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The Economic Benefits of Open Space in Utah

Robert J. Lilieholm and Charles J. Fausold¹

Introduction

Utah's population grew from 1.7 million in 1990 to over 2.0 million in 1996, making it one of the fastest-growing states in the U.S. Current projections forecast continued growth, with population expected to increase 50% over the next 20 years. As development pressures mount throughout the state, more and more Utahns are voicing concern over the loss of once abundant open spaces. These community concerns are warranted since development pressures can irreversibly alter the long-term economic and social character of a community.

Most decisions about growth and development take place at the community level. Unfortunately, these same communities often lack the information needed to accurately assess the benefits and costs of alternative land uses. For example, while the economic benefits of development are readily recognized and promoted by various business interests, the local benefits of protecting open space are too often ignored since they are difficult to measure and articulate.

This paper seeks to add balance to community-level land use planning by reviewing the different types of economic benefits associated with the protection of open space.² We believe that a comprehensive consideration of the multiple values of open space will better inform community decisions about the full costs and benefits of land conservation and development.

Diverse Lands, Diverse Benefits

Since our nation's founding, important natural areas have been acquired and set aside for public use. But describing the economic benefits of such wildlands is difficult since these areas often provide multiple values simultaneously. For example, the same wetland that buffers the impact of peak storm flows may also provide important habitat for wildlife, and enhance the property values of adjacent homes and neighborhoods. Below we describe the many benefits of open space lands. Individuals and governments should comprehensively consider these benefits when evaluating different conservation and development proposals.

Market Value

The most direct measure of the economic value of open space is its real estate market value — the cash price that an informed and willing buyer pays an informed and willing seller in an open and competitive market. In rural areas where the highest and best use of land is as open space, this is easily determined by examining market transactions. In urban or urbanizing regions, however, where highest and best use is typically development, the open space value of land must be separated from its development value.

Impact on Municipal Budgets

Communities are increasingly recognizing that local population growth and real estate development do not necessarily provide net fiscal benefits to local governments. In other words, providing infrastructure and other services to accommodate new development may cost more than the development generates in property tax and other revenues, especially in rapidly-growing communities along the Wasatch Front. This, combined with decreased intergovernmental transfers of financial aid and increasing citizen resistance to taxes, has led local officials to scrutinize the fiscal consequences of land use decisions. Fiscal Impact Analysis is used to compare the public costs and revenues associated with alternative land uses to determine the fiscal impact of development on local governments. Based on a review of such studies, economists have found that residential development often incurs a net fiscal deficit, while open space lands generate a surplus. For example, a study of six rural New England towns revealed that residential development required \$1.13 in municipal services for every \$1 of revenue generated. In contrast, open space lands required only \$0.29 in services for every dollar of revenue generated.

These same lessons are being learned in many rapidly-growing Utah communities. For example, many Utah residents are facing escalating property taxes and city-service fees. At the same time, quality of life may decline due to reduced municipal services and increased traffic and crime. As one frustrated Cache County property owner put it, "I can't afford to live here anymore, but I also can't afford to move."

Enhancement Value

The existence of open space may affect the value of adjacent lands. In 1919, the landscape architect Frederick Law Olmstead, Jr. stated that "a local park ... adds more to the value of the remaining land in the residential area which it serves than the value of the land withdrawn to create it." Evidence of such "enhancement value" is commonly found in real estate ads that feature proximity to public lands, golf courses, and other open spaces.

The relationship between market and enhancement values of open space depends upon land scarcity and the perceived risk of development. In rural areas, where most land is open space and likely to remain so, both market and enhancement value will be low. However, market and enhancement value will be high in urban or urbanizing areas like St. George and the Wasatch Front. Finally, enhancement value is important for open space advocates since it can partially offset reduced tax revenues from open space lands removed from the tax rolls or placed under special reduced-tax designations.

Production Value

Open space lands are seldom idle, but rather are part of a working landscape vital to the production of goods and services valued by society. Oftentimes, the economic value resulting from these lands is direct and readily measured, as with produce from agricultural lands, livestock from rangelands, and wood products supplied by forests. The monetary returns from production accrue directly to the landowner, and are important in that these returns, in relation to alternative land uses like development, often determine current and future land use. Farming, ranching and logging are economically important to Utah, especially in rural counties. For example, approximately 2,700 Utah landowners own forests of 10 acres or more in size. In conjunction with public lands, the wood products supplied by these lands generate \$243 million in annual sales. Utah's 13,400 farms cover 9.6 million acres and produce over \$1 billion in agricultural products each year. While farms cover roughly 18% of the State's total land area, only about 10% — or 1 million acres — is considered prime agricultural land.

Utah is rapidly losing its productive open space lands. For example, between 1974 and 1992, Utah lost nearly a million acres of farmland to development. Projections estimate that by 2050, the State will have only 0.6 acre of farmland per person, roughly half the area needed for self-sufficiency. Moreover, encroaching development can adversely affect the economic viability of nearby open spaces. For example, as development proceeds, political pressures or the fragmentation of large land parcels may make traditional land uses uneconomical or infeasible. Unfortunately, the loss of open space to development and fragmentation will likely accelerate over the next decade since many rural landowners are approaching retirement age and face increased tax pressures on land values and estates.

Impacts from Employment and Tax Revenues

In addition to providing market-valued goods and services, open space lands support jobs and related income that are valuable to local, regional and national economies. In 1995, 13.4% of Utah's jobs were farm or farm-related. Even the State's limited wood products industry currently employs over 5,000 people. Many of these jobs are located in rural areas with limited employment opportunities.

Natural System Value

Open space lands support natural ecosystem functions such as groundwater recharge, climate moderation, flood control and storm damage prevention, and air and water pollution abatement. Economists are increasingly recognizing these ecosystem benefits since human life cannot be sustained without them.

One way to estimate the value of ecosystem benefits is to calculate the monetary damages that would result if the benefits were not provided, or calculate the cost of public expenditures required to construct infrastructure to replace the functions of the natural systems. For example, in Massachusetts, 8,500 acres of wetlands in the Charles River Basin were acquired to serve as a natural valley storage area for floodwaters. The cost of acquiring the wetlands was \$10 million, while the alternative cost of building dams and levees would have exceeded \$100 million.

Use and Nonuse Values

Open space lands are often valued for scenic vistas, solitude, wildlife, and the community character embodied in traditional working landscapes. The subjective value people place on these attributes can be broken into two broad categories: "use value" and "nonuse value." Use value represents the value people place on a current use of the resource. Three types of use value are recognized: (1) "consumptive uses" such as hunting and fishing; (2) "non-consumptive uses" such as hiking, aesthetics, and camping; and (3) "indirect uses" such as reading books or watching programs on open space-related resources or activities.

In contrast to use value, nonuse values consider an individual's possibility for future use, or their altruism. Two broad types of nonuse value are recognized: "option value" and "existence value." Option value represents an individual's willingness to pay to maintain the option of using open space in the future. Existence value represents an individual's willingness to pay to ensure that some resource exists. Part of the motivation for existence value may be the desire to bequeath the resource to future generations.

Expenditures From Open Space Related Activities

Activities directly or indirectly associated with open space may generate significant expenditures and provide an important source of revenue for businesses and state and local governments. For example, revenues from hunting and fishing license sales are a major source of funding for state wildlife agencies. The fish and wildlife populations supporting these activities rely at least in part on habitat provided by open space. Less direct but perhaps more important from an overall economic perspective are expenditures from open space related activities such as hiking, hunting, fishing, bird watching, nature photography, snowmobiling, skiing, and mountain biking. Such expenditures include the purchase of equipment. travel costs. lodging and accommodations, guide services, meals, groceries, etc., as well as attendant service jobs. These expenditures also have income and job multiplier effects, and often occur in rural areas with limited economic opportunities. For example, a record 16 million tourists visited Utah in 1996. Travelers spent an estimated \$3.8 billion, which contributed \$276 million in state and local taxes. Tourism is growing at 7% a year—more than twice the national level.

Intangible Values

Earlier sections focused only on open space values of interest to humans, and of those, only values that could be expressed in monetary terms. However, it is also important to note some of the intangible values of open space. For example, many view wildlands as a "gift" to be passed on to future generations rather than mere "resources" to be exploited and controlled. Similarly, Aldo Leopold's "Land Ethic" holds that people are part of their environment, rather than separate from it. Under this view, the entire biotic community is more important than any individual component, including humans. An individual's appreciation of the intangible value of open space depends on where one's views lie along the continuum of thought that stretches from nature is to be exploited, to nature is to be used wisely, to nature has value independent of any utility to humans.

Discussion

Utah communities increasingly face difficult choices regarding open space. Rural areas distant from urban centers are facing significant development pressures, and many are realizing that existing open space may be lost without active intervention. At the same time, however, some suburban communities on the metropolitan fringe are finding that the loss of open space is not necessarily a consequence of development. Indeed, a growing array of new policy tools such as conservation easements, private land trusts, and cluster subdivision regulations enable growing communities to exercise much greater control over development.

Unfortunately, when it comes to implementing such protections, many communities face challenges by landowners and developers about restricting or "taking" private property rights. Suffice it to say that communities have broad powers to regulate growth and development within their jurisdictions. Indeed, protecting the collective property rights of adjacent landowners and the community at large is an important obligation of local governments. This is particularly true when one considers how development costs are often passed along to the community through higher taxes and city service fees.

Moreover, the high land and development values of open space lands near established communities largely results from the collective investment of existing residents in schools, roads and other services. Such public "givings," however, are far too often ignored in the "takings" debate, even though these community expenditures far outweigh the financial losses likely to result from development restrictions.

This short review has described the many types of values that open space lands provide to landowners, private individuals, and society at large. Acknowledging these values will better inform land use decisions and help dispel the "conventional wisdom" about the economic consequences of land development and conservation. It is hoped that the synthesis of different concepts presented here will broaden the understanding of the many values associated with open space, informing planners, conservationists, local officials and citizens as they make important and often irreversible decisions about these lands.

For More Information Contact:

The Trust for Public Land (415) 495-4014 or www.tpl.org

The American Farmland Trust (202) 331-7300 or www.farmland.org

Utah Critical Lands Conservation Committee Governor's Office of Planning and Budget (801) 538-1696

Utah Forest Legacy Program Utah Division of Forestry, Fire and State Lands (801) 538-5555

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Contributing Authors:

¹ The authors are Associate Professor, Department of Forest Resources, Utah State University, Logan, UT 84322-5215; and Executive Director, Cornell Cooperative Extension Association of Schuyler County, Rural Urban Center, 208 Broadway, Montour Falls, NY 14865.

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