, and national parks collectively draw over 600 million visitors every year.
- Recreation benefits from Roadless and Wilderness areas are estimated to be worth \$1.2 billion annually, and tourism generates billions more for local economies.

## Introduction

The federal government manages more than 750 million acres within the United States as national parks, national forests, and other lands.<sup>1</sup> Many of these areas are largely undisturbed, relatively undeveloped tracts of land; in many cases these lands hold great public appeal and significant quantities of natural resources. More than 107 million acres of Wilderness are protected within the National Wilderness Preservation System, the majority of which is located in the western United States and Alaska. Still, there are many wilderness-quality lands that have not been set aside under this system.<sup>2</sup> At least 58 million acres of these wildlands exist in the eight-state Rockies Region, and a considerable portion of this land has an uncertain future that could result in either development or preservation.<sup>3</sup>

The fate of these public lands depends on political, social, and economic developments in the Rockies. Nowhere in the country is the management of wildlands more contentious than in the Rocky Mountain West. The Rockies is the nation's fastest-growing region, experiencing continuous pressure to increase recreational, ecological, and extractive uses of its remaining wildlands.

This section of the *2008 State of the Rockies Report Card* examines the societal and cultural significance of these open spaces and considers the potential for development and protection for Wilderness and wildlands across the region.

## The Philosophy of Wilderness

American society's relationship with open spaces and wildlands has evolved considerably over the last several hundred years. Historically, land was considered a resource to be used solely for the benefit of humankind. The Louisiana Purchase in 1803 and the Gold Rush in the 1840s are representative of the "Manifest Destiny" ideal by which people occupied and profited from the undeveloped lands in the West.

Prior to the passage of the Homestead Act of 1862, the Federal Government was unsure how to manage the expansive tracts of land it held within the public domain. Many groups lobbied Congress for the "free distribution of such lands."<sup>4</sup> The passage of the Homestead Act encouraged droves of people to travel West so that they could try to gain ownership and live off the land. The Act was designed to send people west to cultivate the soil and to improve it for future use; in addition,

it seemed to promise a stable income for many of the nation's poor. However, this promise fell through.

Between 1862 and 1904, the General Land Office distributed the rights to about 500 million acres. Homesteaders could rarely afford to develop a working farm or ranch. These ranchers, farmers and other laborers acquired only 80 million acres, about 16 percent of the total.<sup>5</sup>

The federal government often assisted industrial development directly, through land grants to railroad companies and other corporations.<sup>6</sup> Private industry jumped at the opportunity and profited immensely from the extraction, degradation, and fragmentation of Western wildlands.

Leading up to and during this time of federal land giveaways, the first explicit philosophies concerning wild and open lands began to emerge. Among the first to articulate the issue was Henry David Thoreau. In *Walden*, he expressed innovative concepts suggesting that undeveloped lands had inherent value beyond their economic potential. He advocated the conservation of natural areas to ensure that they would remain in their pure and natural states.

It took considerably longer, however, for public voices to sound calling for the protection of wild and open spaces. One of the first true champions of conserving public lands was the twenty-sixth President of the United States, Theodore Roosevelt. With help from his friend, the renowned naturalist John Muir, he established some of the nation's early national parks, several wildlife refuges, and hundreds of millions of acres of national forests.<sup>7</sup>



Grand Canyon, Arizona

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In the beginning of the twentieth century, while working for the Forest Service, Aldo Leopold emerged as America's first wilderness advocate. He developed opinions that were critical of practices employed to manage forests and wildlands. In the 1920s, he became dedicated to preserving wilderness areas, associating wilderness with the availability of wild game and outdoor recreation activities. He hoped that the solace of the wild and the value of the land could be discovered without the destructive practices that were primarily used in the "exploration" of natural areas.<sup>8</sup>

At about the same time, Bob Marshall surfaced as another key champion of wild areas. He recognized characteristics of wilderness that were valuable to humanity. To him, wilderness areas allowed for an escape from the distractions of civilization. He considered the inherent value of wild places too great to ignore when he said, "What small financial loss ultimately results from the establishment of wilderness areas must be accepted as a fair price to pay for their inaccessible preciousness."<sup>9</sup> This insight reveals Marshall's ability to recognize the importance of the environment even without the modern understanding of ecosystem services.<sup>10</sup>

More recently, studies of the human relationship with wilderness have progressed further. Deep Ecology is a fairly recent philosophy that considers humankind as simply one component of the Earth's systems. It promotes the idea that ecosystems and wildlife have intrinsic value and should be preserved. This rejects the classic duality expressed by an anthropocentric view which claims that nature and its processes are separate from humanity, and therefore exist solely for our use. Furthermore, deep ecology recognizes that the "business as usual" policy of land management must stop because industrial and extractive practices degrade the natural systems that support all forms of life.<sup>11</sup>

The open spaces of the Rocky Mountain West have enormous potential to serve multiple uses and other interests of human society. In addition to the extractive industries (i.e. oil/gas drilling, mining, and timber,) there are several alternatives for cultural benefit. The most common features of wild-

lands highlighted by wilderness advocates are the opportunities for outdoor recreation. Various recreational activities attract people to wildlands, including fishing, camping, hunting, and even driving ATVs. Millions of user days are tallied each year by people who recreate outdoors to experience something that appears to be largely absent from their daily lives: wild nature.

### What is Wilderness?

Wildlands within the public domain exist under a wide variety of classifications. The agencies with the most significant holdings of federal land are the Bureau of Land Management (BLM), U.S. Forest Service (USFS), National Park Service (NPS), and U.S. Fish and Wildlife Service (FWS). Each of these agencies manages land designated as Wilderness areas.

The term "Wilderness" no longer describes any wild area within the public domain; wilderness is wild ter-



Gore Range, Colorado

© P. Zion Klos



rain where *Wilderness* (note the capital W) is protected land administered by the National Wilderness Preservation System under the terms of the Wilderness Act of 1964. The Wilderness System now contains more than 107 million acres in 702 areas.<sup>12</sup> As expansive as this may seem, Wilderness makes up less than 14 percent of public lands in the United States and less than five percent of total land area. Within the Rockies, just over seven percent of public land is designated as Wilderness; these 22,670,100 acres account for slightly more than four percent of all land in the eight Rockies states (See Figures 1 and 2 and Table 1.)<sup>13</sup>

Critics contend Wilderness areas exclude certain groups of people.<sup>14</sup> It is commonly thought to allow access only to hikers and thus, considerably limiting recreation options within its boundaries. In reality, many recreational opportunities are still allowed in Wilderness areas, including hiking, camping, horse packing, hunting, and fishing; nevertheless, activities that use motor vehicles, motorized equipment, or mechanical transport (i.e. bicycles, snowmobiles, motorboats, trucks, etc.) are expressly prohibited, as well as any supporting infrastructure such as roads and buildings.<sup>15</sup> Under the terms of the Wilderness Act, "A wilderness, in contrast with

those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain."<sup>16</sup> The effects of human actions within Wilderness areas are to be "substantially unnoticeable" next to those caused by the "forces of nature."<sup>17</sup>

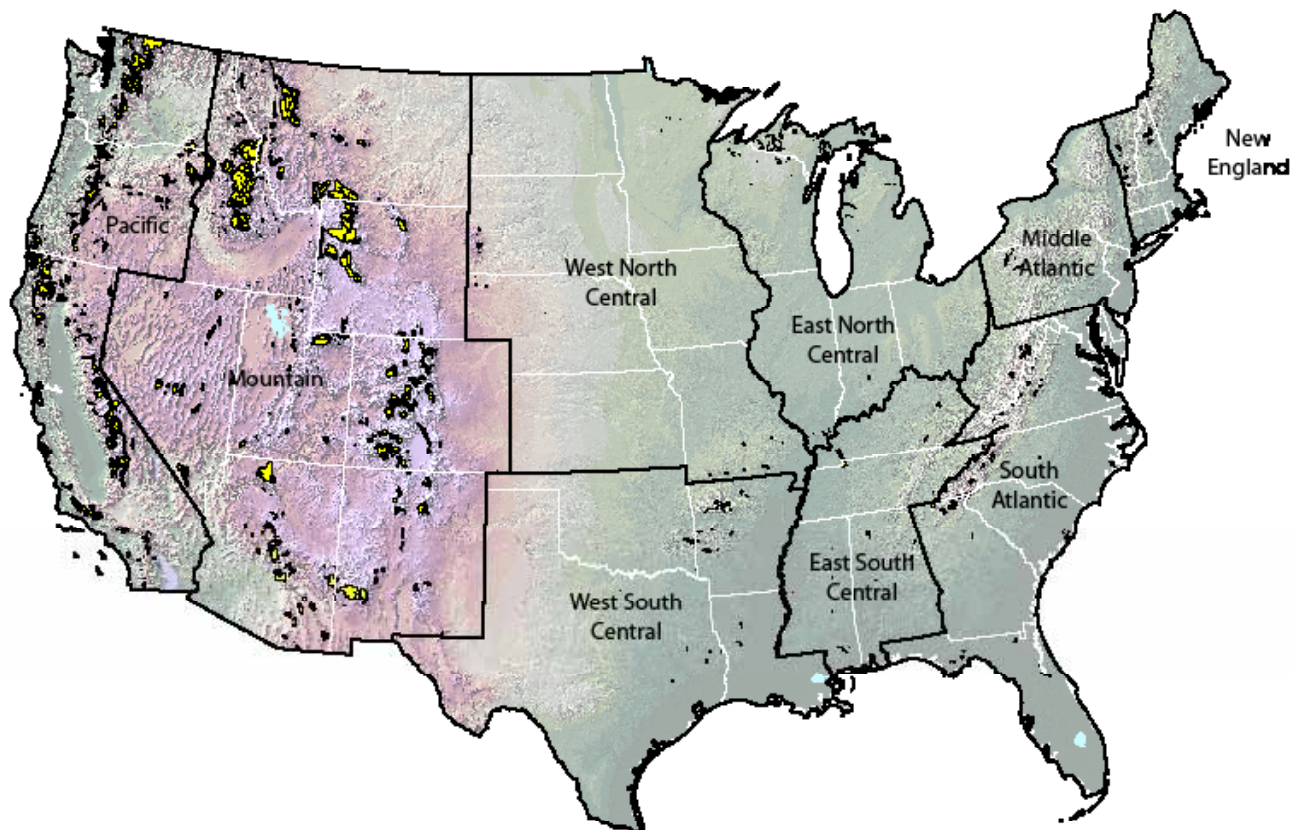
Even so, a wide array of human activities is permitted within Wilderness areas. Vehicles can be permitted if deemed necessary to control disease, insects, or fire. Prospecting and mining was allowed in Wilderness areas until December 31, 1983, and mines can still be established in Wilderness areas provided that a valid claim existed before that date.<sup>18</sup> Grazing rights for livestock are also permitted as long as the use was established prior to September 3, 1964, and is approved by the Secretary of Agriculture.<sup>19</sup>

Many of these activities can negatively impact local ecosystems. Mining operations, for example, alter and fragment landscapes, and mining sites seriously detract from visitors' Wilderness experiences. Livestock, especially cattle, trample the ground, which compacts the soil and increases surface water flow.<sup>20</sup> The amplified

Figure 1

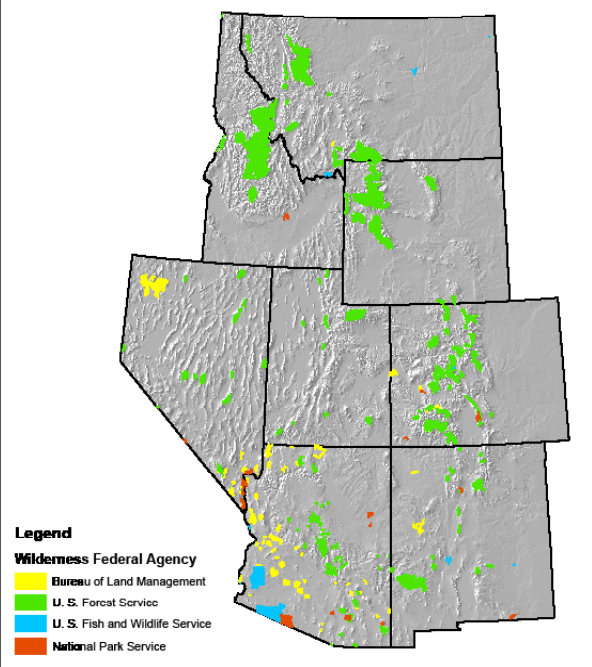
### National Wilderness Preservation System of the Conterminous United States and Census Divisions

Source: National Atlas of the United States, USDA Forest Service



**Figure 2**  
National Wilderness Preservation System  
in the Rockies

Source: National Atlas of the United States, USGS



a 1,600 percent increase in population density, from 4.4 people per square mile in 1790 to nearly 78 people per square mile in 2000. (See Figure 3.) The ratio of population to federal land has increased even more dramatically: from 13 people for every square mile of federal land in 1790 to almost 284 people per square mile in 2000 (Figures 3 and 4). This is largely due to increases in population density. Population in this period grew more than 7,000 percent compared to only a 300 percent increase in federal land area.<sup>22</sup>

The change in public domain as a portion of total U.S. land also reveals the growing scarcity of federal land. In 1850, public land made up 63 percent of total land area; by 1955, that had dropped to less than 18 percent (Figure 5). The West is stereotypically viewed as synonymous with open spaces and an expansive frontier. The Rockies region embodies this idea, with rugged mountains and wide vistas. According to National Atlas Data from 2005, the Rockies contains more than 62 percent of all public land in the lower 48 states. On the whole, 59 percent of the region is owned by the federal government (Table 2).<sup>23</sup> However, what were once vast stretches of wilderness are increasingly shrinking due to exurban development, resource extraction, and some recreational activities.

**Table 1**  
National Wilderness Preservation System of the Rockies, 2005

Source: Data Calculated from National Atlas of the United States

State	Bureau of Land Management	U.S. Forest Service	Fish and Wildlife Service	National Park Service	Total
Arizona	1,412,309	1,349,373	1,337,994	447,884	4,547,560
Colorado	139,290	3,120,946	2,222	99,692	3,362,150
Idaho	1	3,870,986	0	46,031	3,917,018
Montana	11,928	3,258,541	56,625	0	3,327,094
New Mexico	145,756	1,394,736	42,734	56,212	1,639,437
Nevada	998,701	847,576	0	224,374	2,070,652
Utah	31,804	753,752	0	0	785,555
Wyoming	0	3,020,634	0	0	3,020,634

### Public Land in the Rockies

The Rockies region is the fastest growing in the country, with over 14 percent population growth from 2000 to 2006.<sup>24</sup> The rapidly increasing population translates to higher demand for all the resources that public lands provide. This section will compare recent trends in population and public land area in the Rockies region.

The share of public land per person in the Rockies is now changing rapidly as population increases. From 1999 to 2006, the share of public lands per capita decreased almost 18 percent from 15 acres per person in 1999 to 12 in 2006 (Figures 6 and 7).

Nevada and Arizona, the two fastest growing states in the nation, experienced decreases of more than 20 percent.<sup>25</sup>

runoff can increase sediment deposition in streams and rivers, polluting natural freshwater systems and damaging critical riparian zones.<sup>21</sup>

### Public Lands in the United States

The use of federal lands has been contentious for as long as they have existed. Public and private voices call for using these lands in a variety of ways. Some seek to develop, others to preserve. Conflicts emerge as each land use demands a different management strategy or portion of the land.

Over the past two centuries, the United States has seen

The relatively stable public land figures combined with rapid population growth works to erode the frontier image of the Rocky Mountain West. High population densities increase the demand for natural resources, like water, oil, and natural gas. Greater numbers of hikers and campers cause noticeable impacts from increased use on roads, trails, and campsites. In addition, the chance of encountering other individuals in the backcountry rises. Each of these factors can detract from the wilderness experience.

Figure 3

### People per Square Mile of Land and Square Mile of Public Domain in the United States, 1790-2000

Source: Historical Statistics of the United States Millennial Edition Online

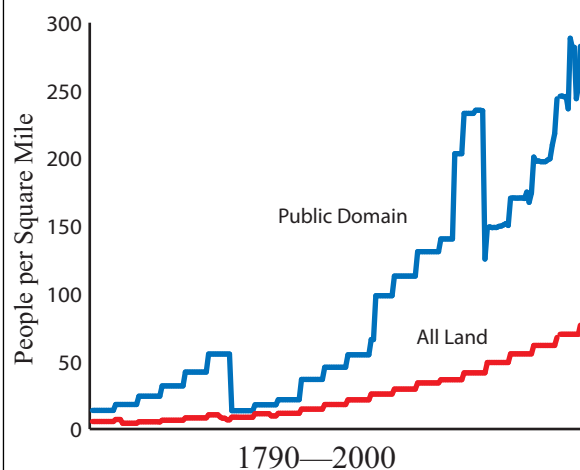
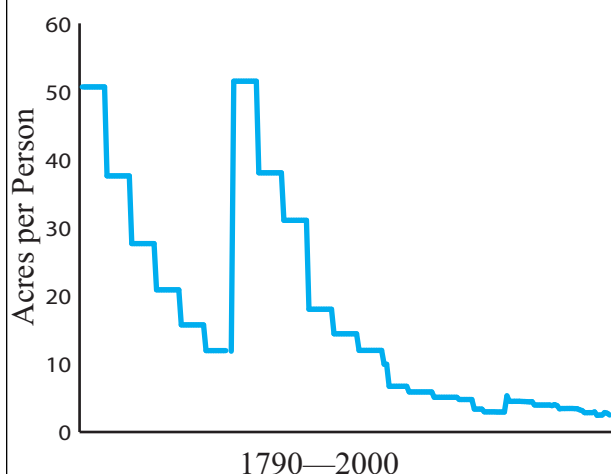


Figure 4

### Acres of Public Domain per Person, 1790-2000

Source: Historical Statistics of the United States Millennial Edition Online



The quantity of public land is not the only factor for consideration. More important, in fact, is its quality. Areas that become more populated apply increasing pressure to a variety of systems. Increasing demand on fresh water removes more water from rivers, reservoirs, and lakes. Higher power demands quickly translate to the need for more power generation facilities. The increased density of backcountry roads and trails considerably affects the landscape. There are also more subtle effects that occur: sediments are deposited into rivers and watersheds, and the risk of human-caused forest fires increases.

This report does not imply that these problems will worsen in the Rockies region with the quickly enlarging population. It simply acknowledges that without proper preparation and attention to these risks, our natural systems may show signs of increasing degradation.

## Current Trends

The Old West economy consisted largely of agricultural and extractive industries. This section of the report will focus mainly on natural resource extraction, since agriculture does not affect the designation of Wilderness to nearly the same extent — at least insofar as Wilderness areas continue to be found primarily in high elevation areas largely unsuited for agriculture. Since the early nineteenth century, harvesting timber and mining for precious metals, oil, and gas has been common in the Rockies. These industries created thousands of jobs as well as support infrastructure. Employees were needed not only for the mining and logging processes; towns like Leadville, Colorado, and Butte, Montana, emerged almost exclusively to support miners. They offered amenities like housing, saloons, and mercantiles catering to workers. Other workers were employed to build and maintain roads connecting remote mining and timber sites to civilization.

The economy emerging in the Rockies today is evolving from the extractive trends of yesterday. Faced with a “choice of an ‘old’ economy built on resource extraction or a ‘new’ economy built on clean environments, natural amenities, and renewable nature services,” more voices in the western United States have come to support the latter.<sup>26</sup> This movement has been labeled the “New West” economy, in contrast to the Old West economy. A significant part of the New West economy is based upon the service industry. The supporting industries of the Old West economy have become the basis for the new emerging Western economies: food, health, technology, legal, entertainment, technical, financial, transportation, administrative, and recreation services have come to dominate the markets of the New West. Economic em-

Figure 5

### Public Domain as a Percent of Total Land in the United States, 1790-2000

Source: National Atlas of the United States

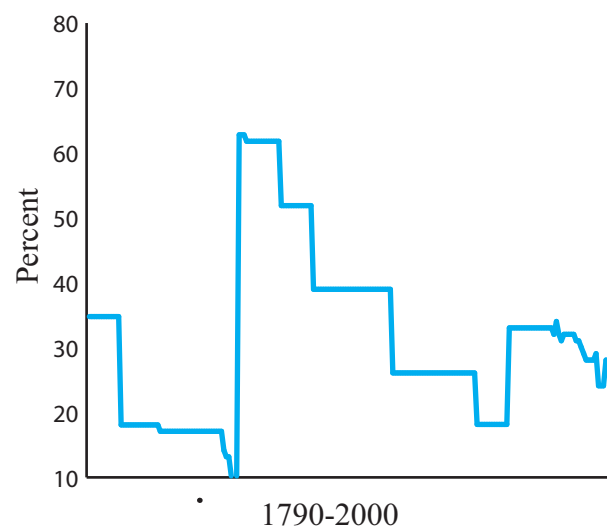




Table 2

## Percent Federal Ownership by U.S. Census Division, 2006

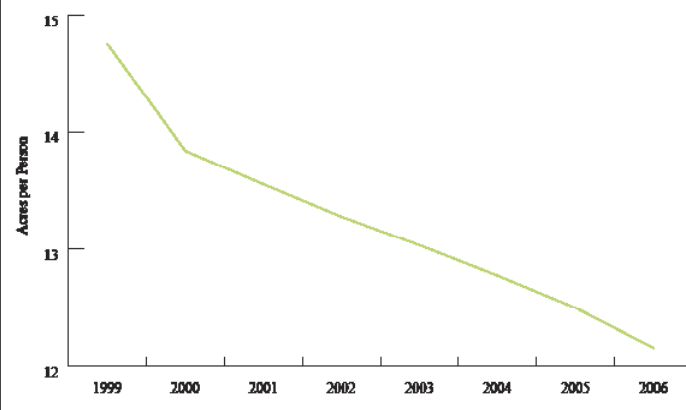
Source: USGS National Atlas GIS layer

Census Division	Sum Federal	Total Land	Percent Federal
Pacific	363,390,363	583,474,860	62%
Mountain	323,560,545	552,717,515	59%
West North Central	32,651,988	331,413,519	10%
West South Central	14,431,935	278,480,765	5%
East North Central	11,657,106	158,780,796	7%
East South Central	9,550,621	116,378,077	8%
South Atlantic	19,978,956	173,791,573	12%
Middle Atlantic	1,376,565	64,955,478	2%
New England	1,835,717	41,977,356	4%

Figure 6

## Acres of Public Land per Person in the Rockies, 1999-2006

Source: US Census Bureau, PILT



phasis has shifted to services that enhance the quality of life while protecting the environment.

Economic trends illustrate this point well. From 1939 to 2001, the number of trade and services employees in the Rockies region rocketed from 281,000 to more than 4.7 million (Figure 8). During the same years, the number of employees in the mining industry only increased from 77,500 to 84,500 (Figure 8). Since 1939, there have been momentous changes within the mining industry. If we assume that mining equipment has changed little from 1997 to 2001, employee numbers can actually tell us something about the size and relative importance of the mining industry. In that five-year period, the number of mining employees in the Rockies dropped almost 8 percent from 91,800 to 84,500 (Figure 8).<sup>27</sup> Examining total employment, the extractive industries' share of the economy is insignificant. In 2005, three percent of the total employed Rockies population worked in agriculture, forestry, fishing, hunting, and mining, whereas 75

percent of the population worked in the service industry.<sup>28</sup> Measured in terms of GDP, mining in the Rockies grew by about 25 percent from 1997 to 2006, but it still accounts for just five percent of the region's GDP, compared to nearly 65 percent for the service sector (Figure 9).<sup>29</sup>

The value of open lands can also be evaluated by analyzing recreation trends. Comprehensive and matching data is lacking across all agencies, so this report analyzes recreational visits for the National Park Service and the Forest Service. Recreation on public lands, especially in our national parks and forests, has become more and more popular. In 1960, there were about 79 million visitors to all areas under the jurisdiction of the National Park Service. It quickly grew and stabilized at about 270 million visitors since 1990. Overall, national parks experienced 245 percent growth in visitor numbers between 1960 and 2005. Between 1960 and 1996, the number of visitors to national forests grew 269 percent from almost 93 million to more than 341 million (Figure 10).

The Wilderness Act, passed in 1964, coincides with the beginning of the boom in outdoor recreation. In 1965, there were almost 3 million recreational visits to all Wilderness areas. In 1994, there were approximately 17 million (Table 3). From this increase, it can be inferred that keeping areas off-limits to machines and vehicles has considerably increased the worth of wild areas to some recreational users.

Lifestyle choices and recreational activities highlight how people value the environment. According to Joe Kerkvliet, "Economists have learned that people value the environment in many ways. Yes, we value extracted oil and gas and we pay directly for it. Westerners also value the healthy lifestyles supported by clean air and water, abundant wildlife, and wide open spaces."<sup>30</sup>

Figure 7

## Acres of Public Land in the Rockies, 1999-2006

Source: PILT

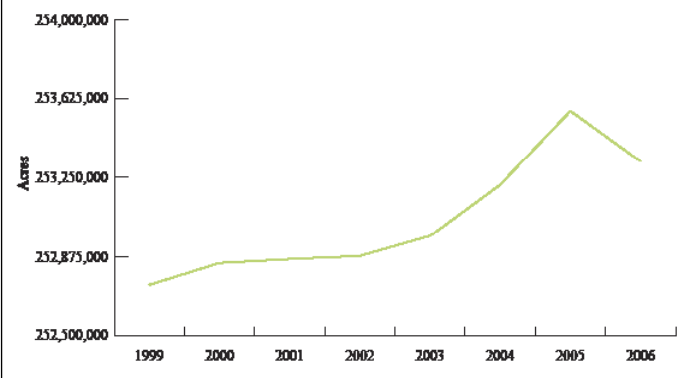
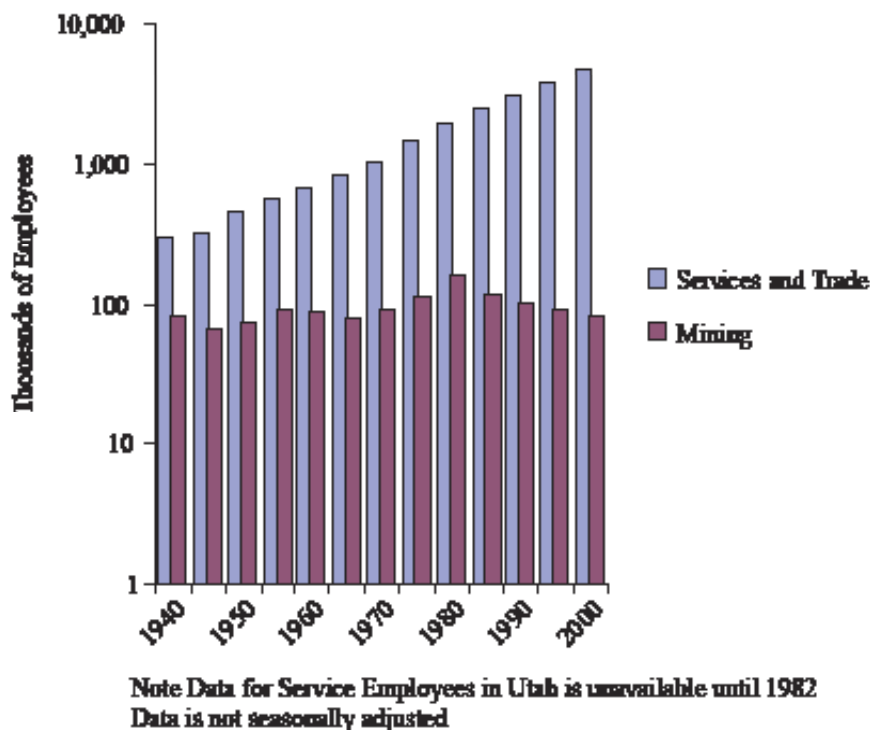


Figure 8  
Employment in Services and Trade and Mining Industries,  
1940-2000

Source: Bureau of Labor Statistics



Many move to the West because of its natural character and environmental amenities. The economic prosperity in the Rockies region is due largely to the rapid influx of people immigrating here from other regions. They are coming west to be closer to wildlands, not only to recreate in but to live near the environmental amenities these places provide.<sup>31</sup>

### The Controversy Over Wildlands

Only a small portion of public lands are actually Wilderness. Less than 14 percent of public land in the United States is designated as Wilderness. Within the continental U.S., about half of these Wilderness acres are in the Rockies region.<sup>32</sup> There are many other lands with Wilderness-quality characteristics, but they lack much of the protection given to formal Wilderness. These exist most prominently as roadless areas within national forests, but are also included in some national parks, BLM lands, and national wildlife refuges. As the most politically-visible, unprotected wildlands, roadless areas managed by the U.S. Forest Service have by far stirred the most controversy.

The debate centers upon whether these lands should be protected as Wilderness or opened up to development. The Forest Service tracks Inventoried Roadless Areas (IRAs) under three categories. Road construction and maintenance is permitted on 70 percent of IRAs and the rest are off-limits to these activities. Some roadless areas are also recommended for Wilderness designation (Figure 11, and Table 4).<sup>33</sup>

Political intentions for roadless areas have differed between recent administrations, sparking a battle over how these lands will finally be designated. In 2001, as one of his last acts as President, Bill Clinton implemented the Roadless Area Conservation Rule ("Roadless Rule"). The plan was to protect 58 million acres of land from road-building and most logging within nearly all national forests, while continuing to allow a wide array of recreational activities. Accused of being "11th-hour" and underhanded by some critics, this action was actually the culmination of about twenty years of study and more than 600 public meetings.<sup>34</sup>

When it came time to solicit public opinion, the Forest Service held a 69-day period for public comment, 30 percent longer than required.<sup>35</sup> This opportunity produced 1.7 million public comments, 95 percent of which favored maintaining these areas without roads.<sup>36</sup>

Shortly after George W. Bush took office, he made it a priority to repeal the Roadless Rule. President Bush claimed that the policy would improperly restrict access to national forest lands.<sup>37</sup> In July 2003, U.S. District

Figure 9  
GDP Derived From Select Services and Trade and Mining Industries  
in the Rockies, 1940-2000, millions of dollars

Source: Bureau of Economic Analysis, U.S. Department of Commerce

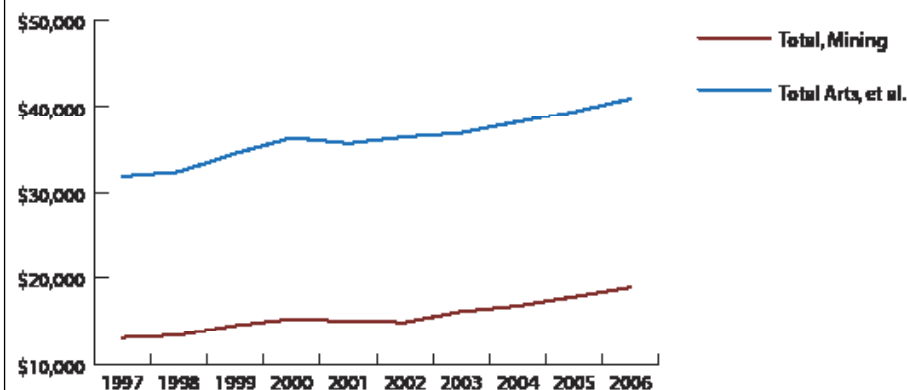
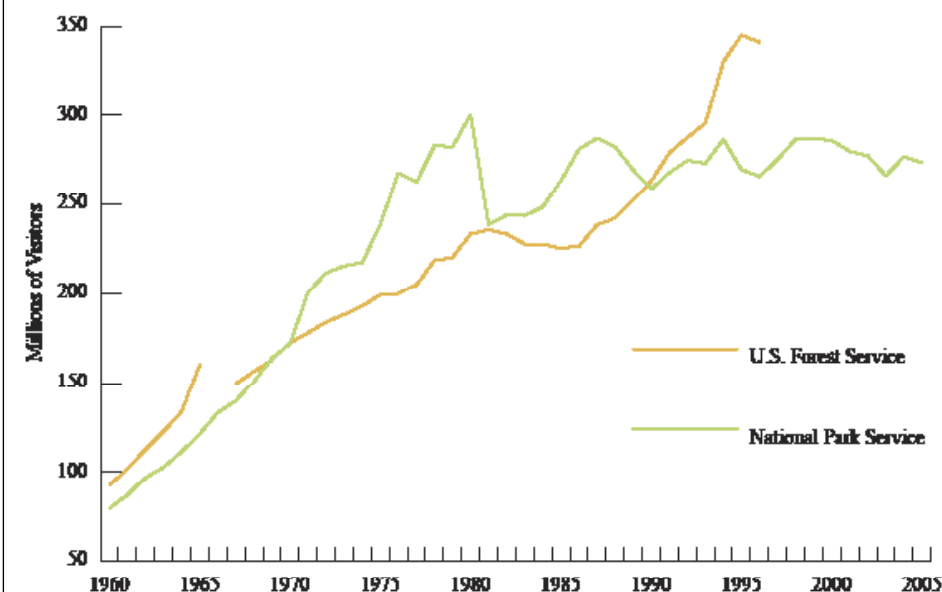




Figure 10

# Annual Number of Visitors to U.S. Forest Service and National Park Service Land, 1960-2005

Source: US Statistical Abstract 2000 Section 7: Parks Recreation and Travel



## Open Land: What is it Good For?

In addressing these issues of quantity and quality, one must consider all possible land uses and resources that wildlands produce. Historically, resource extraction has been the predominant use type. Timber, minerals, and more recently, oil and gas, have brought considerable income and employment to regions that were otherwise economically isolated. Recreation and services that rely on wildlands have recently become much more significant parts of our economy. They have now surpassed resource extraction industries in terms of employment and GDP. (See Figure 9.)

Resource extraction, although waning in magnitude, is still significant to the Rockies economy.

As discussed above, these industries contribute billions of dollars every year and provide thousands of jobs. The economic benefits we reap from these resources should not be dismissed. One study estimated that in existing wells and drilling fields in the United States there is the equivalent of 14.6 years worth of economically recoverable oil and 21.4 years of gas based on 2001 U.S. consumption.<sup>43</sup> Of undiscovered oil and gas on federal lands, the study estimates 384 days and 1.7 years' worth respectively.<sup>44</sup>

The timber industry, although waning like many other natural resource industries, is still a critical part of some economies in the Rockies region. In 1998, almost 56,000 jobs were supported by forestry throughout the United States. The industry's aggregate effects on the economy totaled about \$290.7 million that year alone.<sup>45</sup> A number of areas in the Rocky Mountain states still rely on these revenues and provide raw materials for a variety of forest products.

Without proper management, however, extractive industries have the potential to critically damage the quality of western ecosystems. Logging can degrade the aesthetic value of wildlands, reduce habitat integrity, and increase rates of erosion. Sustainable timber harvesting has therefore become a major goal of many groups working with logging companies. Oil and gas drilling scars and fragments landscapes, as it requires not only rigs for extraction, but roads to transport necessary materials and the resources themselves. In addition, the financial infusion provided to communities generally

Table 3

## Wilderness Recreation Visits, 1965-1994

Source: US Statistical Abstract 2000 Section 7: Parks Recreation and Travel

Year	Recreation Use (Thousands)	Average Annual Percent Change
1965	2,952	—
1972	5,246	11%
1979	8,843	11%
1989	14,801	7%
1994	16,988	3%

Court Judge Clarence Brimmer blocked the implementation of the rule Clinton initiated, claiming that it violated the National Environmental Policy Act (NEPA) and Wilderness Act.<sup>38</sup> Before the case could go to further legal review,<sup>39</sup> the Roadless Rule was repealed in 2005 when the Bush administration replaced it with a process that required state governors to petition the Forest Service for roadless protection in their states.<sup>40</sup> Under the new process, the federal government retained the authority to deny any requested protections.<sup>41</sup>

In September 2006, United States Magistrate Judge Elizabeth Laporte ruled against Judge Brimmer's 2003 decision, and the Roadless Rule was reinstated to the Clinton policy that applied to all national forests within the continental United States.<sup>42</sup> After six years of legal wrangling, the fate of national forest roadless areas remains uncertain. Many of these lands sit vulnerable to extractive uses and motorized recreation. Public opinion may still sway political interests, but one key question lingers: How much wilderness is enough?

## Case Study: The Roan Plateau, Colorado

The fate of the Roan Plateau has become a highly visible battle between environmentalists, local communities, and conservation groups against the federal government. A 9,000-foot-high plateau in Western Colorado, the Roan is capped by 73,602 acres of federal land.<sup>1</sup> The plateau is surrounded by gas drilling within the Piceance Basin and is the next area on the Colorado Oil and Gas Association's wishlist for lands to be leased by the Bureau of Land Management (BLM).

According to one wilderness advocate, the Roan Plateau "rises 3,500 feet above the Colorado River Valley and includes some of the last wild tracts of public land in the region."<sup>2</sup> One of four areas in Colorado noted for its tremendous biodiversity, it is the only one that has not yet been protected. In 1999, a coalition of local groups and elected officials proposed to the BLM that four areas in the Roan Plateau be protected as Wilderness. The BLM confirmed that three of the four have considerable wilderness-quality characteristics. In addition, the region has become a prime location for hunting, fishing, and other types of outdoor recreation.<sup>3</sup> These activities in the Roan bring in an estimated \$5 million every year.<sup>4</sup>

The land on the Roan Plateau was transferred to the BLM from the Department of Energy in 1997. Afterwards, the agency began forming resource management plans (RMPs) for the area. The fight has been for the BLM to acknowledge the ecological and recreational importance of the area, and to manage it with the goal of preserving the environmental quality and integrity of the plateau.<sup>5</sup>

Despite these conservationist efforts, in 2004 the BLM proposed an RMP that would open up land to be leased on top of the Roan Plateau. In May of 2007, Colorado Representatives Mark Udall and John Salazar requested a year-long moratorium on oil and gas production on the Roan.<sup>6</sup> Within one month, the BLM began leasing public lands atop the plateau for development. The final plan was created and implemented at the last minute, making it unavailable for public review or comment. This directly contradicts the draft plan and environmental impact statement (EIS) from the BLM itself, which called for public opinion

to be gauged and recommendations to be formed. The Wilderness Society claims that the new plan actively disregarded public opinion on this matter, despite seven years of public comment that "overwhelmingly opposed drilling the public lands on top of the Plateau."<sup>7</sup>

The BLM asserts that it is compelled to lease all public lands on the Roan to oil and gas companies without delay. In 2002 the "BLM itself acknowledged that there was no such requirement included in the Transfer Act, legislation that turned these lands over to the BLM ... in 1997."<sup>8</sup> Further, Congress passed these lands to the BLM with the intention of having the land administered by terms set by the state of Colorado, and did not expect the drilling of the entire Plateau.<sup>9</sup>

Oddly enough, the BLM's own draft plan found no need to actually drill on the Roan. Projections made by the federal government indicated that 91 percent of all available oil resources were accessible without drilling into the Plateau.<sup>10</sup> Furthermore, 86 percent of the gas could be recovered without drilling anywhere on the top of the Plateau.<sup>11</sup> Groups such as The Wilderness Society also dispute the BLM's figures for recoverable gas from the Roan.<sup>12</sup> With gas drilling now slated to move forward in selected areas atop the plateau, this case illustrates how vulnerable—and how contested—unprotected wildlands in the Rockies remain.

## Case Study Notes

<sup>1</sup>Judith Kohler. July 31, 2007. Congressmen Solicit Feedback On Roan Plateau Management Plan. February 14, 2007. Associated Press. <http://www.saveroanplateau.org/press.htm>

<sup>2</sup>Too Wild Too Drill: Roan Plateau, Colorado. June 25, 2007. The Wilderness Society. <http://www.wilderness.org/WhereWeWork/Colorado/TWTD-Roan.cfm>

<sup>3</sup>The Wilderness Society, 2007.

<sup>4</sup>Steven K. Paulson. June 15, 2007. Two Colorado Congressmen Call For Delay In Drilling On Roan Plateau. May 15, 2007. Associated Press. <http://www.saveroanplateau.org/press.htm>

<sup>5</sup>Campaign Disappointed in BLM Decision to Immediately Lease Roan Plateau's Public Lands. June 14, 2007. The Wilderness Society. June 8, 2007. <http://www.wilderness.org/NewsRoom/Release/20070608.cfm>

<sup>6</sup>Steven K. Paulson. June 15, 2007. Two Colorado Congressmen Call For Delay In Drilling On Roan Plateau. May 15, 2007. Associated Press. <http://www.saveroanplateau.org/press.htm>

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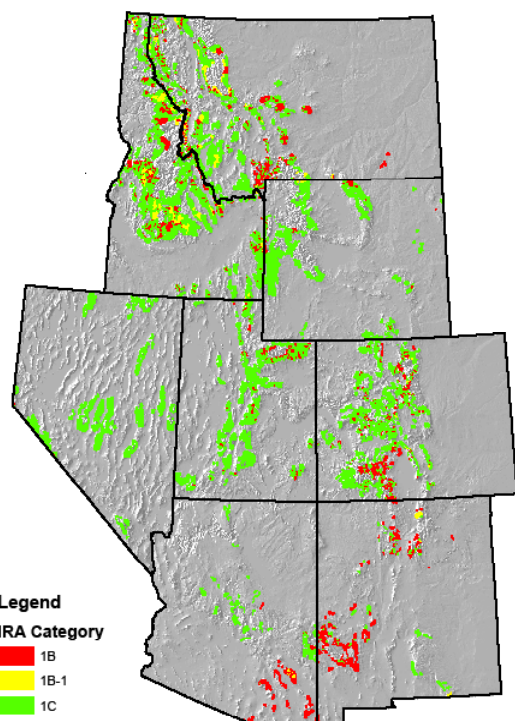
Workover Rig, Rangely, Colorado

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Figure 11

## Inventoried Roadless Areas in the Rockies

Source: USDA Forest Service Geospatial Service and Technology Center, 2003



### Category Definitions

1B: IRAs where road construction and reconstruction is prohibited

1B-1: IRAs that are recommended for wilderness designation in the forest plan and where road construction and reconstruction is prohibited

1C: IRAs where road construction and reconstruction is not prohibited

Table 4

## Inventoried Roadless Areas in the Rockies by State

Source: USDA Forest Service Geospatial Service and Technology Center, 2003

State	1B IRA	1B-1 IRA	1C IRA	Sum
Arizona	534,057	61,135	698,574	1,293,767
Colorado	924,838	10,774	3,522,117	4,457,730
Idaho	2,544,624	1,619,674	5,939,295	10,103,593
Montana	1,882,819	1,012,440	3,925,530	6,820,789
New Mexico	1,098,812	65,779	382,772	1,547,363
Nevada	16,868	401	3,203,617	3,220,886
Utah	448,435	14,630	3,651,834	4,114,898
Wyoming	160,675	18,134	3,111,634	3,290,443

only assists economies in the short-term, so it is questionable whether drilling in wild areas is worth the ecological backlash.

The BLM, which issues most permits for drilling on federal land, claims that it performs thorough assessments of effects on wildlife habitat (see Case Study: Roan Plateau). A former BLM scientist spoke against this view in a 2007 report: “The habitat used to be treated as a valuable resource. Now the BLM biologist acts as a support person to get permits processed, period.”<sup>46</sup> Opponents of the Roadless Rule cited, among other reasons, the loss of mineral, oil, and gas development opportunities as reasons to keep areas open to future road building. According to Wilderness supporters, in Montana, North Dakota, Wyoming, Utah, Colorado, and New Mexico, of all lands with good potential for oil and gas recovery, roadless areas made up less than 4 percent. The total resources from drilling there would provide only 63 to 79 days worth of gas, and 21 to 24 days worth of oil. The relative value of these lands to oil and gas developers is paltry — the most valuable resources have already been surveyed and tapped.<sup>47</sup>

Economic studies of wilderness attempt to analyze all economic benefits that human society receives from these environments. This section of the report presents calculations offered by respected scientists and economists to quantify the extent to which humans benefit from wilderness.

The importance of unimpaired wildlands is disputed by some economists since valuations of ecosystem services are difficult to quantify. Healthy ecosystems purify our air and water, sequester carbon, control erosion, and stabilize the climate, among other things.<sup>48</sup> One paper approximated the total global value of ecosystem services to be at least \$33 trillion annually.<sup>49</sup> In the United States alone, it is estimated that the value of temperate and boreal forests is worth about \$63.6 billion every year.<sup>50</sup> A study at Colorado State University (CSU) found that approximately \$1.5 billion generated from environmental benefits each year from the preservation of 42 million acres of national forest roadless areas.<sup>51</sup>

Recreation, tourism, and their supporting industries also contribute to economic growth. Like agriculture and mining, tourism is now shaping the development of western economies. According to a 2001 survey, hunters and anglers in Arizona, Idaho, Montana, New Mexico, Wyoming, and Utah contributed more than \$3 billion to the economy in spending.<sup>52</sup> Hundreds of millions of dollars are generated each year from licensing, taxes, and other items related to hunting and fishing.<sup>53</sup> The study performed at CSU concluded that just under \$600 million in recreation benefits were generated each year by the 42 million acres of roadless areas mentioned





Sand Dunes, Colorado

© Nicole Gautier

above.<sup>54</sup> Recreation in designated Wilderness generated an additional \$600 million every year in economic benefits.<sup>55</sup>

Even property value is positively influenced by open spaces and wildlands. People increasingly want to live in areas that are relatively undeveloped, especially if there is wilderness close by. In addition to a productive business atmosphere, people look for factors that will directly improve quality of life.<sup>56</sup> The effect this has on land prices is a good indicator of the enormous demand to live in these areas. According to Spencer Philips, “The per-acre price of residential land in towns that have some wilderness acreage is almost 19 percent higher than in towns that contain no wilderness.”<sup>57</sup> Furthermore, in a city/town without any nearby Wilderness, property values would increase by about \$4,000 per acre if some Wilderness acreage were added in the area.<sup>58</sup>

Some studies of wildlands economics seek to account for an array of socioeconomic factors. In 2004, two Colorado College researchers evaluated social and economic factors in 113 rural counties in the Western U.S., 50 of which had designated Wilderness within their boundaries. The percentage of counties managed as Wilderness, or by the BLM, USFS, and NPS was compared to income, employment, and population growth.

Each additional percent of federal land within a county correlated with between 0.23 percent and 0.42 percent more growth for each of these factors. The most significant growth occurred in counties not adjacent to metropolitan counties.<sup>59</sup> These data indicate the significance of open spaces and wildlands to the economies and the social welfare of the West.

### Issues/Obstacles

The benefits of wilderness are likely to be more significant, or at least stable, if the environmental quality of these wild areas is high. If wildlands are left intact, they will be able to effectively perform the full array of ecological services. In addition, they will be increasingly attractive to recreational users; nevertheless, there are a number of issues that may prevent effective gains in wilderness quality.

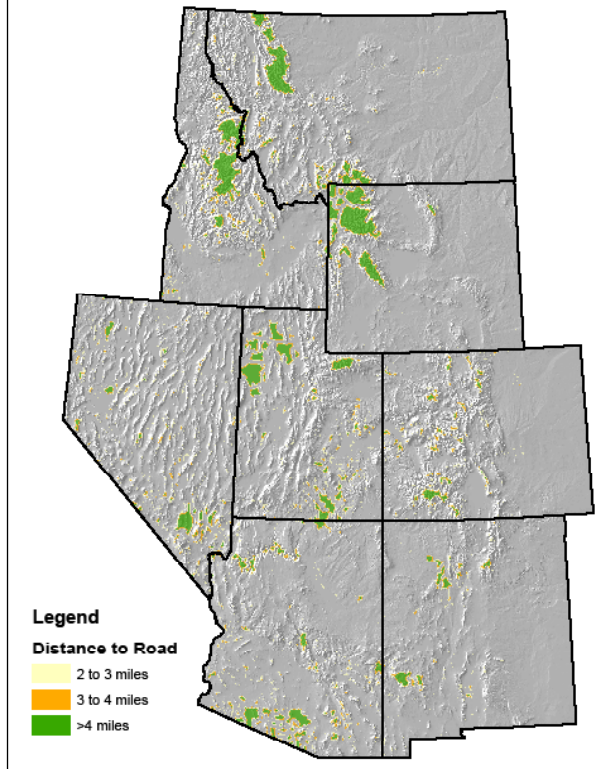
One of the fundamental characteristics of wildlands is solitude. There is an element of remoteness that makes undeveloped areas feel wilder; it is this appeal that draws millions of backpackers, hikers, and other recreational users into the wilderness every year. A good measure of isolation is proximity to roads. The farthest accessible distance from a road in the Rockies region is in northern



Woodland Park, Colorado

© Will Chambers

**Figure 12**  
Distance to Roads in the Rockies  
Source: Watts et. al. (2007)



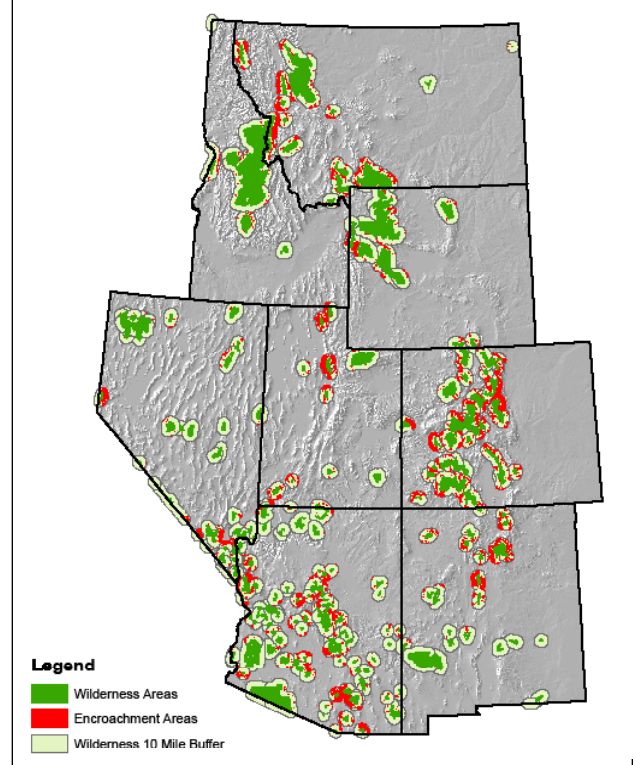
Wyoming, at just over twenty miles.<sup>60</sup> In Colorado, the maximum possible distance to a road is slightly more than ten miles. On average, however, land in the Rockies region is only 0.4 miles from a road (Figure 12).<sup>61</sup>

Biological diversity is another important indicator of wildness. Higher levels of biodiversity in a region tends to match with greater ecosystem health; environmental stressors and random events will have less effect on robust ecosystems. Habitat destruction is currently the largest threat to biodiversity and healthy ecosystems. Other harmful human activities include the spread of non-native species, pollution, exploitation of resources, and habitat fragmentation.<sup>62</sup> The threats, however, are not diminishing. The population in the Rockies region is projected to grow to about 30 million by 2025, almost a 50 percent increase from 2000.<sup>63</sup> The increased demand for land and resources will likely only exacerbate current environmental problems and resource demands.

Habitat destruction and fragmentation are considerably affected by development, like roads. Wilderness can be encroached upon by dwellings as well. The boundaries of many towns in the Rockies extend up to Wilderness land (Figure 13). Houses are built in the middle of forests and on the sides of mountains so that the inhabitants can feel closer to the wild, or farther from civilization. Such development only adds to the destruction and division of wildlands.

Protecting habitat for sensitive species is crucial in pro-

**Figure 13**  
Wilderness Encroachment in the Rockies,  
10-Mile Buffer  
Source: USDA Forest Service (Roadless Area Conservation),  
Radeloff et al. (2005)



tecting biodiversity. The “Spine of the Continent Project” has identified lands from Mexico up to Yukon Territory that qualify as core, linkage, and transition wildlife networks (Figure 14).<sup>64</sup> In doing so, the project has identified considerable quantities of land upon which a number of species rely.

Even with the identification of critical areas, protection depends upon adequate and appropriate management strategies. Wilderness managers currently face several key challenges. The demographics of user trends have changed significantly over the past few years. The number of overnight users is down while the number of day users is up; day users do not get as far into areas, so Wilderness peripheries experience serious impacts.<sup>65</sup> ATV use is becoming more popular in many public lands, and illegal use within Wilderness areas is also increasing. ATVs create unplanned roads that cut into these critical wildlands. Also, as discussed above, development continues to encroach upon wild areas, increasing the “islandification of wilderness.”<sup>66</sup>

These problems are heightened by different management approaches from the various governing agencies and dependable monitoring techniques are still being created to assess the outcomes of management. As such, the extent to which public agencies are accomplishing their goals is unclear. Understanding the values of wilder-



## Case Study: The Swan Valley, Montana

The Swan Valley in northwestern Montana is a site where public-private collaboration has protected key wild lands. In 2003, the Trust for Public Land (TPL) worked with Plum Creek Timber Company, Flathead National Forest, and local communities to transfer almost 1,700 acres into public ownership as national forest. Senators Conrad Burns (R) and Max Baucus (D) of Montana assisted the project by securing financial support from the federal Land and Water Conservation Fund.<sup>1</sup>

Just over three years later, an additional 1,761 acres were protected through the joint efforts of TPL, Bonneville Power Administration (BPA), and the Plum Creek Timber Company. Funding was provided through an agreement between BPA, the Montana Department of Fish, Wildlife, and Parks, and the Confederated Salish and Kootenai Tribes. TPL, working with the State and the local tribes, designed the projects to conserve valuable wildlife habitat in the valley.<sup>2</sup>

Ecologically, protecting the Swan Valley has been very significant. With lands located between several Wilderness areas, the projects were designed to include critical elements of the local ecosystem: wildlife core habitat, habitat linkage areas, and watersheds have been protected as part of this widespread effort.<sup>3</sup> The plan also includes habitat for federally-protected species such as grizzly bear (see Swan Valley Grizzly Movement Map below) bull trout, and water howellia—all native to Montana. The lakes, rivers, and streams provide critical spawning and rearing habitat for the trout. The protected land in the

Swan Valley provides grizzlies with a corridor between the Bob Marshall Complex and the more isolated Mission Mountain Wilderness Areas.<sup>4</sup>

The ecosystem-wide conservation effort required years of constant communication amongst private entities and several other groups, like the Swan Valley Coalition, Friends of the Wild Swan, the Swan Ecosystem Center, and Northwest Connections. They have developed a long-term and comprehensive plan to sustainably utilize forest resources and protect the recreational and environmental assets in the Swan Valley. Since 1999, almost 7,200 acres have been incorporated into the Flathead National Forest, largely through the Land and Water Conservation Fund. Another 7,200 acres make up a conservation easement in Plum Creek forestlands, part of the Swan River State Forest.<sup>5</sup>

Through the energy and resources dedicated by TPL, Plum Creek Timber, and other groups, a larger contiguous landscape has been protected. Critical core and linkage habitat for a variety of species has been conserved and recreational opportunities have been protected. These efforts have made the environmental, social, and economic welfare of the region more secure.

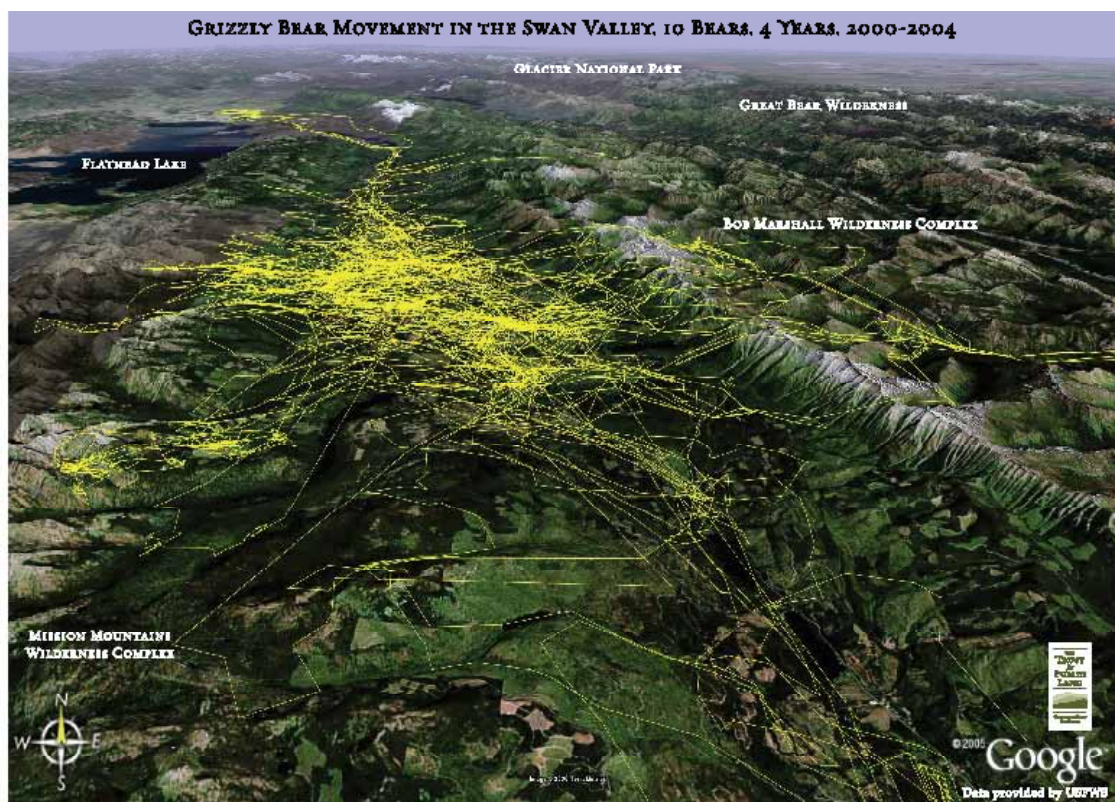
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ness and its contribution to surrounding communities in the Rocky Mountain West is important for both the management agencies and the public.<sup>67</sup>

In the end, much of the administrative action ought to be determined by public opinion. After all, these are public lands. This leads to the final and most prevalent issue: lack of adequate public knowledge. People must be educated on the issues; they should research and evaluate facts. The defense of public lands should not be a partisan issue; it should seek to maintain the ecosystem services provided by our environment and protect wildlands for the enjoyment of hikers, anglers, hunters, and other recreational users from all backgrounds. Collaboration between public and private groups is also needed in many areas (see Case Study: Swan Valley). The benefits that these lands provide make them well worth sparing from development.

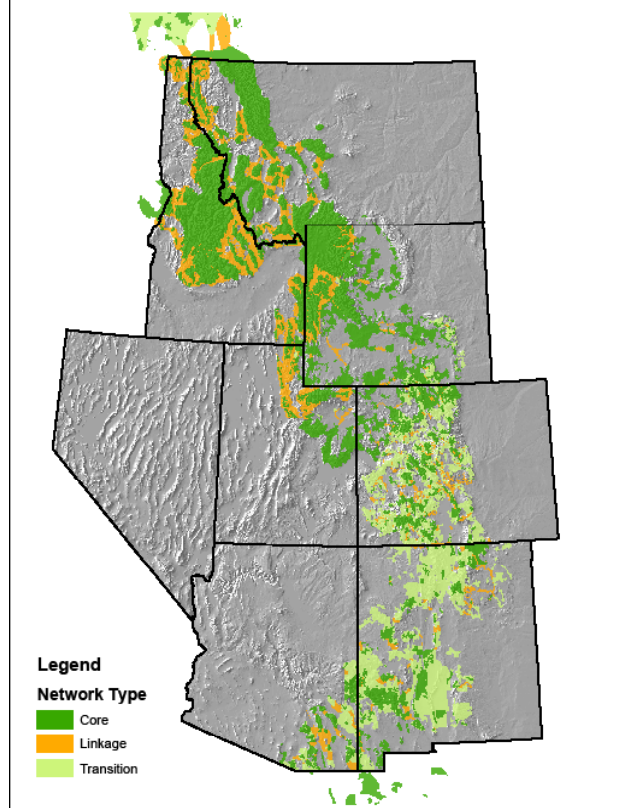
## Conclusion

The Rocky Mountain West contains some of the largest and most ecologically significant and intact tracts of public lands in the U.S. Dating to the nineteenth century, development and natural resource extraction characterized the Old West economy. More recently, changing trends have shifted the focus to recreation and enjoyment in a service-based market, aptly dubbed the New West economy. This brings attention to the quality of our public lands, especially Wilderness. In an effort to correctly manage what wild areas we do have left, the first step is protection. Limiting additional encroachment and fragmentation must be the basis on which human civilization develops further in the Rockies region. The wildlands that exist provide invaluable recreational, economic, and environmental services to millions of Americans. A long-term and fully comprehensive approach to protecting these places can defend the interests that the Rockies region has in them.

Figure 14

## A Wildlands Network Design for the Continental Divide Spine

Source: American Wildlands, Yellowstone to Yukon Conservation Initiative, Wild Utah Project, Grand Canyon Wildlands Council, Southern Rockies Ecosystem Project, Wildlands Project



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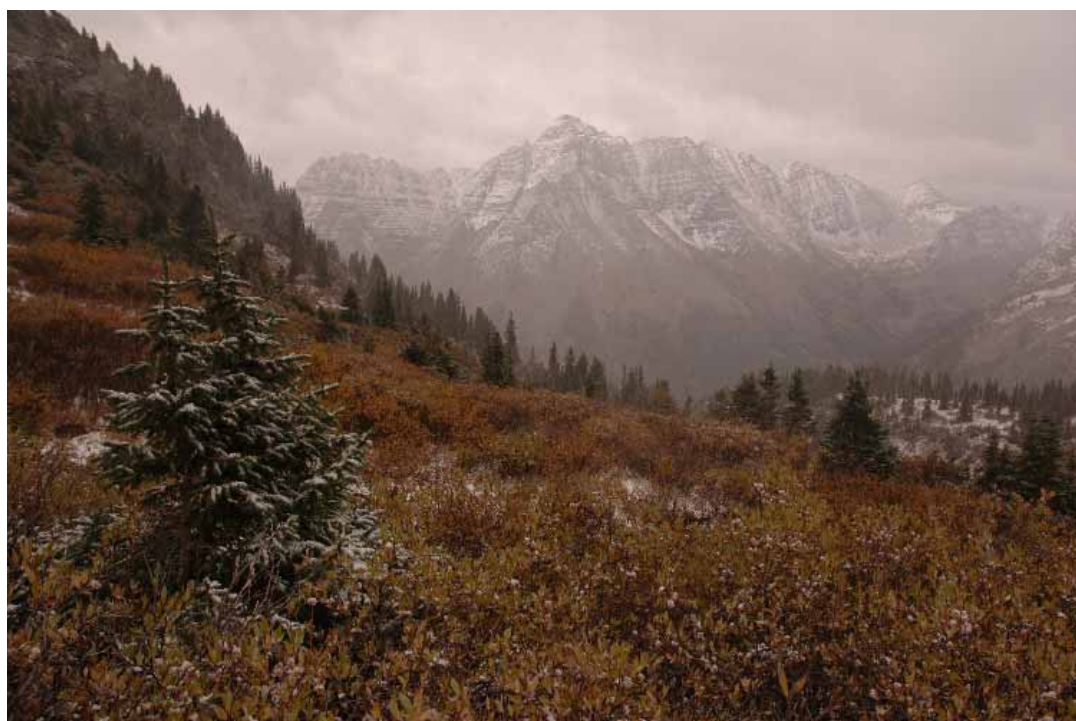
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Maroon Bells Wilderness, Colorado

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THE 2008 COLORADO COLLEGE STATE OF THE ROCKIES REPORT CARD

Grading Wilderness

The historical, cultural, and aesthetic character of the West is often described as “wild.” Westerners identify with open spaces and wildlands not only for their beauty, opportunities for recreation, and economic resources, but as a fundamental part of the region’s distinctiveness. How can we measure the wild qualities of a region? Many associate the trait with a feeling, not a unit of measurement. Gregory Aplet of The Wilderness Society defines wilderness as those tracts of land that are the most “natural” and “free.”<sup>1</sup> That is, where the ecosystem is least disturbed from an historical baseline and outside of direct human impacts or control. Common indicators of wildness include solitude, remoteness, and the extent to which the land is “untrammeled” by humans. This section of the *2008 State of the Rockies Report Card* works from these terms to grade counties based on how “wild” they are.

Methodology

Previous studies suggest that the most “wild” lands are those that are undeveloped, remote, and secluded, and use a variety of indicators to measure these qualities. This study uses federal land designations to quantify naturalness, average distance to roads for remoteness, and population density as a proxy for solitude.

Population density is calculated from 2007 county population estimates provided by Geolytics Inc. and the U.S. Census Bureau. Designated Wilderness Areas and Inventoried Roadless Areas (IRAs) are calculated from National Atlas of the United States and the USDA Forest Service Geospatial and Technology Center. Subcategories of IRAs are defined as follows:

- 1B: Inventoried Roadless Areas where road construction and reconstruction is prohibited.
- 1B-1: Inventoried Roadless Areas that are recommended for wilderness designation in the forest plan and where road construction and reconstruction is prohibited.
- 1C: Inventoried Roadless Areas where road construction and reconstruction is not prohibited.

Public land per county is calculated from Payment in Lieu of Taxes (PILT) data provided by the Department

of the Interior. Road density data is provided by Raymond Watts and the US Geological Survey.<sup>2</sup>

After tabulating the data, each variable was weighted based on the degree to which each variable represents the characteristics of wildness outlined above. Lower weights will have a smaller impact on the final rankings.

VARIABLE	WEIGHT
Population Density: acres per person	0.4
Percent of county that is designated Wilderness	0.4
Percent of county that is Roadless: 1B	0.4
Percent of county that is Roadless: 1B-1	0.38
Percent of county that is Roadless: 1C	0.36
Average distance to roads	0.4
Percent of county that is public land, minus Wilderness	0.1

Before grading, Rockies counties were sorted by population and geography as either “metropolitan,” “micro-politan,” or “rural” as explained in the methodology section of the *2008 State of the Rockies Report Card*. We assume a rural area will be more remote, less developed, and provide more solitude than an urban area. Thus, we only compare like geographies for purposes of grading wildness. The weighted figures were then converted to z-scores and counties were ranked and graded.

There are several limitations to this study. Using federal land designations to measure naturalness is a good measure of federal protection, but does not include unprotected wildlands. In other words, an area need not be protected by the federal government to be wild. A more comprehensive study could include actual land cover data, as well as indicators of biodiversity to demonstrate the degree to which a particular area is departed from the historical norm. Population density also does not tell the whole story in terms of solitude. An area known for being “wild,” especially a well-known Wilderness area, may draw more outdoor enthusiasts, thus diminishing the likelihood that a visitor would experience the same degree of solitude.

<sup>1</sup>Aplet, Gregory; Thomson, Janice; Wilbert, Mark; 1999. “Indicators of Wilderness: Using Attributes of the Land to Assess the Context of Wilderness.” *The Wilderness Society*. <http://www.wilderness.org/Library/Documents/upload/Indicators-of-Wildness-Aplet-et-al.pdf>  
<sup>2</sup>Watts, Raymond D.; Compton, Roger W.; McCammon, John H.; Rich, Carl L.; Wright, Stewart M.; Owens, Tom; and Ouren, Douglas S. 4 May 2007. “Roadless Space of the Conterminous United States.” *Science Magazine*. 316(5825): 736 – 738



State	County	County Type	Grade	Mean Distance to Road by County (miles)	Public Land other than Designated Wilderness, Percent of County	Designated Wilderness as a Percent of Total County Land	Percent of County that is IRA: 1B	Percent of County that is IRA: 1C	Percent of County that is IRA: 1B-1	Population density, acres per person
Arizona	Apache	Micropolitan	D	0.3	8.6%	0.7%	0.1%	0.1%	0.0%	0.2
	Cochise	Micropolitan	C-	0.6	18.8%	3.8%	4.4%	0.0%	0.0%	0.0
	Coconino	Metropolitan	C+	0.6	37.0%	2.7%	0.0%	0.6%	0.0%	0.2
	Gila	Micropolitan	C	0.7	49.6%	8.3%	0.0%	2.7%	0.0%	0.1
	Graham	Micropolitan	C+	0.7	33.1%	4.4%	3.7%	2.2%	2.1%	0.1
	Greenlee	Micropolitan	A-	1.2	75.7%	1.0%	6.5%	23.7%	0.0%	0.2
	La Paz	Micropolitan	C+	0.7	52.5%	10.8%	0.0%	0.0%	0.0%	0.2
	Maricopa	Metropolitan	C+	0.5	33.5%	8.1%	0.0%	2.1%	0.0%	0.0
	Mohave	Micropolitan	C	0.7	63.6%	7.0%	0.0%	0.0%	0.0%	0.1
	Navajo	Micropolitan	D	0.4	9.1%	0.3%	0.0%	0.0%	0.0%	0.1
	Pima	Metropolitan	A-	2.1	13.6%	13.6%	2.5%	0.0%	0.0%	0.0
	Pinal	Metropolitan	C-	0.4	14.5%	3.7%	1.3%	0.0%	0.0%	0.0
	Santa Cruz	Micropolitan	C-	0.4	50.6%	3.6%	4.7%	0.0%	0.0%	0.0
	Yavapai	Metropolitan	C+	0.5	42.9%	6.9%	0.0%	4.4%	0.0%	0.0
	Yuma	Metropolitan	B+	0.9	18.5%	25.8%	0.0%	0.0%	0.0%	0.0
Colorado	Adams	Metropolitan	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
	Alamosa	Micropolitan	D	0.3	7.8%	7.3%	0.2%	1.1%	0.0%	0.0
	Arapahoe	Metropolitan	D	0.3	0.9%	0.0%	0.0%	0.0%	0.0%	0.0
	Archuleta	Micropolitan	B+	0.7	42.6%	8.0%	9.5%	20.1%	0.0%	0.1
	Baca	Rural	D	0.2	12.6%	0.0%	0.0%	0.0%	0.0%	0.6
	Bent	Micropolitan	D	0.3	2.2%	0.0%	0.0%	0.0%	0.0%	0.3
	Boulder	Metropolitan	B-	0.6	27.3%	7.0%	8.5%	1.8%	0.2%	0.0
	Broomfield	Metropolitan	D	0.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
	Chaffee	Micropolitan	A-	0.7	64.7%	14.2%	4.2%	35.2%	0.0%	0.1
	Cheyenne	Rural	D	0.3	0.0%	0.0%	0.0%	0.0%	0.0%	1.0
	Clear Creek	Metropolitan	A	0.5	47.5%	19.9%	27.2%	36.2%	0.2%	0.0
	Conejos	Rural	B-	0.6	48.8%	11.6%	10.9%	2.3%	0.0%	0.1
	Costilla	Rural	D	0.3	0.1%	0.0%	0.1%	4.3%	0.0%	0.4
	Crowley	Rural	D	0.3	0.8%	0.0%	0.0%	0.0%	0.0%	0.1
	Custer	Rural	C+	0.4	27.5%	9.3%	1.4%	13.2%	0.1%	0.2
	Delta	Micropolitan	C+	0.4	53.9%	1.2%	2.6%	29.2%	0.0%	0.0
	Denver	Metropolitan	D	0.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
	Dolores	Rural	B	0.4	58.7%	3.1%	0.0%	42.1%	0.0%	0.6
	Douglas	Metropolitan	C-	0.3	27.0%	0.0%	1.3%	12.1%	0.0%	0.0
	Eagle	Micropolitan	B	0.6	63.5%	14.9%	0.3%	25.6%	0.0%	0.0
	Elbert	Metropolitan	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.1
	El Paso	Metropolitan	D	0.4	7.7%	0.0%	0.0%	2.9%	0.0%	0.0
	Fremont	Micropolitan	D+	0.5	43.0%	3.3%	0.0%	5.5%	0.1%	0.0
	Garfield	Micropolitan	C	0.5	53.8%	9.0%	0.5%	8.8%	0.0%	0.1
	Gilpin	Metropolitan	A-	0.3	34.3%	9.3%	27.1%	0.0%	0.0%	0.0
	Grand	Rural	B-	0.6	60.5%	6.5%	7.5%	19.5%	0.2%	0.1
	Gunnison	Micropolitan	A-	0.8	58.7%	19.9%	2.4%	30.8%	0.0%	0.2
	Hinsdale	Rural	A	2.0	47.6%	46.5%	24.9%	13.2%	0.0%	1.5
	Huerfano	Micropolitan	C	0.4	17.0%	3.4%	2.2%	7.3%	0.0%	0.2
	Jackson	Rural	B+	0.5	39.7%	10.0%	3.7%	17.3%	0.0%	1.2
	Jefferson	Metropolitan	D+	0.3	18.3%	2.8%	0.8%	5.0%	0.0%	0.0
	Kiowa	Rural	D+	0.3	0.8%	0.0%	0.0%	0.0%	0.0%	1.3
	Kit Carson	Micropolitan	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.3
	Lake	Micropolitan	A-	0.6	44.6%	32.1%	19.1%	21.1%	0.4%	0.0
	La Plata	Micropolitan	B+	1.1	35.7%	4.5%	5.6%	21.2%	0.0%	0.2
	Larimer	Metropolitan	B-	0.8	37.5%	10.5%	2.3%	6.8%	0.3%	0.0
	Las Animas	Micropolitan	D+	0.3	10.2%	0.0%	0.7%	0.5%	0.0%	0.3
Colorado (continued)	Lincoln	Rural	D	0.2	0.1%	0.0%	0.0%	0.0%	0.0%	0.5
	Logan	Micropolitan	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.1
	Mesa	Metropolitan	B	1.0	69.4%	3.3%	0.3%	19.8%	0.0%	0.0
	Mineral	Rural	A	1.5	61.4%	31.9%	27.9%	17.8%	0.0%	0.9
	Moffat	Micropolitan	C	0.4	55.0%	0.0%	0.0%	4.2%	0.0%	0.4
	Montezuma	Micropolitan	C-	0.4	35.5%	0.7%	0.0%	15.2%	0.0%	0.1
	Montrose	Micropolitan	D+	0.3	66.3%	1.7%	2.1%	4.1%	0.0%	0.1
	Morgan	Micropolitan	D	0.2	0.4%	0.0%	0.0%	0.0%	0.0%	0.0
	Otero	Micropolitan	D	0.2	22.3%	0.0%	0.0%	0.0%	0.0%	0.1
	Ouray	Rural	C	0.5	34.3%	11.6%	0.7%	5.6%	0.0%	0.1
	Park	Metropolitan	B	0.5	39.2%	11.2%	1.5%	9.6%	0.1%	0.1
	Phillips	Rural	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.1
	Pitkin	Micropolitan	A	1.1	47.7%	43.2%	1.1%	37.8%	0.0%	0.1
	Prowers	Micropolitan	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.1
	Pueblo	Metropolitan	D	0.3	3.9%	0.3%	0.2%	1.2%	0.0%	0.0
	Rio Blanco	Rural	C	0.5	69.3%	3.4%	0.1%	9.0%	0.0%	0.5
	Rio Grande	Micropolitan	B+	0.4	56.6%	0.8%	20.9%	11.6%	0.0%	0.1
	Routt	Micropolitan	B-	0.6	36.4%	7.5%	0.6%	20.9%	0.0%	0.1
	Saguache	Rural	B-	0.6	59.5%	6.6%	6.4%	12.2%	0.0%	0.4
	San Juan	Rural	A	1.7	66.5%	19.9%	22.4%	94.3%	0.0%	0.7
	San Miguel	Rural	C-	0.3	55.5%	3.9%	0.3%	9.0%	0.0%	0.2
	Sedgwick	Rural	D	0.2	0.1%	0.0%	0.0%	0.0%	0.0%	0.2
	Summit	Micropolitan	A-	0.9	54.3%	25.2%	6.8%	41.2%	0.0%	0.0
	Teller	Metropolitan	C-	0.3	45.3%	0.0%	0.0%	7.5%	0.0%	0.0
	Washington	Rural	D	0.2	0.1%	0.0%	0.0%	0.0%	0.0%	0.6
	Weld	Metropolitan	D	0.4	7.7%	0.0%	0.0%	0.0%	0.0%	0.0
	Yuma	Micropolitan	D	0.2	0.5%	0.0%	0.0%	0.0%	0.0%	0.2
Idaho	Ada	Metropolitan	D+	0.7	43.2%	0.0%	0.0%	0.0%	0.0%	0.0
	Adams	Rural	B	0.5	59.7%	2.1%	26.0%	8.1%	0.0%	0.4
	Bannock	Metropolitan	C+	0.4	29.1%	0.0%	0.4%	23.6%	0.0%	0.0
	Bear Lake	Micropolitan	B	0.4	42.9%	0.0%	0.1%	41.7%	2.3%	0.2
	Benewah	Micropolitan	D	0.2	9.1%	0.0%	0.0%	0.0%	0.0%	0.1
	Bingham	Micropolitan	D	0.3	22.1%	0.0%	0.0%	0.0%	0.0%	0.0
	Blaine	Micropolitan	A	0.7	76.2%	1.6%	12.1%	26.5%	19.4%	0.1
	Boise	Metropolitan	A	0.9	67.0%	5.5%	0.5%	20.0%	15.9%	0.2
	Bonner	Micropolitan	C+	0.5	37.0%	0.0%	5.2%	11.1%	2.8%	0.0
	Bonneville	Metropolitan	A	0.8	50.3%	0.0%	18.2%	17.9%	5.4%	0.0
	Boundary	Micropolitan	B+	0.5	58.1%	0.0%	10.2%	14.3%	5.2%	0.1
	Butte	Rural	B	0.6	60.3%	2.2%	1.7%	26.4%	2.3%	0.8
	Camas	Rural	A-	0.8	64.5%	0.0%	34.9%	36.6%	0.0%	1.0
	Canyon	Metropolitan	D	0.2	5.0%	0.0%	0.0%	0.0%	0.0%	0.0
	Caribou	Micropolitan	B	0.4	38.7%	0.0%	0.1%	38.4%	0.0%	0.3
	Cassia	Micropolitan	C-	0.3	55.4%	0.0%	1.5%	9.2%	0.0%	0.1
	Clark	Rural	A-	0.4	62.3%	0.0%	7.9%	17.0%	6.1%	1.9
	Clearwater	Micropolitan	A	0.7	52.6%	0.0%	9.0%	23.7%	18.7%	0.3
	Custer	Rural	A	1.1	81.3%	11.6%	7.5%	40.4%	17.7%	1.2
	Elmore	Micropolitan	A-	0.7	64.0%	4.3%	18.1%	14.0%	3.9%	0.1
	Franklin	Metropolitan	A-	0.3	32.6%	0.0%	0.0%	37.4%	7.1%	0.1
	Fremont	Micropolitan	C	0.3	58.8%	0.0%	3.1%	1.2%	4.3%	0.2
	Gem	Metropolitan	C	0.5	36.9%	0.0%	5.3%	2.9%	0.0%	0.0
	Gooding	Micropolitan	D	0.4	53.6%	0.0%	0.0%	0.0%	0.0%	0.1
	Idaho	Micropolitan	A	2.7	43.7%	39.4%	11.4%	15.6%	3.4%	0.5

State	County	County Type	Grade	Mean Distance to Road by County	Public Land other than Designated Wilderness, Percent of County	Designated Wilderness as a Percent of Total County Land	Percent of County that is IRA: IB	Percent of County that is IRA: IC	Percent of County that is IRA: IB-1	Population density, acres per person
Idaho (continued)	Jefferson	Metropolitan	D	0.2	26.8%	0.0%	0.0%	0.0%	0.0%	0.0
	Jerome	Micropolitan	D	0.2	25.0%	0.0%	0.0%	0.0%	0.0%	0.0
	Kootenai	Metropolitan	D	0.2	28.6%	0.0%	0.0%	4.9%	0.0%	0.0
	Latah	Micropolitan	D	0.2	14.3%	0.0%	0.0%	0.0%	0.0%	0.0
	Lemhi	Micropolitan	A	1.1	74.8%	15.8%	15.0%	34.9%	6.6%	0.6
	Lewis	Rural	D	0.2	2.6%	0.0%	0.0%	0.0%	0.0%	0.1
	Lincoln	Rural	D	0.3	76.0%	0.0%	0.0%	0.0%	0.0%	0.3
	Madison	Micropolitan	B	0.3	20.9%	0.0%	23.6%	2.0%	0.0%	0.0
	Minidoka	Micropolitan	D	0.5	36.7%	0.0%	0.0%	0.0%	0.0%	0.0
	Nez Perce	Metropolitan	D	0.3	6.4%	0.0%	0.0%	0.0%	0.0%	0.0
	Oneida	Rural	D+	0.3	53.1%	0.0%	0.0%	14.6%	0.0%	0.3
	Owyhee	Metropolitan	A	0.6	73.8%	0.0%	0.0%	0.2%	0.0%	0.7
	Payette	Micropolitan	D	0.6	24.9%	0.0%	0.0%	0.0%	0.0%	0.0
	Power	Metropolitan	C	0.3	31.8%	0.0%	0.2%	1.9%	0.0%	0.2
	Shoshone	Micropolitan	A	0.5	72.6%	0.0%	10.5%	23.1%	18.9%	0.2
	Teton	Rural	A	0.4	33.6%	0.0%	57.8%	6.7%	21.8%	0.1
	Twin Falls	Micropolitan	D	0.2	51.7%	0.0%	0.6%	1.9%	0.0%	0.0
	Valley	Rural	A	2.5	55.9%	29.8%	16.0%	20.7%	12.3%	0.4
	Washington	Micropolitan	C	0.8	36.0%	0.0%	2.5%	2.3%	0.0%	0.1
Montana	Beaverhead	Micropolitan	A-	0.7	56.0%	1.4%	4.5%	29.8%	6.3%	0.7
	Big Horn	Micropolitan	D+	0.3	1.3%	0.0%	0.0%	0.0%	0.0%	0.4
	Blaine	Rural	D	0.4	16.6%	0.0%	0.0%	0.0%	0.0%	0.7
	Broadwater	Rural	C	0.3	35.5%	0.0%	6.4%	12.9%	1.1%	0.3
	Carbon	Metropolitan	A-	0.8	31.7%	11.7%	0.2%	11.7%	2.2%	0.2
	Carter	Rural	C+	0.3	27.7%	0.0%	0.0%	0.0%	0.0%	2.6
	Cascade	Metropolitan	C+	0.4	12.4%	0.0%	11.3%	4.9%	0.0%	0.0
	Chouteau	Rural	D	0.3	6.1%	0.0%	0.0%	1.6%	0.0%	0.7
	Custer	Micropolitan	D+	0.3	13.7%	0.0%	0.0%	0.0%	0.0%	0.3
	Daniels	Rural	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.8
	Dawson	Micropolitan	D	0.3	4.2%	0.0%	0.0%	0.0%	0.0%	0.3
	Deer Lodge	Micropolitan	B-	0.8	34.1%	10.9%	0.0%	14.9%	1.2%	0.1
	Fallon	Rural	D	0.3	11.2%	0.0%	0.0%	0.0%	0.0%	0.6
	Fergus	Micropolitan	C	0.3	17.4%	0.0%	3.4%	0.1%	0.0%	0.4
	Flathead	Micropolitan	A-	2.1	54.1%	18.4%	2.4%	12.6%	3.0%	0.1
	Gallatin	Micropolitan	B+	0.8	35.9%	5.9%	18.9%	3.0%	2.6%	0.0
	Garfield	Rural	B	0.3	26.3%	0.0%	0.0%	0.0%	0.0%	4.2
	Glacier	Micropolitan	C-	0.8	20.7%	0.0%	0.0%	3.0%	0.0%	0.2
	Golden Valley	Rural	C-	0.2	4.2%	0.0%	12.3%	0.4%	0.0%	1.0
	Granite	Rural	A-	0.8	57.7%	5.7%	8.3%	23.9%	5.3%	0.6
	Hill	Micropolitan	D	0.2	2.6%	0.0%	0.0%	0.0%	0.0%	0.2
	Jefferson	Rural	C	0.5	52.2%	0.0%	4.2%	13.0%	1.6%	0.1
	Judith Basin	Rural	C+	0.4	25.8%	0.0%	8.6%	16.6%	0.0%	0.9
	Lake	Micropolitan	B-	0.5	13.6%	1.2%	0.0%	13.3%	7.8%	0.1
	Lewis and Clark	Micropolitan	A-	2.0	28.2%	20.3%	3.4%	14.9%	5.0%	0.1
	Liberty	Rural	D	0.2	3.6%	0.0%	0.0%	0.0%	0.0%	0.7
	Lincoln	Micropolitan	B+	0.4	72.2%	2.1%	9.3%	10.3%	5.9%	0.2
	McCone	Rural	D+	0.3	5.7%	10.3%	0.0%	0.0%	0.0%	0.4
	Madison	Rural	B+	0.8	45.6%	0.0%	2.3%	21.5%	1.9%	2.0
	Meagher	Rural	C+	0.4	31.5%	0.0%	8.1%	16.4%	0.6%	1.2
	Mineral	Rural	A	0.6	82.0%	0.0%	9.0%	30.5%	26.0%	0.3
	Missoula	Metropolitan	A-	0.6	34.9%	8.1%	2.7%	5.2%	11.8%	0.0
	Musselshell	Rural	D	0.2	7.3%	0.0%	0.0%	0.0%	0.0%	0.4
	Park	Micropolitan	A	1.7	24.8%	27.7%	18.1%	4.5%	0.0%	0.2

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Montana (continued)	Petroleum	Rural	B-	0.3	31.3%	0.0%	0.0%	0.0%	0.0%	3.9
	Phillips	Rural	C-	0.3	40.6%	0.6%	0.0%	0.0%	0.0%	1.3
	Pondera	Micropolitan	C+	0.5	9.7%	0.6%	5.1%	5.9%	0.5%	0.3
	Powder River	Rural	C	0.3	28.2%	0.0%	0.5%	0.0%	0.0%	2.1
	Powell	Micropolitan	A	2.4	30.3%	18.7%	2.6%	13.8%	5.3%	0.3
	Prairie	Rural	C-	0.3	38.5%	0.0%	0.0%	0.0%	0.0%	1.7
	Ravalli	Micropolitan	A	1.2	54.6%	18.0%	18.8%	17.0%	5.6%	0.1
	Richland	Micropolitan	D	0.2	4.0%	0.0%	0.0%	0.0%	0.0%	0.2
	Roosevelt	Micropolitan	D	0.2	0.3%	0.0%	0.0%	0.0%	0.0%	0.2
	Rosebud	Rural	D	0.3	10.1%	0.0%	0.9%	0.0%	0.0%	0.6
	Sanders	Rural	B-	0.5	49.1%	2.1%	9.0%	18.4%	4.0%	0.2
	Sheridan	Rural	D	0.2	-0.1%	0.2%	0.0%	0.0%	0.0%	0.5
	Silver Bow	Micropolitan	C-	0.4	50.8%	0.0%	0.2%	18.4%	0.0%	0.0
	Stillwater	Rural	C	0.7	5.5%	11.0%	0.0%	3.2%	0.0%	0.2
	Sweet Grass	Rural	C+	0.6	17.4%	7.9%	11.4%	5.6%	0.0%	0.5
	Teton	Rural	C+	0.7	11.6%	7.8%	3.2%	3.9%	0.7%	0.4
	Toole	Micropolitan	D+	0.2	3.7%	0.0%	0.0%	0.0%	0.0%	0.4
	Treasure	Rural	D+	0.3	0.1%	0.0%	0.0%	0.0%	0.0%	1.6
	Valley	Micropolitan	C+	0.3	34.7%	0.0%	0.0%	0.0%	0.0%	0.7
	Wheatland	Rural	D+	0.3	7.2%	0.0%	0.2%	10.2%	0.0%	0.7
	Wibaux	Rural	D	0.3	4.7%	0.0%	0.0%	0.0%	0.0%	1.0
Nevada	Yellowstone	Metropolitan	D	0.2	4.6%	0.0%	0.0%	0.0%	0.0%	0.0
	Churchill	Micropolitan	C	0.8	66.7%	0.0%	0.0%	0.0%	0.0%	0.2
	Clark	Metropolitan	B+	1.3	82.8%	9.8%	0.0%	1.9%	0.0%	0.0
	Douglas	Micropolitan	C+	1.4	54.4%	0.0%	1.1%	9.3%	0.0%	0.0
	Elko	Micropolitan	C+	0.5	69.6%	2.2%	0.0%	3.8%	0.0%	0.4
	Esmeralda	Rural	A-	0.7	97.0%	0.9%	0.5%	0.9%	0.0%	4.7
	Eureka	Rural	B+	0.6	80.6%	0.0%	0.0%	4.9%	0.0%	3.1
	Humboldt	Micropolitan	B	0.7	70.0%	10.3%	0.0%	3.4%	0.0%	0.5
	Lander	Micropolitan	A-	0.7	94.4%	0.0%	0.0%	8.1%	0.0%	1.0
	Lincoln	Rural	B+	1.0	94.2%	0.0%	0.0%	1.1%	0.0%	2.3
	Lyon	Micropolitan	C-	0.4	67.3%	0.0%	0.0%	16.6%	0.0%	0.0
	Mineral	Micropolitan	B+	0.6	79.5%	0.0%	0.2%	10.5%	0.0%	0.8
	Nye	Micropolitan	B-	0.7	70.1%	3.3%	0.0%	11.2%	0.0%	0.4
	Pershing	Rural	C	0.5	75.0%	0.4%	0.0%	0.0%	0.0%	1.0
	Storey	Metropolitan	D	0.3	8.6%	0.0%	0.0%	0.0%	0.0%	0.1
	Washoe	Metropolitan	C	0.7	66.0%	3.9%	0.0%	0.6%	0.0%	0.0
	White Pine	Micropolitan	B+	0.5	91.2%	1.8%	0.0%	10.6%	0.0%	0.9
	Carson City	Metropolitan	D	0.3	48.5%	0.0%	0.0%	0.0%	0.0%	0.0
	Bernalillo	Metropolitan	C-	0.7	8.8%	3.5%	0.0%	0.0%	0.0%	0.0
	Catron	Rural	B+	0.7	54.0%	8.0%	8.8%	1.8%	0.0%	2.1
New Mexico	Chaves	Micropolitan	D	0.3	31.0%	0.3%	0.0%	0.0%	0.0%	0.1
	Cibola	Micropolitan	D+	0.4	23.6%	3.6%	0.0%	0.2%	0.0%	0.2
	Colfax	Micropolitan	D	0.3	3.1%	0.0%	0.0%	0.0%	0.0%	0.3
	Curry	Micropolitan	D	0.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
	DeBaca	Rural	D+	0.2	3.0%	0.0%	0.0%	0.0%	0.0%	1.2
	Dona Ana	Metropolitan	D+	0.5	48.6%	0.0%	0.0%	0.0%	0.0%	0.0
	Eddy	Micropolitan	D	0.2	57.6%	1.2%	0.0%	0.6%	0.8%	0.1
	Grant	Micropolitan	B	0.9	34.2%	12.3%	10.4%	0.1%	0.0%	0.1
	Guadalupe	Micropolitan	C+	0.3	3.3%	0.0%	0.0%	0.0%	0.0%	0.7
	Harding	Rural	C+	0.3	5.2%	0.0%	0.5%	0.0%	0.0%	3.0
	Hidalgo	Micropolitan	B-	0.5	37.4%	0.0%	2.1%	0.0%	0.0%	0.7
	Lea	Micropolitan	D	0.2	15.1%	0.0%	0.0%	0.0%	0.0%	0.1

State	County	County Type	Grade	Mean Distance to Road by County	Public Land other than Designated Wilderness, Percent of County	Designated Wilderness as a Percent of Total County Land	Percent of County that is IRA: 1B	Percent of County that is IRA: 1C	Percent of County that is IRA: 1B-1	Population density, acres per person
New Mexico (continued)	Lincoln	Micropolitan	D+	0.3	27.3%	2.6%	0.0%	1.6%	0.0%	0.2
	Los Alamos	Micropolitan	B+	0.5	47.5%	4.7%	18.4%	15.5%	0.0%	0.0
	Luna	Micropolitan	D	0.4	39.3%	0.0%	0.0%	0.0%	0.0%	0.1
	McKinley	Micropolitan	D	0.3	12.1%	0.0%	0.7%	0.0%	0.0%	0.1
	Mora	Rural	C-	0.5	4.2%	5.2%	1.8%	0.2%	0.2%	0.4
	Otero	Micropolitan	D	0.4	35.2%	0.0%	0.0%	2.4%	0.0%	0.1
	Quay	Micropolitan	D	0.2	0.1%	0.0%	0.0%	0.0%	0.0%	0.3
	Rio Arriba	Micropolitan	C-	0.3	50.1%	3.6%	2.6%	1.2%	0.0%	0.1
	Roosevelt	Micropolitan	D	0.2	0.7%	0.0%	0.0%	0.0%	0.0%	0.1
	Sandoval	Metropolitan	B-	1.6	40.0%	1.6%	1.8%	0.9%	0.0%	0.0
	San Juan	Metropolitan	D+	0.3	23.1%	1.2%	0.0%	0.0%	0.0%	0.0
	San Miguel	Micropolitan	D	0.3	11.2%	1.9%	1.8%	0.3%	0.0%	0.2
	Santa Fe	Metropolitan	C	0.4	20.7%	5.3%	4.4%	1.0%	0.0%	0.0
	Sierra	Micropolitan	B	0.6	43.0%	4.9%	8.8%	0.7%	0.0%	0.3
	Socorro	Micropolitan	C+	0.4	34.5%	2.2%	3.0%	1.5%	0.0%	0.4
	Taos	Micropolitan	C	0.4	50.3%	3.5%	1.4%	0.5%	3.1%	0.1
	Torrance	Metropolitan	C	0.3	6.1%	1.4%	0.0%	0.0%	0.0%	0.2
	Union	Rural	D	0.2	2.4%	0.0%	0.0%	0.0%	0.0%	1.0
	Valencia	Metropolitan	D	0.3	4.4%	0.9%	0.0%	0.0%	0.0%	0.0
Utah	Beaver	Rural	C-	0.4	77.4%	0.0%	0.2%	7.0%	0.0%	0.4
	Box Elder	Micropolitan	C	1.4	27.7%	0.3%	0.0%	2.5%	0.0%	0.1
	Cache	Metropolitan	B	0.4	28.7%	7.1%	2.0%	25.6%	1.9%	0.0
	Carbon	Micropolitan	D+	0.5	45.9%	0.0%	1.8%	3.1%	0.0%	0.1
	Daggett	Rural	A-	0.6	78.0%	0.0%	39.6%	25.2%	0.0%	0.7
	Davis	Metropolitan	B	2.1	8.8%	0.0%	0.1%	8.3%	0.0%	0.0
	Duchesne	Micropolitan	A-	1.1	29.8%	13.2%	13.3%	14.9%	0.0%	0.2
	Emery	Rural	C	0.8	79.0%	0.0%	0.7%	5.7%	0.0%	0.4
	Garfield	Rural	B	0.9	77.6%	0.7%	0.1%	15.6%	0.0%	1.2
	Grand	Micropolitan	C+	0.8	72.7%	0.2%	0.0%	1.3%	0.0%	0.4
	Iron	Micropolitan	D+	0.4	58.3%	0.4%	0.0%	5.9%	0.0%	0.1
	Juab	Metropolitan	B+	0.5	68.9%	0.9%	0.0%	7.2%	0.0%	0.4
	Kane	Micropolitan	B+	1.2	86.7%	0.8%	0.0%	1.1%	0.0%	0.7
	Millard	Micropolitan	B-	0.5	77.1%	0.0%	0.0%	6.3%	0.0%	0.6
	Morgan	Metropolitan	C-	0.4	4.1%	0.0%	0.0%	6.7%	0.0%	0.1
	Piute	Rural	B+	0.4	72.4%	0.0%	0.6%	50.1%	0.0%	0.6
	Rich	Rural	D+	0.3	31.7%	0.0%	0.0%	10.5%	0.0%	0.5
	Salt Lake	Metropolitan	C	0.4	12.8%	6.1%	3.4%	2.4%	0.0%	0.0
	San Juan	Micropolitan	B	0.9	59.0%	1.2%	0.4%	2.8%	0.0%	0.6
	Sanpete	Micropolitan	C+	0.3	51.8%	0.0%	3.3%	30.7%	0.0%	0.1
	Sevier	Micropolitan	B-	0.5	77.9%	0.0%	0.0%	41.5%	0.0%	0.1
	Summit	Metropolitan	A	0.9	31.2%	12.3%	19.9%	16.2%	0.0%	0.1
	Tooele	Metropolitan	B+	2.0	43.4%	0.5%	0.0%	1.6%	0.0%	0.1
	Uintah	Micropolitan	C	0.5	63.6%	0.0%	5.5%	7.2%	0.0%	0.2
	Utah	Metropolitan	B+	1.0	47.0%	3.0%	1.4%	37.4%	0.0%	0.0
	Wasatch	Micropolitan	B	0.3	59.2%	0.0%	0.7%	48.8%	0.0%	0.1
	Washington	Metropolitan	B-	0.6	70.2%	3.7%	0.1%	16.2%	0.0%	0.0
	Wayne	Rural	B	1.0	84.1%	0.0%	0.0%	15.8%	0.0%	1.0
	Weber	Metropolitan	C+	1.2	16.3%	0.0%	4.0%	9.4%	0.0%	0.0
Wyoming	Albany	Micropolitan	D	0.3	24.5%	0.1%	0.2%	5.0%	0.0%	0.1
	Big Horn	Rural	C+	0.4	71.8%	4.5%	0.3%	17.7%	0.0%	0.3
	Campbell	Micropolitan	D	0.2	11.9%	0.0%	0.0%	0.6%	0.0%	0.1
	Carbon	Micropolitan	C+	0.3	51.9%	1.7%	0.0%	3.9%	0.0%	0.5
	Converse	Micropolitan	C-	0.2	14.8%	0.0%	0.1%	4.4%	0.0%	0.3

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Wyoming (continued)	Crook	Rural	D	0.2	18.2%	0.0%	0.1%	1.1%	0.0%	0.5
	Fremont	Micropolitan	B-	0.9	44.9%	8.9%	0.5%	9.0%	0.0%	0.3
	Goshen	Micropolitan	D	0.2	1.9%	0.0%	0.0%	0.0%	0.0%	0.2
	Hot Springs	Micropolitan	C	0.4	42.7%	1.7%	0.0%	3.9%	0.0%	0.4
	Johnson	Micropolitan	B-	0.4	27.0%	4.1%	0.0%	8.9%	0.0%	0.5
	Laramie	Metropolitan	D	0.3	0.6%	0.0%	0.0%	0.0%	0.0%	0.0
	Lincoln	Micropolitan	B+	0.5	74.6%	0.0%	2.0%	36.7%	2.5%	0.2
	Natrona	Metropolitan	D+	0.3	43.1%	0.0%	0.0%	0.2%	0.0%	0.1
	Niobrara	Rural	D	0.2	7.4%	0.0%	0.0%	0.0%	0.0%	1.1
	Park	Micropolitan	A	3.1	58.0%	22.5%	0.7%	11.8%	0.4%	0.3
	Platte	Micropolitan	D	0.2	7.9%	0.0%	0.0%	0.0%	0.0%	0.2
	Sheridan	Micropolitan	C	0.3	27.1%	0.3%	1.7%	23.9%	0.0%	0.1
	Sublette	Rural	A-	1.0	62.1%	14.8%	0.0%	22.7%	0.0%	0.7
	Sweetwater	Micropolitan	C-	0.3	68.7%	0.0%	0.0%	0.4%	0.0%	0.3
	Teton	Micropolitan	A	3.5	71.4%	26.0%	3.2%	23.1%	2.4%	0.2
	Uinta	Micropolitan	D	0.2	42.5%	0.0%	0.0%	0.1%	0.0%	0.1
	Washakie	Micropolitan	C-	0.3	66.8%	0.0%	0.0%	7.7%	0.0%	0.3
	Weston	Micropolitan	D+	0.2	19.9%	0.0%	0.0%	0.3%	0.0%	0.4