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Cows, Canoes, and Condos: Blending the Old West with the New

BY TERRY L. ANDERSON AND
LAURA E. HUGGINS

JANE S. SHAW
SERIES EDITOR



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To the READER

In the past, the economy of the western United States depended on converting natural resources into lumber, metals, and hydroelectricity. More recently, the relationship to natural resources has moved from extraction toward protection. But this shift has led to acrimony and gridlock.

Surprisingly, the experience of the past can come to the rescue. In “Cows, Canoes, and Condos: Blending the Old West with the New,” Terry L. Anderson and Laura E. Huggins point out that the Old West was not as wild as many people think. Drawing in part on lessons captured in *The Not So Wild, Wild West* by Terry L. Anderson and Peter J. Hill, they point out that it was a place where entrepreneurs discovered local, cooperative solutions based on institutions such as property rights. Anderson and Huggins recommend ways that these institutions can help people maximize nature’s wealth today.

This essay is part of the *PERC Policy Series* and, specifically, one in a series of essays supported by the Dufresne Foundation and the M. J. Murdock Charitable Trust. These “wealth of nature” essays explore the changing demands on resources in today’s western United States. PERC, the Property and Environment Research Center, is a nonprofit institute based in Bozeman, Montana, dedicated to improving environmental quality through markets.

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The *PERC Policy Series* is edited by Jane S. Shaw and produced by Mandy-Scott Bachelier who also is in charge of design. This and other papers in the series are available on PERC’s Web site, www.perc.org.

“The character inherent in the American people has done all that has been accomplished, and it would have done somewhat more, if the government had not sometimes got in its way.”

—Henry David Thoreau
Civil Disobedience

Cow, Canoes, and Condos: Blending the Old West with the New

TERRY L. ANDERSON AND LAURA E. HUGGINS

Charles M. Russell is known for his western scenes of cowboys and Indians fighting, riding, and shooting. Such depictions bolster the notion of the “wild, wild West” where life was, as political philosopher Thomas Hobbes phrased it, “nasty, brutish, and short.” The fact of the matter is, however, that the wild West was basically a civilized region where local people created local solutions to local problems (Anderson and Hill 2004).

A closer look at Russell’s wonderful array of paintings exposes this tamer American West. In *The Roundup #2*, featured on the cover, Russell depicts a roundup where cowboys sort cattle for spring branding. Roundups were a cooperative venture that helped cattlemen manage livestock efficiently. The range was frequently divided into customary (not formally codified) districts, and in the spring all the cattlemen in the district would gather to collect the cattle and to brand the calves. This property rights arrangement also protected the range from being overgrazed. When the districts were full of cattle, newcomers were not allowed to join the roundup or graze their livestock—rules that controlled the number of domestic animals on the range (Anderson and Hill 2004, 163–66).

Other Russell paintings also reveal details underlying civilized interactions. In *The Buffalo Hunt #81*, two braves risk their lives riding into a stampeding herd to shoot buffalo with bow and arrow. The hunt was far from a communal affair. The braves had carefully marked their arrows to identify who killed the buffalo and who would be rewarded with the choice cuts of meat. *The Toll Collectors* shows Indian braves cutting two steers from a cattle herd as payment from the drover for passage through the tribe's territory. And *Wagon Boss* depicts a wagon train beginning its journey across the plains, where a contract between the wagon boss and pioneers established the rules of governance for the long journey.

Russell's portrayals of the West were based on his observations of American Indians and European settlers.¹ The images reveal a frontier where the heroes were entrepreneurs who replaced conflict with cooperation by investing in property rights and establishing the rule of law. The western frontier itself illustrates how institutions—the rules, customs, norms, and laws that guide people's interactions—enhanced the value of natural resources such as furs, gold, and fertile land. Only because entrepreneurs were able to find institutions that encouraged cooperation and respect for others' property was the West able to benefit from these resources.

In the modern West, new entrepreneurial opportunities have emerged. Many of these reflect the growing demand for environmental products (sometimes called amenities) such as recreation and open space, in contrast to traditional commodities such as timber and minerals. Yet this desire for "unspoiled" nature has created acrimony and gridlock in the West. The institutional setting today is dominated by national politics rather than by individuals, community groups, and local governments as it was more than a century ago. Conflict is pervasive because one party's gain is another's loss. As Daniel Kemmis (2001, xxiv), senior fellow at the Center for the Rocky Mountain West, has stated, "the West sometimes seems nearly paralyzed by the currents sweeping through and around it."

Yet the West has always prided itself on its independence and ingenuity. The message of this essay is that the New West must learn from the Old West. If we are to get the most from nature's bounty—whether from traditional activities such as cattle ranching or modern ones such as recreational canoeing,

or a combination of both—we must learn from institutions that encouraged resource stewardship and cooperation on the frontier. Finding a balance between cows and canoes in the midst of a stampede of people moving West to live in condos will be the key to long-term prosperity in the West.

A CIVILIZED FRONTIER

On the western frontier, wealth from nature was derived mainly from timber, cattle, crops, and minerals. This emphasis on commodities was reflected in many state nicknames—Montana, the Treasure State; Idaho, the Gem State; Wyoming, the Cowboy State; Washington, the Evergreen State; and California, the Golden State.

Those who gained from the various commodities were those who hammered out institutions that prevented the “tragedy of the commons.” This term, coined by ecologist Garrett Hardin (1968), describes what happens when open access to common resources leads to overuse and perhaps even destruction of those resources. Throughout the history of the West we find entrepreneurs who prevented this tragedy, from the cowboys of Montana and the Plains Indians portrayed in Charles Russell’s paintings to Pacific Northwest Indians who limited access to salmon spawning streams. In this evolutionary process, necessity was the mother of institutional invention and property rights were one of the institutions that emerged.

Indian clans along the Pacific Northwest coast claimed ownership of streams and demarcated their territories with carved symbols of the clan. With clear ownership of a stream, a clan had an incentive to make sure that salmon were protected, so that they would continue to flow upstream to spawn in future years. There is even evidence that these owners harvested salmon selectively, leaving the biggest salmon in the stream so their offspring would be larger (Nikel-Zueger 2003, 9).

In mining camps from California to Montana, miners held meetings to establish the rules for staking mining claims (Umbeck 1977). Rather than claim jumping, miners knew it was in their best interest to follow the rules of each mining camp. Local rules varied, depending on the types and locations

of precious metals and the technology used to extract them. According to one commentator, these home-grown rules “placed the strong and the weak upon a footing of equality, defined the claims that might be set apart, protected the tools left on the ground as evidence of proprietorship, and permitted the adventurers to hold their rights as securely as if they were guaranteed by a charter from the government” (quoted in Zerbe and Anderson 2001, 115).

Miners also created rules governing water use in the West. The first person to divert water from a stream established a right to use the water, as long as the use was considered beneficial. This “first-in-time-first-in-right” rule became the cornerstone of the prior appropriation doctrine, which remains the basis for water law throughout the American West to this day. Under this doctrine, water owners had a secure right to water and a reasonable expectation about how much water they could claim under what circumstances. Owners spent less time fighting over water and more time on beneficial projects such as building flumes to use water to flush the ores out of the rock.

On the grazing frontier, cattlemen not only created roundups but also established property rights to land by posting notice on signs or in local newspapers. On April 12, 1884, for example, Charles S. Johnston stated in the *Glendive (Montana) Times* that he did “hereby notify the public that I claim the valley, branching off the Glendive Creek, four miles East of Allard, and extending to its source of the South side of the Northern Pacific Railroad as a stock range” (Osgood 1929, 183). These informal, customary rights were enforced by cattlemen’s associations, which functioned as local governments, keeping newcomers’ cattle out unless there was sufficient space. The claims became even better defined and enforced after the invention of barbed wire, which enabled fences to be built on the mostly treeless plains.

Such rules and customs provided secure claims of ownership that could be traded as demands and values changed. The prior appropriation doctrine allowed water to be transferred from one diversion use to another. Mining claims could be sold and traded. And land could be shifted from grazing to crops and back again depending on the value of the commodity. Settlers even negotiated with American Indians over rights to land (Anderson and McChesney 1994). This peaceful exchange ended after the Civil War, when the presence of the standing U.S. Army fueled conflict.

The property institutions that evolved in the West required collaboration and they often developed into formal governmental institutions. For example, initially cattlemen's associations frequently registered cattle brands. As cattle markets expanded, however, and similar brands became confused in distant markets, the cattlemen lobbied fledgling territorial and state legislatures to require and enforce state-wide brand registration.

Even when entrepreneurs promoted such formal government institutions, the resulting solutions were local enough to take account of time- and place-specific conditions. The great western explorer John Wesley Powell recognized the importance of home-grown institutions and local decision making for water allocation. He said to the Montana Constitutional Convention in 1889:

I want to present to you what I believe to be ultimately the political system which you have got to adopt in this country, and which the United States will be compelled sooner or later ultimately to recognize. I think each drainage basin in the arid land must ultimately become the practical unit of organization, and it would be wise if you could immediately adopt a county system which would be convenient with drainage basins. (quoted in Kemmis 2001, 177)

Although his suggestions were ignored by the governments of Montana and other western states, his insights into the connection between the physical characteristics of natural resources and the optimal geographic region for organizing government were profound. The modern West could learn much from the likes of John Wesley Powell and the other entrepreneurs who settled the frontier.

THE FRONTIER MOVES TO WASHINGTON

Before the arrival of formal government in the American West, people invested their own time and money in establishing property rights. They had a direct stake in avoiding excessive time, effort, and conflict in deciding who owned what. The prior appropriation doctrine, for example, gave the first

possessor the right to divert water for a beneficial use. This clear and simple rule minimized the costs of claiming water.²

The arrival of formal government, however, eliminated the incentive to avoid waste of time and resources. The rule makers in Congress and other governmental agencies did not have to live with the rules and thus they made decisions that in retrospect we see as unfair and illogical.

In the case of the homestead acts of 1862 and 1864, for example, Congress required claimants to settle and cultivate land before doing so was economically viable. They offered “free” land, but the hope of free land led many pioneers to stake claims on land that would not provide a decent return for many years to come. This resulted in suffering as pioneers tried to “prove up” but could barely make a living. The effect of federal water projects was similar. The subsidies to large water storage and diversion projects lured farmers to settle and cultivate land long before there was a positive economic return to irrigation (Hansen and Libecap 2004).

The classic Hollywood western *Shane* illustrates how the homestead acts caused conflict and waste. In the movie, the cattleman Ryker argues with Starrett, a farmer, about how property rights are established. Ryker contends that first possession by the cattlemen created cattlemen’s rights, but the homesteaders, following the rules set by Congress, ignored these rights. Ryker’s attempts to drive homesteaders from “his” land were consistent with the law of the open range, but were illegal under the letter of the homestead law.³ The resulting conflict between cattlemen and farmers was caused by federal institutions that superseded local, traditional ones.

Conflicts of the sort illustrated in *Shane* continue today. Battles rage over whether national forests should be used for timber production or for spotted owl habitat, over whether water should be used for irrigation or to support spawning salmon, and over whether the Arctic National Wildlife Refuge should be used for energy production or remain wild. In this modern winner-take-all world, governmental agencies find themselves locked in political or court battles over virtually every decision they make.

Gradually, the transition from the Old West to the New West followed a path from individual ownership and local control to public ownership and federal control. Today, federal agencies such as the U.S. Forest Service,

National Park Service, and Bureau of Land Management control land-use decisions from Washington. Because more than 90 percent of federal land is found in the eleven westernmost states and in Alaska, these decisions dominate the politics of the West (Kemmis 2001, xix).

YELLOWSTONE NATIONAL PARK

The history of Yellowstone Park tells the story of the transition from local control, with its institutions of private ownership developed out of necessity, to national control. In the late 1860s, officials of the Northern Pacific Railroad recognized the value of Yellowstone's unique amenities for potential passenger traffic. But homesteaders were already trying to establish claims to sites such as Mammoth Hot Springs and Old Faithful. Having no way to establish private ownership of the entire area, the Northern Pacific lobbied Congress to set aside Yellowstone as a national park and close it to homesteading. By controlling services such as railroad transportation to Yellowstone, stagecoach travel, and accommodations within the park, the railroad became a virtual owner—with an incentive to preserve Yellowstone's unique features (Anderson and Hill 2004, 207–8).⁴

After other railroads arrived and the park was opened to automobiles, the National Park Service took control of the park. During its early years, the National Park Service too acted like an owner, obtaining enough revenue to fully cover its costs and then some. More recently, however, the National Park Service has become a political football. Jockeying is rife over issues such as building campgrounds, allowing snowmobiling, and reintroducing species such as wolves and grizzly bears.⁵ Each issue represents a competing demand that requires the National Park Service to reallocate the resources under its charge from one interest group to another.

The shift to federal control of so many western resources has worsened the conflict over whether nature's bounty will be used to meet amenity or commodity demands. Unlike the institutions of the Old West, which encouraged incremental changes in uses in order to shift toward or away from commodity demands, today's regime is a zero-sum game in which more amenity production reduces commodity production, and vice versa.

WATER IN THE KLAMATH BASIN

The allocation of water in the Klamath Basin serves as a modern example. In recent years, the drought-prone Klamath watershed, which straddles the Oregon and California border, has experienced a perpetual crisis over competing demands for water. The struggle came to a head after near-record drought struck the region in 2001. The Interior Department decided that, based on the biological opinions and the requirements of the Endangered Species Act, no water could be diverted from Upper Klamath Lake to supply the farmers of the Klamath Reclamation Project. The shutoff of irrigation to most of the 1,400 farms on the Klamath Project was designed to protect the shortnose and Lost River suckers in the Upper Klamath Lake and coho salmon in the Klamath River.⁶ Farmers fought back against what they perceived as a “taking” of their water rights. At one point tensions were so high that armed federal marshals were brought in to guard the head gate once used to divert irrigation water.

Environmentalists also view the Klamath Basin as a disaster, but in their case it is because farmers have been diverting too much water for too long. Scientists and environmentalists have cautioned for years that salmon would be wiped out if the volume of water in the Klamath River did not double (Anderson and Huggins forthcoming). Furthermore, they argue that the sucker fish in Upper Klamath Lake also need more water. The potential impact on the fish brings the Klamath Tribes into the picture because the tribes have relied on the fish for subsistence for hundreds of years.

The conflicts in the watershed were exacerbated by the 2001 drought, but the root cause of the problem is the uncertainty over who has what rights to the water. When there is not enough water to meet all the demands, who has first rights—farmers who have prior appropriation water rights, irrigators who have contracts for water delivery from the Bureau of Reclamation, Native Americans who have treaty rights for fishing and hunting, or environmentalists who claim water for fish species under the Endangered Species Act? It is this question that keeps agriculturalists, environmentalists, tribes, and government agencies locked in conflict (Anderson and Huggins forthcoming).

Until property rights to the water are settled, the war will rage on. The

Oregon courts have announced that the time has come for water adjudication (the process by which water rights are verified, documented, and quantified) in the Klamath Basin. This process, however, is expected to take years.

A more sensible and timely solution would be for the basin's water interests to exert greater regional control through community involvement and cooperation. Local players could create solutions, such as private contracts between the Klamath Tribes and irrigators, that allow the various interests to avoid fighting over the water. If rights can be stipulated locally, mimicking the institutions of the Old West, markets can induce incremental reallocations of the water between willing buyers and willing sellers.

In the modern West, where political institutions control the allocation of numerous natural resources, conflict is inevitable. Recognizing existing property rights—whether they be private, as with land, or political, as with grazing permits—and encouraging exchange is a better way to link the New West with its Old West heritage.

BACK TO THE FUTURE

Because of rising incomes and more leisure time, the value of environmental amenities in the New West has increased relative to the value of commodities. The spell of the West—the grand vistas, open ranges, and majestic waters—captures the hearts of many visitors. These resources are attracting people from other parts of the country and world. In fact, the population of the seven Rocky Mountain states has surged 47 percent in the past two decades (Breslau 2004). People are moving to the West in such numbers that the region has been called the “Third Coast” (Anderson, Huggins, and Power forthcoming).

Long-time residents and newcomers alike want to preserve the amenities they love while maintaining a healthy economy. The question is, can the two coexist? Is it possible to shift natural resource use from commodity production such as minerals, cattle, and lumber to amenity production such as scenic vistas, wildlife, and outdoor recreation—without a net loss over time of income and jobs?

To avoid the damage that can result from all-or-nothing competition for nature's assets, new institutional arrangements and related incentive systems need to be created. The range of institutional possibilities is much broader than the polarizing alternatives that often dominate the public dialogue such as debates over unregulated open access, privatization, and central government control.

THE PROPERTY RIGHTS TOOL KIT

Going back to the future of the New West requires asking how tools such as property rights, markets, and voluntary exchange can be used to balance amenity demands with commodity demands while at the same time promoting a vibrant economy. Environmental entrepreneurs are demonstrating that this can be done. What follows is a description of the tools that these entrepreneurs require as they harmonize natural resource use in the modern West.

TOOL 1: PRIVATE OWNERSHIP PROMOTES STEWARDSHIP, OR “NO ONE WASHES A RENTAL CAR”

Stewardship requires a long-term commitment to maintaining an asset. Have you ever washed a rental car? Barring an unusual circumstance such as the car is so caked in mud that you can't see out the window, the answer is surely “no.” A person who rents a car does not have a future commitment to the car; the rental car company, on the other hand, does. If the car is not washed, future renters will be less likely to rent it, and if the car is not maintained, its book value will decline.

Owners have a long-term interest in their property. Recognizing the value of fishing and hunting, some resource owners capitalize on the profit potential from improving habitat. Tom and Mary Kay Milesnick, for example, have changed the way they manage their traditional cattle ranch to account for the fishing value of the Ben Hart and Thompson Spring Creeks on their property. On the MZ-Ranch, located north of Belgrade, Montana, the Milesnicks have

taken steps to improve the fish habitat by intensifying grazing on riparian zones at certain times of the year, establishing gravel watering pads for cattle to reduce siltation of trout spawning beds, and by creating undercut banks and deeper pools to attract larger fish.

With the improved habitat, the Milesnicks can charge a \$75 daily fishing fee, limit the number of anglers, and still keep the stream booked by fishermen throughout the season. Due to the success of the fee fishery, Tom and Mary Kay established the Milesnick Recreation Company. The new business accounts for 8 percent of the ranch's total revenue, but comprises 40 percent of net income (Grewell and Landry 2003, 77).

TOOL 2: PROFITABILITY IS NECESSARY FOR SUSTAINABILITY, OR "IF IT PAYS, IT STAYS"

There is much talk in environmental circles about "sustainable management" of nature's bounty. To be sure, this beguiling term is ambiguous, but it usually means that we would like a resource to be around in the future. For that to happen, the resource must be profitable—the idea that is captured in the phrase, "If it pays, it stays." In the words of reporter Bruce Barcott (2005, 105), "Follow the money, and you end up in a very green place." Or as the famed conservationist Aldo Leopold (1934, 202) put it, "Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest."

If landowners are to protect wildlife habitat, they must receive some reward for doing so. "Ranching for Wildlife" programs, currently practiced in eight states, provide landowners with opportunities to profit from hunting and thus to make their land attractive to fish and wildlife. Under these state programs, ranchers cooperate with wildlife authorities to establish a site-specific management plan for the habitat on their land. In return for adhering to the plan and to allowing some hunting at no charge, ranch owners are issued a certain number of hunting permits that they can sell at whatever the market will bear, and are allowed extended hunting seasons. Ranching for wildlife leads to improved habitat, healthier game herds, more cooperation with state wildlife agencies, and better experiences for hunters (Leal and Grewell 1999, 54).

The Deseret Ranch participates in Utah's ranching for wildlife program, demonstrating that domestic livestock, wildlife populations, and healthy range and forest lands can coexist. In the late 1970s, this 200,000-acre ranch was in poor shape and was losing money. With a change in management and new incentives created by ranching for wildlife, the ranch now has a mission to "make a profit while maintaining or enhancing the resource." That's just what Deseret Ranch is doing. Many western ranchers average less than \$1.00 profit per acre annually, but the Deseret Ranch averages between \$4.00 and \$7.00—largely because of its innovative use of intense short-term grazing practices and emphasis on improving the habitat for wildlife. Moreover, Deseret's advanced methods of making good neighbors of livestock and wildlife while enhancing the natural environment are attracting positive national attention.⁷

TOOL 3: EXCHANGE PROMOTES COOPERATION, OR "YOU SCRATCH MY BACK; I'LL SCRATCH YOURS"

Political allocation of resources is often acrimonious because what one person gets the other loses. Voluntary exchange helps avoid this acrimony because both parties to the transaction get a share of the gains that come from the trade. Consumers get satisfaction above the price they pay and producers get some profit above the cost of production.

Water markets illustrate this cooperation. The mission of the Oregon Water Trust (2006) is to "restore surface water flows for healthier streams in Oregon by using cooperative, free-market solutions." The trust improves the flows of water in streams where salmon and steelhead spawn by compensating farmers and ranchers for leaving all or a portion of their water instream instead of diverting it for irrigation. Founded in 1993 by a group with diverse water interests, OWT was the first water trust in the nation.

In one of its initial transactions, OWT convinced rancher Rocky Webb to swap his rights to water in Buck Hollow Creek (a steelhead spawning tributary on the Deschutes River) in return for a year's worth of hay. Webb transferred his irrigation rights to instream water flows, which meant that more water stayed in the creek to help prevent it from running dry. In exchange, OWT provided Webb with 78 tons of hay (worth \$6,600) to feed his

cows. Webb wanted “to see the steelhead thrive again in Buck Hollow Creek, but I also have a bottom line to worry about,” he said (*High Country News* 1994). Thanks to the efforts of several landowners, private groups such as OWT, and the state of Oregon, steelhead spawning counts have continually increased in Buck Hollow Creek over the past 15 years.⁸

In 1994, OWT’s portfolio amounted to two leases totaling 1.4 cubic feet per second. Today, it has 84 projects that protect 117 cubic feet per second.⁹ OWT’s success through negotiation instead of confrontation is being mimicked by similar water trusts in Washington, Idaho, and Montana.

A private partnership between the Grand Canyon Trust and the Conservation Fund is another example of cooperation through exchange rather than regulation. On November 29, 2005, the Grand Canyon Trust and the Conservation Fund (after years of negotiation) jointly purchased the Kane and Two Mile ranches (located north of the Grand Canyon) for \$4.5 million.¹⁰ The grazing allotments that came with the ranches share a 100-mile boundary with Grand Canyon National Park and stretch from the Grand Canyon in Arizona to Utah’s Grand Staircase-Escalante. The ranches, which include 1,000 acres of deeded land, numerous water rights, buildings, and range improvements, hold grazing permits on more than 850,000 acres of public lands administered by the United States Forest Service (USFS), the Bureau of Land Management (BLM), and the Arizona State Land Department.¹¹

The trust and the Conservation Fund have created North Rim Ranch, LLC to hold title to both ranches, as well as the permits, livestock, brands, facilities and other assets owned by the ranch. The two groups purchased these ranches with the goal of partnering with the U.S. Forest Service and the Bureau of Land Management to manage livestock grazing and to restore ecological, cultural, and scenic values. The grazing allotments are on public lands that will remain available for all activities allowed by the agencies who manage them. According to Bill Hedden, executive director of the trust:

We don’t pretend that we can just march in and manage the land better than anyone else. But our goals are different than traditional ranchers. We can manage to improve the habitat for antelope fawn

survival or to ensure that there is adequate small mammal prey for goshawks and spotted owls. . . . We need new ways to do things, and this private partnership represents one of the new ways. We're seeing this attitude of "let's work this damn thing out." in a lot of places around the West. (quoted in Larmer 2004, 6)

TOOL 4: SCARCITY REQUIRES TRADE-OFFS, OR "COWS NOT CONDOS"

Because resources are scarce, trade-offs are a fact of life: More cattle ranches mean that less land can be subdivided for housing developments. More water for instream flows means less for irrigation. More land in wilderness means less for snowmobiling and trail biking. It may seem obvious that environmentalists want more open space and cows and fewer condos. But environmental entrepreneurs can often make bigger strides toward their long-term goals by trading a little of one thing (condos, say) for a lot of another (such as cows).

Some years ago, the nation's largest environmental group, the Nature Conservancy (TNC) faced a trade-off. TNC was given title to beachfront property in St. Croix, Virgin Islands. Rather than preserve this pristine property, TNC traded the property for a much larger tract of land in Wisconsin. Why would TNC let this happen? The answer is that the conservancy was actively trying to protect an entire watershed in Wisconsin, which it deemed critical to ecosystem health. TNC was able to protect the last parcel of land needed to preserve the watershed by giving the landowner of that parcel title to the St. Croix beachfront. To get what it wanted and to increase its overall conservation efforts, TNC had to choose preserving a watershed over preserving a place of natural beauty. Given its mission of "saving the last great places," the trade-off was worth it.¹²

The Paul J. Rainey Preserve, owned by the National Audubon Society, offers another example of the benefits of such trade-offs. The Louisiana preserve is known for protecting migratory birds such as the snowy egret (the symbol of the Audubon society), but for nearly fifty years it was also home to 13 natural gas wells. The society allowed the extraction of natural gas but put tough stipulations on the process, such as requiring that no pumping occur

during nesting periods. By giving up a small part of the pristine quality of the bird sanctuary, Audubon was able to receive substantial sums for its conservation goals. Between 1950 and 1999 the society earned about \$25 million from the wells (after 1999 the gas was no longer economically recoverable) (Fretwell 2004, 71).

OLD INSTITUTIONS FOR THE NEW WEST

The privatization of land, water, and minerals that occurred on the frontier may not be feasible today, but the property rights tool kit described above can still help resolve the competition for natural resources in the New West. Where privatization is not politically feasible, the key is to move closer to establishing ownership. This includes mimicking the profit motives of the private sector to avoid waste and promote stewardship, devolving decision making to lower levels of government, and creating more trusts to ensure better long-term care of resources. Below are four recommendations for getting “back to the future” with the property rights tool kit.

1. ESTABLISH OWNERSHIP

The tragedy of the commons has been well documented. Some years ago, an annual report by the President’s Council on Environmental Quality (quoted in Reed 1988) stated that “unowned resources are more likely to be overexploited than resources privately owned and managed, since a private owner directly benefits from the preservation and maintenance of such resources and is thus more likely to act as a responsible steward.” Establishing private rights can discourage overexploitation and encourage stewardship.

The story of the Alaska halibut fishery illustrates one way to overcome the tragedy of the commons through a policy that is close to ownership. Like many ocean fisheries, this fishery was threatened by overfishing—caused by factors such as advances in fishing technology. In an effort to preserve fish populations, the government put tough limits on the number of halibut that could be caught. A nine-month fishing season was shortened to a few pressure-packed

days. The result was a survival-of-the-fittest fishing “derby” that increased the already fierce battle between fishing crews, which in turn endangered the lives of fishermen who were forced to take on untimely storms as well as each other.

Economically, the impact of this regulatory regime was also grim. Fishing crews were forced to sell their catch in a glutted market that depressed the value of their catch. Moreover, in the rush to search for concentrations of larger halibut, crews caught whatever they could, throwing away bycatch (undersized fish and fish of other species).

What direct regulation was unable to accomplish, however, market-based tools have (see Leal 2006). In 1995, the Alaska halibut fishery implemented individual fishing quotas (IFQs). Although these quotas were not as secure as actual property rights, they did give each fisherman a right to a portion of the total allowable catch set each season by the fishery managers. This quota gave fisherman an incentive to conserve fish stocks for the long run. Because the quotas are transferable, quota holders can adjust the size of their operations by buying and selling rights.¹³

In the first year under IFQs, the fishing season expanded dramatically, from two days to eight months. Bycatch was reduced more than 80 percent, fishing crews earned higher prices for their catch, and with annual shares safe in the water, crews stayed home during bad weather—not a single life was lost that year (O’Keefe 2004). IFQs created an institutional arrangement allowing fishermen to change their perspective from viewing a fishery as a commons to be exploited as rapidly as possible to seeing it as a valuable, sustainable resource in which they have an ownership stake. The Alaskan experience is just a small sample of what this type of approach can accomplish. Worldwide, at least 100 marine species are now under individual fishing quota management (Leal 2006, 62).

2. MIMIC PROFIT MOTIVES

Public resource managers do not face the discipline of having to make a profit. The most visible sign of problems with public land management is the substantial losses that federal land management agencies—the Bureau of Land Management, the Fish and Wildlife Service, the U.S. Forest Service,

and the National Park Service—incur every year. These agencies oversee an estate of 614 million acres rich in timber, minerals, livestock forage, wildlife habitat, recreation sites, and natural beauty (Fretwell forthcoming). Each year, management costs for these public lands reach billions of dollars. As Table 1 (page 18) shows, except for mineral production federal lands consistently lose millions of dollars every year.

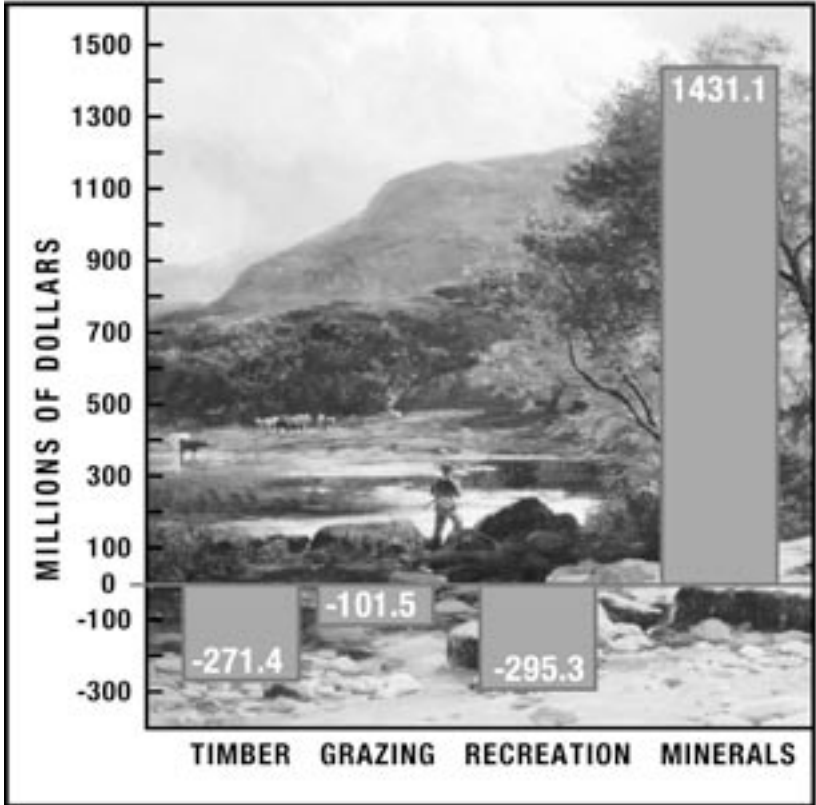
Beyond the economic losses are the environmental concerns. The U.S. forest lands, for example, are tinderboxes created by decades of fire suppression, diseased trees, and insect infestation. The National Parks Conservation Association (2005) says of the national parks, “Wildlife species are disappearing. Important museum artifacts are not being preserved. Irreplaceable historic structures are crumbling.” The grazing practices of the Bureau of Land Management are also frequently criticized, although there is no generally accepted standard for what grazing land should be like.

Mimicking the private sector’s profit motive could improve both fiscal and environmental results, as evidence from state school trusts suggests. A number of states manage lands under trusts whose primary goal is to provide revenues to support public schools. Representatives from public schools such as administrators, teacher unions, and parent associations monitor the bottom line, acting like stockholders in a company. This pressure to earn net revenues gives land managers an incentive to maximize the long-term value of the land by keeping costs low and revenues high. In contrast, federal managers do not have a profit incentive. For the most part, revenue from national forest land goes to the U.S. Treasury and expenses are funded out of budget allocations.

A study by Donald Leal (1995) contrasted state and federal forest land management in Montana, comparing state forests with national forests that were adjacent or at least nearby. He found that the state school trust lands earned approximately \$2.00 in revenue for every \$1.00 they spent on forest management. National forests earned only \$0.50 in revenue for every \$1.00 they spent. Leal’s research also showed that the state of Montana did a better job of protecting watersheds from the impacts of logging and of keeping trees alive and free of disease than did their federal counterpart.

Holly Fretwell (1998) compared Forest Service timber revenue and expenditures with state trust timber revenues in four states. She found that the revenue

TABLE 1:
AVERAGE NET RETURNS BY ACTIVITY ON FEDERAL LANDS (1998-2001)



Source: Fretwell (forthcoming). Data collected from the U.S. Forest Service and Bureau of Land Management, 1998-2001, in 2000 dollars.¹⁴

per dollar spent for the Forest Service was 76 cents, while the timber revenues of the state trusts were \$5.62 for each dollar spent (Fretwell 1998, 6).

3. DEVOLVE DECISION-MAKING AUTHORITY

Public land management is rife with conflict because there are too many cooks in the kitchen, resulting in bureaucratic gridlock. Forest Service Chief Dale Bosworth (2001, 6) called this “analysis paralysis,” and Jack Ward Thomas (2006), his predecessor, called it a “Gordian knot that is strangling public land management.” A recent report criticizing the Forest Service stated that “large

portions of the National Forest System are in poor or declining health [because] the Forest Service operates within a statutory, regulatory, and administrative framework that has kept the agency from effectively addressing declines in forest health” (USDA 2002, 42).

This Gordian knot might be unraveled if the federal government would experiment with institutions that could promote cooperation by devolving decision making to local groups that have a direct stake in the outcome. One proposal for such cooperation is to establish a new “virtual” region—Region Seven—in the U.S. Forest Service management structure.

The significance of Region Seven comes from a change in the Forest Service structure. In 1965, when Region Seven was officially absorbed into Region Eight and Nine, Region Seven vanished. In the 1990s, a group of individuals with a variety of perspectives on the Forest Service met several times at the University of Montana’s Experimental Forest to discuss the complex issues facing national forest management. These meetings, now known as the Lubrecht Conversations (Kemmis 2001, 145), proposed that Region Seven be given new life, not as a geographical region but as a collection of experimental projects on Forest Service land across the United States. This system would encourage innovative solutions and allow tools from the property rights tool kit to be tested and evaluated. In the end, experimentation is likely to create better management regimes (Kemmis forthcoming).

The Region Seven proposal emphasizes three important points: 1) Adaptive approaches to public land management are necessary to take advantage of time- and place-specific information because “one-size-fits-all” management is destined to fail; 2) Cooperation is more likely to result when smaller, more local groups with a stake in the results are involved in management decisions; and 3) Fiscal responsibility, as described above for state school trust lands, requires carefully considering alternative land-use values.

4. CREATE MORE TRUSTS

Experiments with trusts to manage public lands offer an alternative to the status quo of winner-takes-all in a zero-sum game. A trust is a legal assignment of certain powers to one or more persons, called trustees, who manage assets

for the benefit of another. The trustees have a legal or fiduciary obligation to manage the assets within the constraints of the trust agreement. Most trusts are private and many are charitable organizations.

The Valles Caldera National Preserve (VCNP) represents not only a fresh perspective to existing federal park and forest management, but a return to the original vision of national parks as financially self-sufficient (Yablonski 2004). The VCNP was a private ranch until 2000, when Congress created it from the well-known “Baca Ranch” in New Mexico. This groundbreaking legislation, which authorized federal purchase of the 89,000-acre ranch, also created a unique nine-member trust to govern the land. The trust is a legal entity similar to a board of directors. In the case of the VCNP, it is comprised primarily of private citizens with a responsibility to protect the resource and generate revenue to benefit the property.

Given a blank slate, the VCNP trust began its work, which includes continuing ranch operations while opening the preserve to visitors. The trust is also trying to create an unparalleled experience for guests by keeping the numbers of tourists low. “The sense of solitude for visitors,” says Julie Grey, former VCNP communications director, makes the preserve unique (Yablonski 2004, 4). Current activities—for which visitors must make reservations in advance—include elk hunting, fishing clinics, photo excursions, skiing, wagon rides, hiking, equestrian rentals, and various special tours.¹⁵ Unfortunately, the trust is not racing to become financially self-sufficient. Because Congress gave the trust fifteen years of treasury support plus the option to request a continuation of federal funding after that, it has little incentive to find funding sources.

The Presidio of San Francisco provides another example of a public trust. The Presidio is a former military post located on a promontory overlooking San Francisco Bay. It has a city-like infrastructure of nearly 800 buildings surrounded by an expansive cultivated forest and natural areas. By the mid-1990s, the post was in a bad state of repair and no longer needed for military purposes. Rehabilitating and maintaining the Presidio would have cost the federal government enormous sums. Rather than liquidating the former military facility, in 1996 Congress turned the post over to the National Park Service but also created the Presidio Trust to preserve,

enhance, and maintain the Presidio's interior land. Congress also mandated that it become self-sufficient by 2012, providing the trust with annual federal appropriations that decline each year.

The Presidio, which is in a stunning location in one of the nation's most attractive cities, has tremendous potential value. The idea was that the trust framework would separate the management of the Presidio from politics, while the goal of self-sufficiency would provide an incentive to earn revenue. Under this arrangement, the trust is rehabilitating old Army buildings into civilian homes, workplaces, and public facilities. The revenues earned through leasing its property are used to operate the park, preserve its natural and cultural resources, maintain its infrastructure, and, it is hoped, ensure its long-term care.¹⁶

CONCLUSION

Bob Dylan was right: "Times, they are a-changin'." In the distant past, the West's natural resources were widely abundant and the economies of the West depended on converting these resources into lumber, metals, and hydroelectricity. More recently, however, the relationship between the economy and the environment has moved away from resource extraction toward resource protection supporting a healthy economy. Finding a new balance between commodity and amenity production from the wealth of nature that better matches contemporary economic values will benefit all Westerners.

In the face of growing pressure on our natural landscapes and increasingly bitter conflict over their management and use, we cannot simply defend the status quo or the institutional arrangements of the past. We have only recently begun to explore innovative combinations of private and public, local and national, interests guided by contractual or trust arrangements. We can, however, learn a few lessons from the old ways of the West as we push for more institutional innovation and a better blend of cows, canoes, and condos on the frontier of the future.

NOTES

1. For more information on the life of Charles M. Russell visit www.carussell.org.

2. For a complete discussion of the evolution of water law in the United States, see Anderson and Snyder (1997).

3. For more information on Hollywood westerns and property rights see North (2005) and Libecap (1981).

4. As Anderson and Hill note, the romantic view that a few farsighted visionaries persuaded Congress to set aside Yellowstone is incorrect.

5. For more information on the role of politics in Yellowstone National Park see Chase (1987).

6. For further information on the Endangered Species Act and the listing of the shortnose and Lost River sucker visit www.usbr.gov/mp/kbao/esa/.

7. For more information on the wildlife management program or recreational opportunities at Deseret Land & Livestock, call the office at (435)793-4288.

8. For further information on Buck Hollow Creek and steelhead recovery efforts see State of Oregon 2006.

9. For detailed information on the Oregon Water Trust, see www.owt.org.

10. For details on the purchase of the Kane and Two Mile Ranches visit www.grandcanyontrust.org/programs/kane/background.php.

11. For details on the Kane and Two Mile Ranches program visit www.grandcanyontrust.org/programs/kane/overview.php.

12. This information comes from Brent Haglund, former state director, Wisconsin Field Office, The Nature Conservancy.

13. A more detailed explanation of individual fishing quotas (IFQs) is available at www.ifqsforfisheries.org.

14. Data end at 2001 due to a reconfiguration within the U.S. Forest Service's accounting system. A compression of line-items makes it impossible to accurately track comparable expenses into the future.

15. For a full list of activities, prices, and reservation information for the Valles Caldera National Preserve, visit www.vallescaldera.gov/comevisit/.

16. For more information about the Presidio, visit www.presidio.gov.

REFERENCES

- Anderson, Terry L., and Peter J. Hill. 2004. *The Not So Wild West: Property Rights on the Frontier*. Stanford, CA: Stanford University Press.
- Anderson, Terry L., and Fred McChesney. 1994. Raid or Trade: The Economics of Indian-White Relations. *Journal of Law and Economics* 37(1): 30–74.
- Anderson, Terry L., and Laura E. Huggins. Forthcoming. Homegrown Property Rights in the Klamath. In *Accounting for Mother Nature: Changing Demands for Her Bounty*, eds. Terry L. Anderson, Laura E. Huggins, and Thomas M. Power. Unpublished manuscript in PERC's possession.
- Anderson, Terry L., Laura E. Huggins, and Thomas M. Power, eds. Forthcoming. Introduction. In *Accounting for Mother Nature: Changing Demands for Her Bounty*. Unpublished manuscript in PERC's possession.
- Anderson, Terry L., and Pamela Snyder. 1997. *Water Markets: Priming the Invisible Pump*. Washington, DC: Cato Institute.
- Barcott, Bruce. 2005. As a Matter of Fact, Money Does Grow on Trees. *Outside Magazine*, March.
- Bosworth, Dale. 2001. Oversight Hearing on Conflicting Laws and Regulations: Gridlock on the National Forests. Before the Subcommittee on Forests and Forest Health of the Committee on Resources, U.S. House of Representatives 107th Congress. Serial no. 107–76, 6.
- Breslau, Karen. 2004. Working to Save the West. *Newsweek*. October 12. Online: www.forests.org/articles/print.asp?linkid=35657 (cited April 7, 2006).
- Chase, Alston. 1987. *Playing God in Yellowstone: The Destruction of America's First National Park*. New York, NY: Harcourt Brace & Company.
- Fretwell, Holly Lippke. 1998. *Public Lands: The Price We Pay*. Bozeman, MT: PERC. Online: perc.org/perc.php?subsection=9&id=134 (cited April 10, 2006).
- . 2004. Public Land Management. In *The Environmental Index 2004*.

- San Francisco and Washington, DC: Pacific Research Institute and the American Enterprise Institute. Online: www.perc.org/perc.php?id=392 (cited April 7, 2006).
- . Forthcoming. *Who is Minding the Federal Estate?* Unpublished manuscript in PERC's possession.
- Grewell, J. Bishop, and Clay J. Landry, with Greg Conko. 2003. *Ecological Agrarian: Agriculture's First Evolution in 10,000 Years*. West Lafayette, IN: Purdue University Press.
- Hansen, Zeynep K., and Libecap, Gary D. 2004. Small Farms, Externalities, and the Dust Bowl of the 1930s. *Journal of Political Economy* 122(3): 665–94.
- Hardin, Garrett. 1968. The Tragedy of the Commons. *Science* 16(2):1243–48.
- High Country News*. 1994. Fish Benefit from Trade. July 25. Online: www.hcn.org/servlets/hcn.Article?article_id=490 (cited April 7, 2006).
- Kemmis, Daniel. Forthcoming. Institutional Reform for Public Lands. In *Accounting for Mother Nature: Changing Demands for Her Bounty*, eds. Terry L. Anderson, Laura E. Huggins, and Thomas M. Power. Manuscript in PERC's possession.
- . 2001. *This Sovereign Land: A New Vision for Governing the West*. Washington, DC: Island Press.
- Larmer, Paul. 2004. Buying Ecological Leverage. *High Country News*. August 2.
- Leal, Donald R. 1995. Turning a Profit on Public Forests. *PERC Policy Series* PS-4. Bozeman, MT: PERC, September. Online: www.perc.org/perc.php?subsection=6&id=203 (cited April 10, 2006).
- . 2006. Saving Fisheries with Free Markets. *Milken Institute Review* 8(1): 57–66.
- Leal, Donald R., and J. Bishop Grewell. 1999. *Hunting for Habitat*. Bozeman, MT: PERC. Online: www.perc.org/perc.php?subsection=3&id=119 (cited April 10, 2006).
- Leopold, Aldo. [1934] 1991. Conservation Economics. In *The River of the Mother of God and Other Essays by Aldo Leopold*. Madison, WI: University of Wisconsin Press.
- Libecap, Gary D. 1981. *Locking up the Range: Federal Land Controls and*

- Grazing*. Cambridge, MA: Ballinger Publishing.
- National Parks Conservation Association. 2005. *Americans for National Parks: Campaign Mission and Goals*. Washington, DC: National Parks Conservation Association. Online: www.npca.org/across_the_nation/AmericansforNationalParks/about/default.asp (cited April 7, 2006).
- Nikel-Zueger, Manuel. 2003. Saving Salmon the American Indian Way. *PERC Policy Series PS-29*. Bozeman, MT: PERC, December. Online: www.perc.org/perc.php?subsection=6&id=178 (cited April 10, 2006).
- North, Gary. 2005. *In Defense of the Classic Western*. Online: www.lewrockwell.com/north/north409.html (cited April 10, 2006).
- O'Keefe, Mark. 2004. Free Market Answer to Saving Ocean Fisheries. *Philanthropy*. January/February, 4-5.
- Oregon Water Trust, 2006. *Cooperative Solutions, Healthy Streams*. Online: www.owt.org (cited April 10, 2006).
- Osgood, Ernest Staples. 1929. *The Day of the Cattleman*. Chicago, IL: University of Chicago Press.
- Reed, Lawrence W. 1988. Privatization: Best Hope for a Vanishing Wilderness. *Freeman*, February. Online: www.fee.org/publications/the-freeman/article.asp?aid=1427 (cited April 11, 2006).
- State of Oregon. 2006. *Neighbors Unite to Restore Watershed Plan: Buck Hollow Watershed Enhancement*. Online: www.oregon.gov/OPSW/stories/deschutes.shtml (cited March 28, 2006).
- Thomas, Jack Ward. 2006. On Environmental Morality. Interview with Tom Findley. *Range*. Spring. Online: www.rangemagazine.com/features/winter-05/environmentalmorality.shtml (cited April 10, 2006).
- Thoreau, Henry David. [1849] 1958. Civil Disobedience. In *Henry David Thoreau: Selected Writings*, ed. Lewis Leary. Arlington Heights, IL: AHM Publishing, 9-32.
- Umbeck, John R. 1977. A Theory of Contract Choice and the California Gold Rush. *Journal of Law and Economics* 20(2): 421-37.
- USDA. 2002. The Process Predicament: How Statutory, Regulatory, and Administrative Factors Affect National Forest Management. Online: www.fs.fed.us/projects/documents/process-predicament.pdf (cited April 10, 2006).

- Yablonski, Brian. 2004. Valles Caldera National Preserve: A New Paradigm for Federal Lands? *PERC Reports*, December, 3-5. Online: www.perc.org/perc.php?subsection=5&id=521 (cited April 10, 2006).
- Zerbe, Richard O. Jr., and C. Leigh Anderson. 2001. Culture and Fairness in the Development of Institutions in the California Gold Fields. *Journal of Economic History* 61(1): 114-43.



“The character inherent in the American people has done all that has been accomplished; and it would have done somewhat more, if the government had not sometimes got in its way.”

—HENRY DAVID THOREAU
CIVIL DISOBEDIENCE

Charles M. Russell is known for his depictions of western scenes that bolster the notion of the “wild, wild West.” In reality, the old West was basically a civilized region where local people solved problems through local solutions, as a closer look at Russell’s wonderful paintings reveals. In *The Roundup #2*, featured on the cover, Russell illustrated cattle being sorted for branding in the spring roundup. Roundups allowed cooperative management of livestock, while property rights to cattle and customary rights to grazing land encouraged protection of grassland.

In this essay, “Cows, Canoes, and Condos: Blending the Old West with the New,” Terry L. Anderson and Laura E. Huggins reveal the lessons that the Old West can teach people today who are attempting to minimize acrimony over resource uses and maximize nature’s wealth. The essay is part of a series sponsored by the Dufresne Foundation and the M.J. Murdock Charitable Trust.



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