



# New Resource Management

*Innovative Approaches in the Rockies*

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The Rocky Mountain region is characterized by its unique natural resources: land, water, wildlife, spectacular beauty. Conflict over these scarce resources is inevitable and traditionally disputes over allocation of resources have involved various levels of government and the courts. Fortunately, a new wave of resource management approaches reflects the fact that more Rockies residents are recognizing the failure of government regulation and lawsuits alone to determine the best use for and control of resources. Instead, the region is seeking out and experimenting with new, innovative management techniques.

State and federal regulation and litigation often provide one-sided solutions and therefore cause dissent among people within the region and throughout the nation. For example, ranchers and wildlife conservationists are often at odds over the best use of public land. Conservationists recognize that predators such as wolves and grizzly bears are necessary for a healthy ecosystem. Consequently, they seek to expand predator habitat on public lands and use



regulation to impose heavy fines for killing protected animals. Ranchers of lands adjacent to the public domain, on the other hand, see predators as a threat to their livestock and thus, their way of life. Because predators do not recognize boundaries between protected habitat and grazing lands, they often end up on public grazing land and private ranches where they kill livestock. Ranching is an industry

that operates on a very thin margin, and the loss of a single calf or cow to a wolf or grizzly means hundreds of dollars in lost revenue. Conservation and livestock production are both legitimate claims to the best use of the land, but litigation often pits environmentalists against ranchers. Such conflict inhibits productive dialogue and prevents long-term solutions. Divisiveness is detrimental to a region struggling to define its common voice.

Recently there has been a movement away from traditional management techniques. Individuals and organizations have recognized that regardless of the outcome of lawsuits and government regulation, prolonged conflict is economically

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unsustainable. Consequently, interest groups from all sides of the resource management issue have gradually shifted toward using more innovative techniques that address the needs of all parties involved. The goal is to seek compromises that are acceptable to all positions. In general, these new management policies and programs attempt to harness market incentives or recognize conflicting financial needs and compensate for any resource loss. This more thoughtful approach avoids much of the animosity generated from lawsuits and regulation. In addition, programs that bring all sides to the table and evolve into adaptive management tend to be more dynamic, easily reacting to new breakthroughs in research and quickly responding to unanticipated problems. A new emphasis on compromise serves to unify the region and encourages stakeholders to replace conflict with cooperation, effectively protecting the Rockies' environment and economy at the same time. The following case studies highlight just a few of the many new, innovative management techniques that have recently emerged.

## Predators on the Range

### *The National Wildlife Federation's Grazing Allotment Retirements, Idaho, Montana, and Wyoming*

The conflict over predator habitat is one of the most heated and publicized issues in the West; since the rise of ranching in the West in the 1880s, few topics have evoked more emotion or stronger opinions. Simply put, it is an issue over the best use of public land. The value of predators is undeniable—wolves and grizzly bears are an essential element to healthy and balanced ecosystems in the Rocky Mountains. But these predators threaten livestock and subsequently jeopardize the economic viability of ranches. Sheep and cattle lost to wolves and grizzlies represent hundreds of dollars in lost income. For an industry that operates on a thin margin, such losses are devastating.

For over a century, the battle over predator habitat versus livestock grazing was fought through litigation and government regulation, yet the problem still remains, illustrating the shortcomings of traditional "confrontational" resource management techniques. The early part of the 20<sup>th</sup> century found the government condoning the extermination of predators in favor of growth in ranching.<sup>1</sup> It wasn't until 1973 that the Endangered Species Act made it illegal to kill wolves and grizzly bears. Then, in 1995, conservationists won another major legal battle, allowing for the reintroduction of wolves into Yellowstone National Park. Within the boundaries of national parks and other protected wildlife sanctuaries, where grazing is prohibited, there is little dispute between livestock producers and conservationists. But the success of the predator reintroduction program in Yellowstone National Park has again sparked intense conflict. As the number of wolves and grizzlies grows, so do their habitat requirements, and predators that wander out of the park pose a threat to livestock on nearby public and private grazing land.

The reintroduction and protection of predators help reestablish ecological balance within the protected public lands. But its very success leads to new conflicts between ranchers and conservationists. Current laws that protect predators hurt ranchers, who rightly assert that the reintroduction of wolves puts at risk their very livelihoods adjacent to the public lands. Faced with few options, some ranchers feel they must kill predators to protect their livestock. Many conservationists at the same time call for tighter enforcement and heavier fines for killing predators. But increased regulation will do little as a long-term solution; as long as ranchers are threatened, the problem will remain. Both conservationists and ranchers lose in this situation—predator mortality rates rise significantly outside of protected areas as a result of livestock interactions, and ranchers continue to suffer losses and incur fines.

In 1987, recognizing the reality of the situation, Defenders of Wildlife took a progressive step toward a long-term solution. The group proposed a wolf compensation program to work with ranchers by paying them for losses due to predators. In 1998, the program was extended to include compensation for grizzly bear kills. Although the compensation program went far toward improving dialogue and relations between ranchers and conservationists, conflict over predators on the range still persisted. Ranchers were still dealing with kills, Defenders of Wildlife was continuously paying, and government agencies still had to conduct costly removals and relocations of predators on public grazing allotments. The program did little to actually stop livestock mortality.

Looking at the example of the compensation program, The National Wildlife Federation took a more drastic step toward a permanent solution through the Grazing Allotment Retirement Program. The National Wildlife Federation went to the root of the problem by actually cutting off the interaction between predators and livestock. The retirement process begins with the National Wildlife Federation researching which parcels of public grazing land are most vital to adjacent protected habitat and which parcels experience the most livestock kills. The next step is to contact the rancher who holds the grazing lease and negotiate a deal to purchase the grazing permit to that land. If the rancher agrees, then the permit is waived back to the managing agency—either the Bureau of Land Management or

Forest Service, with the assurance that the permit will not be turned over to any other livestock producer. The National Wildlife Federation then pays the livestock producer an agreed amount, sufficient to permanently waive the grazing permit. Finally, the managing agency issues a decision notice permanently retiring the allotment, complete with the rationale for doing so. Retiring grazing allotments results in a buffer zone between grazing lands and predator habitat, and the livestock producer may then use the proceeds from the transaction to purchase grazing rights in a safer area. Like the compensation program, the allotment retirement program recognizes the financial needs of the rancher to facilitate a long-term solution. Both conservationists and ranchers stand to gain as predator and livestock mortality is decreased. Since its inception in 2002, the National Wildlife Federation



has purchased nearly 300,000 acres of grazing allotments and received no complaints from ranchers with whom they have made deals.<sup>2</sup> Expansion of the program is limited only by funding, as the money to purchase grazing allotments comes solely from private donations. Nevertheless, word about the success of the grazing allotment retirements has spread and other organizations are considering similar programs in Oregon and in the U.S. Southwest.<sup>3</sup>

The Grazing Allotment Retirement Program represents a creative, new, voluntary, long-term solution to the problems associated with predator habitat expansion. By simultaneously recognizing the needs of both ranchers and conservationists, the National Wildlife Federation has been able to devise an innovative program that benefits livestock producers, conservationists, and the citizens of the West who enjoy the services of both.

### Fee Hunting

*The White Mountain Apache Hunting Program, Arizona*

With the decline of natural predators on the range, deer and elk populations are rapidly growing, and consequently, the animals are eating riparian plant life to the point of permanent damage. Traditionally, wildlife managers have used private hunting as a management tool to thin deer and elk populations. By issuing large numbers of affordable licenses, the Division of Wildlife seeks to ensure enough kills to keep herds under control. This method, however, has had an unforeseen consequence. Hunters prefer to take bulls, leaving a higher number of cows in the herd, resulting in poor genetic diversity in the herd. Many states are beginning to

adapt their hunting programs by issuing greater numbers of cow licenses or forcing hunters to take a cow before they are allowed to take a bull. However, high numbers of hunters and low numbers of trophy game have diluted the experience for many hunters, and some are willing to pay much more for a premium animal kill, creating a market for high-end hunting trips.<sup>4</sup> On many private lands, where landowners can take advantage of the burgeoning “fee hunting” market, wildlife can be managed more effectively than on state-managed public lands.

The White Mountain Apache Tribe, located in White River, Arizona, is at the forefront of the fee hunting market. The organization caters to hunters who are seeking a premier hunting experience in an intimate setting and the opportunity for a trophy bull. Recognizing the market value of trophy elk, the tribe altered its cattle-grazing operation to maximize the benefits from the elk herd. The tribe also severely limits the number of licenses issued on the land, allowing for a healthier herd with bigger elk. With less pressure on the herd, bulls can grow much larger than on public land. Fewer kills also maintains a better bull-to-cow ratio in the herd.<sup>5</sup> The price of a hunting trip reflects the quality of the experience, costing up to \$16,000 for a guided trip. The waiting list for a permit on the land is several years, and there is an 80 - 90 percent hunter return rate.<sup>6</sup> In addition to providing jobs for members of the tribe, the large income from guiding fees and licenses is reinvested into conservation programs on the tribe’s land.<sup>7</sup>

Private fee hunting is by no means the panacea for all wildlife management problems in the West. There are far fewer herds on private land compared to public land. It is difficult to justify



private management of herds on public lands, especially when there remains a market for low cost hunting; hunting on public lands should be available to everyone, regardless of wealth. But where there is a herd on private land, the market solution can be the best for both business and conservation.



#### The White Mountain Apache fee hunting

program demonstrates that there are often market-based solutions to conservation problems. In this case, the wildlife is managed well, while hunters who are willing to pay for a premium experience have the opportunity to do so, and the White Mountain Apache Tribe has an enhanced source of revenue. The private hunting industry is also catching on among ranchers on private lands, who have recognized the opportunity to supplement their cattle operation with private hunting trips.

### Water Rights for Conservation

#### *The Colorado Water Trust, Colorado*

The West's semi-arid climate makes water one of the region's most sought-after resources. It is fundamental to the growth of cities, the survival of farms and ranches, and industrial operations ranging from mines to manufacturing. To satisfy various water needs, rivers and streams are diverted to allow for easy access. The privilege of using the water and the quantity of water used are dictated by individual water rights. Early water rights in most Western states developed under a legal regime called prior appropriation, meaning the party that can prove it was the first to use the water has the first priority, or most senior right, to use that water each year. Establishment of the right was predicated upon appropriating water by diverting it and putting it to a beneficial use.<sup>8</sup> The requirement for water diversion, however, ignores the biological and recreational value of leaving water in a river or stream as what are called "in-stream flows." This changed in the state of Colorado in 1973 with legislation that created minimum stream flow levels meant to ensure a certain amount of water remaining in the river or stream. But, as with other states, minimum flow rights in Colorado are junior rights, and are, therefore, largely ineffective at keeping water in streams as they must yield to other higher priority water uses.

The Colorado Water Trust, a nonprofit conservation group, is working within the parameters of Colorado water law to acquire more rights for in-stream flows. In 2002, the organization supported legislation to allow the Colorado Water Conservation Board to maintain some water rights simply as "in-stream flow rights" above the minimum stream flow level dictated by the 1973 legislation. Before 2002, the legal environment was not conducive to water assignment maintaining higher in-stream flows. The holder of a water right, such as a rancher or a town, could not dedicate any water rights to support the ecological integrity of a watershed because

it was not recognized as a protected beneficial use.

After helping to create a legal way to keep water in streams, the Colorado Water Trust switched focus to acquiring water rights for in-stream flows. The trust acquires water rights by purchasing them from willing sellers or donors and assigns the rights to the Colorado Water Conservation Board,

the only entity in Colorado allowed to hold in-stream flow rights. Now, parties looking to sell their rights to ensure in-stream flows can seek out the Colorado Water Trust to make a deal.

In-stream flow deals are completely voluntary and market-driven. When a particular water right comes on the market, the Colorado Water Trust can compete with any other potential buyer to purchase the right. More often, a seller who has a conservation interest will approach the Colorado Water Trust first to negotiate a fair price. For example, in June 2005, the Colorado Water Trust purchased 800 acre feet of water from the Slate Creek Ranch in Summit County for \$130,000. To the delight of local fishermen, kayakers, and conservationists, the deal keeps water levels high in Boulder Creek and the Blue River. The additional water will be used for agriculture again once it reaches the Colorado River.<sup>9</sup>

Similar to land trusts, the greatest challenge facing the Colorado Water Trust is financial security. Funding for water rights purchases comes mostly from grants and private donors. But as more people see how effective in-stream flow transactions are in ensuring water rights for conservation, more donations and grants are expected. Support is also coming from mountain towns that rely on in-stream flows for recreational tourism and scenery in the parched region.<sup>10</sup> In a realm of the law that has been slow to recognize the value of conservation, the Colorado Water Trust is an innovative and dynamic organization that is working hard to satisfy the needs of water users and conservation alike.

### The Undaunted Stewardship Program

#### *Montana*

It is a common misconception in the West that agricultural practices conflict with environmental values. As agricultural and land-use research have progressed, it is fast becoming apparent that both ranching and conservation can work in concert. To achieve this harmony, however, it is essential that ranchers, conservationists, and researchers collaborate and seek out information about economically and environmentally viable ranching practices.

The Undaunted Stewardship Program (USP) is a collaborative project geared toward educating both the public and livestock producers about the compatibility of ranching and environmental values. The program is managed by Montana State University, the Montana Stockgrowers Association, and the Bureau of

Land Management, and is aided by 16 other conservation, agricultural, historic, and tourist organizations.<sup>11</sup>

One important facet of the USP is a certification program that recognizes ecologically sound ranching practices. To qualify for “good steward” certification, ranchers must demonstrate compliance with a set of standards, which include: providing for the needs of fish and wildlife on the property, grazing plans that emphasize maintaining the ecological capacity and diversity of the land, control of noxious weeds, and limited runoff from corrals and dry lots into adjacent streams.<sup>12</sup> Although these conservation objectives have traditionally been seen as contrary to economic survival in the agriculture industry, in reality, ranchers rely on healthy ecosystems to provide long-term sustainability of their operations. Conservation efforts will ultimately be fiscally advantageous.<sup>13</sup>



In addition to recognizing those ranchers who comply with the sound management criteria, the USP also helps interested ranchers—those not quite conforming to the certification criteria—implement environmentally sound ranching practices. The USP provides educational seminars and workshops, as well as individual technical assistance to ranchers who are working toward certification.<sup>14</sup>

The USP is working to help ranchers take advantage of the potential tourist value of their land. Many ranches have historical sites located on their land, specifically, landmarks from the Lewis and Clark Trail. In the past, tourists have trespassed on ranch land to view the sites. With the help of the Forest Service, historical grants, and the USP, facilities have been built to help ranchers manage tourists. The program also gives advice on potential opportunities for “heritage tourism” as yet another source of income for ranchers.<sup>15</sup>

Although the popularity of the program is growing rapidly, there has been an unforeseen obstacle. Ranchers in Montana are a fervently communal group, often unwilling to stand out in comparison to their fellow ranchers. Many view the Undaunted Stewardship Program certification as a symbol of “individualism” that cuts against the grain of their fellow ranchers, a type of break in their valued solidarity.<sup>16</sup> To solve the problem, the program is encouraging groups of ranchers to enlist in the program together, resulting in equal recognition throughout the community.<sup>17</sup>

The Undaunted Stewardship Program is a unique, voluntary collaboration that works hard to strengthen rural economies while maintaining the ecological sustainability of the land. By emphasizing conservation, economics, heritage, and education, the program is effectively preserving the unique culture of the West.

## Trading Forage for Conservation

*The Rowe Mesa Grassbank, New Mexico*

Much of the forest land throughout the West is severely mismanaged. Overgrazing and strict suppression of naturally occurring, low-intensity fire on public land has led to dense, unhealthy stands of trees. Thick forests are vulnerable to uncontrollable catastrophic fire, and susceptible to disease epidemics. The grassy areas of woodlands are a key fuel source for the natural fires that rejuvenate forests. Overgrazing limits the amount of grass available to burn, as well as allowing bushes and shrubs to encroach, further reducing the total area of grasslands.<sup>18</sup> Yet, grazing on public land is a necessity for the livestock industry. Few ranchers can afford to own all the land it takes to raise livestock over the seasons of a year, so they rely on grazing leases of public land to provide the necessary summer forage. Many conservationists call for the elimination of public grazing leases, citing the damage caused by overgrazing. Yet, ranchers provide many landscape-wide conservation benefits through management of their private land such as open space, wildlife habitat, and migration corridors. If ranchers were cut off from public grazing leases and forced out of business, then the conservation benefits on their private land would be impaired or lost, especially as land subdivision fragments the landscape further.

To reconcile the needs of both ranchers and conservationists on public lands, an innovative trend in land management has been implemented—the Grassbank. Grassbanks are parcels of land that provide livestock forage on one piece of land in exchange for conservation efforts on other grazing allotments. Ranchers can voluntarily send their cattle to graze at the grassbank, thus allowing restoration of traditional grazing lands, wildlife habitat, wetlands recovery or other conservation objectives. The first grassbank is attributed to the Malpai Borderlands Group in Arizona in 1994, and since then several more have been established throughout the West.<sup>19</sup>

The Rowe Mesa Grassbank is located in northern New Mexico. Ranching in the region is both a necessary source of income and a deep-seated root of the community’s cultural heritage and identity. Local ranchers depend on grazing permits on public land in the Carson and Santa Fe National Forests to provide forage for their cattle. Unfortunately, decades of overgrazing and fire suppression have given rise to the same dense forests that plague the West. The Rowe Mesa Grassbank seeks to absolve the conflict between ranching and conservation needs by exchanging forage for grassland restoration and prescribed burns to mimic the natural thinning of forests. In addition, in order for ranchers to qualify to use the grassbank, they must commit to range improvements on their

own particular public grazing allotment. This commonly entails repairing communal fences and corrals that have suffered from overuse.<sup>20</sup>

Funding for the Rowe Mesa Grassbank comes from grants and donations. It generates no revenue from providing forage, yet must pay for its own ranch facilities, as well as a ranch manager. Relying on grants and donations is risky, as they are not guaranteed sources. In an effort to generate a more stable source of income, the grassbank will soon be starting a program called "Cows for Conservation," in which they will manage a small herd for profit while continuing to provide forage for other ranchers.<sup>21</sup>

In addition, the Rowe Mesa Grassbank is limited by its small size. Currently, the plot is only large enough to accommodate several hundred cows and their calves. While there is no anticipated growth in the physical size of the grassbank, the operation is planning to expand by hosting clinics on responsible grazing ethics. That way, the Rowe Mesa Grassbank can teach every rancher who uses Forest Service land for grazing how to manage for forage restoration. Clinics and technical advisors focus on both conservation and economic benefits of sustainable grazing plans.<sup>22</sup>

Cooperation is fundamental to the success of the grassbank system. From its outset, the Rowe Mesa Grassbank has made it a point to demonstrate that "ranchers, conservationists, and agency personnel can work together for the good of the land and the people who depend on it."<sup>23</sup> Ranchers need healthy public lands for grazing, and conservationists can help ranchers understand how to keep the land healthy, which is coincidentally the conservationist's goal. Conservationists, in turn, rely on ranches for open space, wildlife habitat, and migration corridors. Furthermore, cooperation and compromise are more conducive to long-term management solutions. Grassbanks like the Rowe Mesa Grassbank in northern New Mexico are tools for resource management that serve economic and environmental interests and build bridges among the people of the West.

## Endnotes

<sup>1</sup>Hank Fischer, *Wolf Wars*, (Missoula: Fischer Outdoor Discoveries LLC, 2003).

<sup>2</sup>Hank Fischer, personal conversation, January 7, 2006.

<sup>3</sup>*Ibid.*

<sup>4</sup>Terry L. Anderson and Michael R. Houser, "A Better Way to Manage Wildlife," *Rocky Mountain News*, December 20, 1995.

<sup>5</sup>Terry L. Anderson and Donald R. Leal, "Trophy Elk, Tribal Gain" (2005), <http://www.perc.org/perc.php?subsection=5&id=318>.

<sup>6</sup>The White Mountain Apache Tribe, "Trophy Elk Hunt" (2005), <http://162.42.237.6/wmatod/elk.shtml>.

<sup>7</sup>The Harvard Project on Indian American Development, "Wildlife and Outdoor Recreation Program" (2005), [http://www.ksg.harvard.edu/hpaied/hn/hn\\_2000\\_rec.htm](http://www.ksg.harvard.edu/hpaied/hn/hn_2000_rec.htm).

<sup>8</sup>Robert L. Glicksman and George Cameron Coggins, *Modern Public Land Law*, (St. Paul: West Group, 2001).

<sup>9</sup>Bob Berwyn, "Water trust finalizes first sale," *Summit Daily News*, June 3, 2005.

<sup>10</sup>Jerd Smith, "Water deal will benefit nature, people," *Rocky Mountain News*, May 28, 2005.

<sup>11</sup>Undaunted Stewardship, "Undaunted Stewardship Land Certification Program" (2005), [www.undauntedstewardship.com/news](http://www.undauntedstewardship.com/news).

<sup>12</sup>*Ibid.*

<sup>13</sup>Dale Lasater, personal conversation, July 8, 2005.

<sup>14</sup>Undaunted Stewardship, "Undaunted Stewardship Land Certification Program" (2005).

<sup>15</sup>Jeff Mosley, personal conversation, January 10, 2006.

<sup>16</sup>*Ibid.*

<sup>17</sup>*Ibid.*

<sup>18</sup>Mike Dechter, "Valle Grande (Rowe Mesa) Grassbank" (2005), <http://www.grassbank.net/FileCab/projectinfoheader.asp>.

<sup>19</sup>Other grassbanks in the West include the Heart Mountain Grassbank in Wyoming and The Matador Ranch Grassbank in Montana.

<sup>20</sup>"Grassbank' Concept Has Spread From Origin in N.M.'s Bootheel," *Livestock Weekly* (December 7, 2000), [www.livestockweekly.com/papers/00/12/07/whl-grassbank.asp](http://www.livestockweekly.com/papers/00/12/07/whl-grassbank.asp).

<sup>21</sup>Craig Conley, personal conversation, January 5, 2006.

<sup>22</sup>*Ibid.*

<sup>23</sup>Courtney White, "Forage for Conservation," *Headwaters News* (May 17, 2005), [www.headwatersnews.org/WhiteGrassbank051795.html](http://www.headwatersnews.org/WhiteGrassbank051795.html).

