

Introduction

The American West has always been the source of romantic visions: the carefree cowboy riding the open range, the prospector panning for gold and instant riches, or the homesteader “making the desert bloom like a rose” in return for title to the land. It is easy to immerse oneself in Charles Russell and Frederic Remington paintings of bucking broncos, cattle drives, or endless herds of buffalo. The thought of leading a pack of mules into the mountains where few others have trodden makes us all yearn for those good old days of yesteryear.

In contrast to visions of the Old West, visions of the New West conjure up grand mountain vistas, wild rivers, and free-roaming wildlife. There is no better presentation of our romance with the West than the story (1976) and the movie (1992) *A River Runs Through It*. Set in rural Montana in the early 1900s, this is the coming-of-age story of the author (Norman Maclean) and his brother realizing the divine beauty of their land and their interaction with it, symbolized by and culminating in a fly fisherman’s casting skill. In the movie, Robert Redford narrates, “When I am alone in the half-light of the canyon, all existence seems to fade to a being with my soul and memories.

And the sounds of the big Blackfoot River and a four-count rhythm and the hope that a fish will rise. Eventually, all things merge into one, and a river runs through it.”

The problem is that now, at the beginning of the twenty-first century, we are seldom “alone” on the river, any river. Maclean’s elegant text combined with the beautiful images in Redford’s movie helped popularize fly-fishing in the West. The rich and famous such as Ted Turner, Peter Fonda, and Tom Brokaw attracted more attention to the West when they decided to buy a chunk of it. At the same time, far less affluent people were buying second homes and condominiums at ski resorts and housing developments along the rivers that run through it. As a result, many of the famous western trout streams (including Maclean’s beloved Blackfoot River) have become crowded with anglers practicing the “four-count rhythm.” In fact, people are moving to the West in such numbers that the region is sometimes called the “Third Coast.”

While we can each dream our romantic visions of the Old West and the New West without interfering with one another, acting out our dreams brings competition and conflict over how Mother Nature’s bounty will be used. The debate over commodity use versus amenity use centers on these two different views of the “wealth of nature.” The *commodity view* holds that wealth from nature results from tangible commercially valuable outputs that can be produced from nature. These are usually minerals, cattle, and wood. The *amenity view* holds that wealth from nature is derived directly from nature itself without it being transformed into other outputs and without necessarily being sold in commercial markets. Examples of amenity goods are scenic vistas, wildlife habitat, and wilderness areas. As long as resources were abundant relative to the population and its demand for amenities, there was little conflict over defining the wealth of nature.

In a few cases, commodity demands and amenity demands are complementary, as with reservoirs that produce flood control, irrigation, and electricity while providing recreation opportunities; but for the most part amenity demands conflict with commodity production. Pursuing one type of wealth precludes enjoying the other. More commodity production reduces the potential for amenity production, and vice versa. Conflicting demands between water for irrigation and in-stream flows in the Klamath Basin are an example discussed by Anderson and Huggins (Chapter 5), and the conflict between mining and recreation is addressed by Meiners and Morriss (Chapter 7). Competition and conflict between commodity users and amenity users are

obvious, but conflicts also arise within those groups. For example, backpackers oppose snowmobiling, mountain bikers oppose horseback riders, and on and on.

This volume focuses on why these conflicts occur and how they might be eliminated or at least minimized. The simple answer to both questions is that the institutions that govern who controls how resources are used and the people in control must have incentives to find “win-win” solutions to competing uses.

In Part One, the institutions that govern western resource allocation are explored. Power (Chapter 1) elaborates on the distinction between local economic impacts and on how changing demands on the wealth of nature are articulated. Because much of the institutional structure in the West evolved when commodity demands dominated, Power argues that institutional evolution and redesign are necessary if newer amenity demands are to be reconciled with commodity demands in a less acrimonious way. Anderson (Chapter 2) makes the case for relying more on markets to allocate resources between competing demands and emphasizes that this requires property rights that are clearly defined, enforced, and transferable.

Many environmentalists argue that nature is the kind of thing that money cannot buy. “Exchanging, selling, calculating tradeoffs, or otherwise commoditizing biodiversity in the global sanctuary of creation simply to maximize immediate human gain represents the primordial blasphemy of confusing sacred space with the market place,” fumes Timothy Weiskel, an environmental ethicist at the Harvard Divinity School (quoted in Harris 2003). Others argue that the only real way to protect nature is to calculate its worth: “Follow the money, and you end up in a very green place. This is the new story of the West. Conservation is now as much about economics as it is about less tangible aspects like the solace of open space” (Barcott 2005).

Power and Anderson recognize that amenity demands have both market and nonmarket characteristics. Marketable amenities are those for which private property rights are or can be defined and enforced and for which only those willing to pay are allowed access. Fee fishing is one example, and housing development that incorporates local amenities is another (see Anderson and Leal 1997). Nonmarketable amenities, on the other hand, are those for which it is difficult to establish property rights and therefore to exclude nonpayers. A pristine view is an example. Economists contend that such “public goods” will be underproduced, but David Haddock

(Chapter 2) challenges this conclusion, arguing that, in many cases, private individuals capture sufficient private value to produce efficient amounts of public goods despite free-riders.

One of the biggest stumbling blocks to market allocation of the wealth of nature is the complex set of weak and rather undefined claims to environmental entitlements. Environmental and public process laws have given entitlements to broad groups of citizens (e.g., Montana citizens have a constitutional right to a “clean and healthful environment”). But those entitlements are neither clearly defined nor transferable, which changes the incentive system. Actors can stay focused on the values that they think they have a right to without taking seriously the cost in terms of valuable opportunities to others that may be lost. In that situation, finding a win-win outcome (e.g., “willing buyer, willing seller”) may be impossible.

Other reasons why property rights and markets are not used more to allocate the wealth of nature include:

- Some amenities are “produced” as unintentional byproducts of private activities to which consumers have free access. Ted Turner’s 358,643-acre ranch in New Mexico, for example, not only provides a home to a reintroduced population of desert bighorn sheep, which are managed by the Turner Endangered Species Fund, but also protects a beautiful viewshed for the public. Similarly, almost all forestlands, grasslands, and wetlands, whether private or public, produce a broad range of valuable environmental services without any human action.
- Some amenities are the complex result of natural processes that rely on both public and private lands and resources. In the case of water, for example, moisture often comes in the form of snow influenced by natural weather patterns; snow may fall at high elevations on federal lands managed for timber; it then melts into public rivers, and rivers are diverted for private agricultural and municipal uses. Balancing and contracting among uses where there are so many interconnections is difficult, to say the least.
- Public lands, meaning lands owned by different levels of government, are involved in the production of ecosystem services, and the management of those lands is subject to the conflicting demands of various groups of citizens who believe that they have legitimate claims on the wealth of nature.
- The costs of organizing diffused groups of amenity demanders and amenity suppliers so that they can negotiate a better level of amenity production may be so high that those transaction costs outweigh the potential improvement

in amenity values. As a result, productive agreements are never reached, and the wealth from nature is dissipated.

- Managing congestion and use costs as the number of beneficiaries or the level of use increases may also be difficult. For example, with millions of visitors to Yosemite Valley each year, development and traffic congestion pressures continue to be a problem—one for which it is difficult to create an “equitable” solution.

For these reasons, neither Power nor Anderson sees a panacea in particular institutional changes. Vested private interests benefit from current institutional mechanisms. For example, the Mining Law of 1872 gives mining interests more ability to patent federal lands. And bureaucratic interests, especially at the federal level, do not want to give up their grip on western resource allocation. To be sure, current institutions are antiquated and a more decentralized locus of control would be better equipped to take advantage of time- and place-specific information and to balance competing demands. Getting from here to there, however, will not be easy.

Part Two offers some ways of making this transition within the context of current bureaucratic institutions. Daniel Kemmis (Chapter 3) calls for experimentation within the structure of the U.S. Forest Service. Following the lead of John Wesley Powell, the famous explorer of western waterways, he calls for creating clear national guidelines for specific outputs (commodity, amenity, or some combination) and then devolving more authority to local collaborative groups or trustees to determine how best to meet those guidelines. Holly Fretwell (Chapter 4) compares and contrasts state park and national park management and suggests that states have found more innovative ways of linking consumers (visitors) with producers (park managers), improving both the fiscal and environmental performance.

Part Three explores the property rights approaches for maximizing the wealth of nature. Conflict over water use in the Klamath River Basin is a quintessential example of conflicts between old and new western demands. Terry Anderson and Laura Huggins (Chapter 5) draw upon the Klamath experience to show how stipulating property rights at the local level and removing hurdles to trading between off-stream and in-stream demands could replace acrimony with cooperation. Donald Leal (Chapter 6) draws on his policy analysis of individual fishing quotas to suggest that such property rights can efficiently and equitably promote more sustainable fisheries management. Roger Meiners and Andrew Morriss (Chapter 7) call for

expanding the Mining Law of 1872 to allow patenting of claims to federal lands for other uses such as recreation and ecosystem service production. And Dominic Parker (Chapter 8), based on his extensive survey of land trusts, argues that these voluntary organizations could be made even more effective if we moved away from tax deductions for easement contributions and toward direct tax funding for private groups producing amenity values.

Finally, Part Four examines various problems in measuring the wealth of nature. With his review of the wealth of nature literature, Andrew Hanssen (Chapter 9) explores the evolution of the wealth of nature paradigm, and Timothy Fitzgerald and Myrick Freeman (Chapter 10) evaluate various ways of measuring wealth from nature and discuss the potential for market measures to do this. Both of these chapters provide a critique of a growing body of literature trying to quantify the value of nature and ecosystem services, especially that of Robert Costanza, director of the Gund Institute for Ecological Economics. In 1997, Costanza estimated the value of the services performed by the environment at \$33 trillion and argued that investments in ecosystem preservation can yield returns of 100 to 1. Fitzgerald and Freeman dispute the methodology and magnitude of Costanza's findings.

There is no doubt that wealth from nature is positive and growing, and of particular importance to many parts of the United States. But, Ronald Johnson (Chapter 11) challenges the notion that protection of natural landscapes and the environment will, in general, offset declines in natural resource-based extractive industries. The evidence presented in his chapter reveals that declines in natural resource extraction sectors were not quickly followed by expansion in other sectors of natural resource-oriented states. It was not specialization in natural resource extraction that caused poor economic performances in natural resource-dependent states but rather their relative low density, isolation, and difficulty in holding and attracting better-educated workers.

The focus on how the use of Mother Nature's bounty affects local economic well-being mixes two issues together. The first is the assertion that some set of site-specific qualities that have come to be called *amenities* contributes significantly to resident well-being, but "consumers" must be present in the region to appreciate the benefit of directly enjoying the amenities. The second is how the presence of those local amenities affects the location of economic activity. Much of the economic literature on the wealth of

nature, including Chapter 9 and Chapter 11, focuses on the latter—the impact of natural amenities on local economic vitality.

In summary, this volume explores the potential for markets, as one of the institutions for balancing the demands on nature's bounty, to improve the environment and the economy at the same time. The authors examine how institutions thwart market solutions to natural resource allocation that conserve the wealth of nature and how those institutions could be changed to promote market solutions. Furthermore, when those institutions won't necessarily maximize the wealth of nature, the authors ask whether there are ways to mimic markets. If market-mimicking institutions cannot be made to work for certain amenities or ecosystem services, what are the appropriate loci of scale and level of public accountability for collective solutions to problems?

Bob Dylan was right when he wrote, "For the 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 those 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 that supports a healthy economy. Finding a new balance between commodity and amenity production from the wealth of nature that better matches contemporary economic values and opportunity costs will benefit everybody.

References

- Anderson, Terry L., and Donald R. Leal. 1997. *Enviro-Capitalists: Doing Good While Doing Well*. Lanham, MD: Rowman & Littlefield Publishers.
- Barcott, Bruce. 2005. "As a Matter of Fact, Money Does Grow on Trees." *Outside*, March.
- Columbia Pictures. 1992. *A River Runs Through It*. Directed by Robert Redford.
- Harris, Lissa. 2003. "At What Cost?" *Grist*. April 8. Available online: <http://www.grist.org/news/maindish/2003/04/08/what/> (cited June 26, 2006).
- Macleán, Norman. 2001 [1976]. *A River Runs Through It and Other Stories*. Twenty-fifth Anniversary Edition. Chicago: University of Chicago Press.