



## CHAPTER 4.

# OUR ECONOMIC BENEFITS

## INTRODUCTION

Larimer County's natural areas, nature-based recreation areas, and conserved working farms and ranches provide enjoyment, recreation, costs savings, and local revenues. This section, prepared by The Trust for Public Land, investigates certain economic benefits provided by these lands.

- **Agriculture.** Working farms and ranches are a cultural and economic cornerstone of Larimer County. Much of the county's landscape is dominated by expanses of farm and ranch land and is a major component of the local economy.
- **Economic development.** Larimer County's vast open spaces of farms, ranches, grasslands, foothills, forests and mountains make the county a unique place to live and work. The high quality of life provided by these open space amenities plays a critical role in the county's economic development.
- **Enhanced property value.** Larimer County's natural areas, nature-based recreation areas, and conserved working farms and ranches increase the value of nearby residential properties because people like living near them and are willing to pay a premium for the privilege.
- **Recreation and tourism.** Natural areas and nature-based recreation areas play an important role in attracting visitors to the county who spend money at local businesses.
- **Direct use value.** Larimer County's natural areas and nature-based recreation areas provide direct recreational value to residents through such activities as walking, hiking, running, horseback riding, biking, and wildlife watching. Residents save money by using the county's natural areas and nature-based recreation areas at no- or low-cost instead of having to pay to participate in these activities elsewhere.

## AGRICULTURE

Agriculture is a cultural and economic cornerstone of Larimer County. Much of the county's landscape is dominated by expanses of farm and ranch lands. Approximately 1,760 farms and ranches cover nearly a half-million acres or 30 percent of the county's total land area. While the number of farms in the county has increased, these farms have become considerably smaller. The average farm size decreased by nearly 100 acres between 1997 and 2007.<sup>1</sup> Overall the county is losing farmland. This loss not only threatens a way of life in Larimer County, but also threatens a major component of the local economy.

## Local Farm and Ranch Industry

In general, working farms and ranches are small family endeavors in Larimer County. In fact, only 5 percent of Larimer farms are categorized as Non-family Farms. Over 30 percent of farm operators are age 65 or over. More than 70 percent of operators have been on the farm for 10 years or longer.<sup>2</sup> These demographic figures are important to consider because many farmers use proceeds from agricultural easements to benefit the next generation.

Agriculture sales in the county topped \$128 million in 2007, accounting for 2 percent of the state's agricultural output. This makes Larimer County the 10<sup>th</sup> ranked county in agricultural output in Colorado based on sales. Livestock, poultry, and related products accounted for \$78.2 million of those sales.<sup>3</sup> As shown in Table 4.1, milk and dairy products are the top grossing agricultural goods in Larimer County with \$42.5 million in annual sales in 2007. Cattle is second with sales of \$27.1 million followed by horticulture (floriculture and nursery products) with \$23.6 million. Grain and hay round out the top five grossing products with \$8.9 million and \$8.4 million in sales, respectively.<sup>4</sup>

Farms support the local economy by pumping much of this revenue back into local businesses through the purchase of inputs, services, and labor. In 2007, farm operators in the county spent \$102 million on supplies, services, labor, and other expenses. This included \$8.5 million on supplies, repairs, and maintenance and \$7.2 million on seeds, plants, vines and trees. Hired labor, however, was the greatest expense representing \$19.4 million paid to farm workers.<sup>5</sup>

**Table 4.1: Larimer County Top Grossing Agricultural Commodities (2007)**

Commodity	Annual Sales	County Rank in Colorado (out of 64)
1. Milk and Dairy Products	\$42,494,000	2nd
2. Cattle	\$27,060,000	13th
3. Horticulture	\$23,561,000	3rd
4. Grain	\$8,911,000	14th
5. Hay	\$8,405,000	n/a

Source: USDA Census of Agriculture, 2007

## Jobs Created by Larimer County's Farms

Farming is an especially labor intensive activity as evidenced by the 2,280 workers who were hired during the course of 2007.<sup>6</sup> As shown in Table 4.2, approximately 600 individuals are full-time farmers in the county while an additional 1,160 operate farms to help make a living. Jobs are also created in the industries closely tied to agriculture. For example, the food manufacturing sector depends on a robust local agriculture industry. The county's 29 food manufacturing businesses employ a workforce of 290 with an annual payroll of \$12.9 million.<sup>7</sup>

**Table 4.2: Jobs from Agriculture**

Farm Operators	
Full time operators	599
Part-time operators	1,158
Farm Labor	
Workers hired more than 150 days of the year	739
Workers hired less than 150 days of the year	1,539
Agriculture-related businesses	
Food Manufacturing	290
Farm & Garden Wholesale and Retail	261
Other	31
<b>Total</b>	<b>4,617</b>

Source: U.S. Census Bureau, 2009 County Business Patterns; USDA Census of Agriculture, 2007.

## The Economic Cost of the County's Farmland Loss

Larimer County's farmland is being lost (converted to other uses) at a rate of 4,500 acres each year – the 15<sup>th</sup> highest rate among counties in the state. Between 1997 and 2007, 8.4 percent of farmland was converted to non-agricultural use, as shown in Table 4.3. During that time 6,770 acres of cropland were lost. Based on the average annual output of agricultural land in the county, it is possible to estimate an annual economic loss of roughly \$1.2 million in agricultural output each year. Between 1998 and 2011 the average rate of conservation in Larimer County was approximately 8,700 acres per year (this includes agricultural and non-agricultural land).<sup>8</sup>



**Table 4.3: Larimer County Farmland Loss 1997-2007<sup>[1]</sup>**

Category	Year		
	1997	2002	2007
Number of Farm Operations	1,429	1,564	1,757
Farmland Operated (acres)	534,783	521,599	489,819
Average size of farms (acres)	374	334	279
Farmland loss (1997-2007)	44,964 acres		
Percent loss	8.4%		
Cropland (acres)	126,752	139,895	119,984
Cropland Loss (1997-2007)	6,768 acres		
Percent Loss	5.3%		
Estimated market value of agricultural products sold (inflated to 2011 dollars)	\$100,867,000	\$101,096,000	\$128,123,000
Average per farm	\$98,925	\$80,822	\$79,110
Average per acre of farmland	\$188	\$194	\$262

Sources: USDA Census of Agriculture, 2007; USDA National Agricultural Statistics Service; Farmland Information Center. Ohio Statistics Sheet.

[1] According to the Northern Colorado Regional Food System Assessment, "USDA changed the definition of a farm causing more acreage to be reported as a farm in 2007 than met the definition in 2002." This means that it is likely some farms reported in 2007 were not reported in earlier census years because of the definition change.



Larimer County is losing **4,500 acres/year** at a cost of **\$1.2 million** in agricultural output (sales).

Laramie Foothills; photo by Charlie Johnson



## ECONOMIC DEVELOPMENT

Larimer County's natural areas, nature-based recreation areas, conserved working farms and ranches, forests and mountains make the county a unique and desired place to live and work. The high quality of life provided by these open space amenities plays a critical role in the county's economic development. Skilled workers are attracted to places like Larimer County where there is open space, clean air and water, and ample opportunities for outdoor recreation. Businesses, in turn, are drawn to these places to recruit the best workers. The most sought-after workers in today's economy look at more than just a paycheck when picking places of employment. One survey of high-tech workers showed that a job's attractiveness increases by 33 percent in a community with a high quality of life.<sup>9</sup>

Quality of life in Colorado is one of the state's top assets for business according to CNBC's America's Top States for Business report. In 2011, Colorado ranked 7<sup>th</sup> of all states in Quality of Life based on criteria that included air and water quality. Its quality of life was its second highest ranked asset after business friendliness.<sup>10</sup> According to CNBC, air and water quality and perceived livability are the second most important consideration for locating a business after cost of doing business.<sup>11</sup> In a similar ranking by Forbes Magazine, Colorado ranked in the top 10 of all states in Quality of Life.<sup>12</sup> Businesses recognize the importance of quality of life in attracting skilled employees.

Larimer County is well known across the state and the country as a place with an especially high quality of life. In 2012, Fort Collins was ranked by CBS news as one of the 10 best places in the country to retire. The report specifically cited opportunities for biking, hiking, camping, boating, skiing, and snowshoeing.<sup>13</sup> The area was also named as one of "The Greatest Places to Live in the West" in 2010 by American Cowboy magazine. The criteria for its selection included "abundant recreational, leisure, and outdoor activities."<sup>14</sup> Numerous other awards and recognitions have been bestowed on the city, many because of the nearby access to vast natural areas to enjoy. Perhaps the best measure of how these amenities translate into quality of life is provided by the Gallup-Healthways Well-Being Index, which ranked the Fort Collins-Loveland area as the third happiest metro region in the country.<sup>5</sup>

Larimer County and its cities and town have had great success in attracting businesses because of the superior quality of life. There are already 21 Fortune 500 companies in the county.<sup>16</sup> Protecting the county's natural resources will ensure that workers and businesses are attracted to Larimer for years to come.



A survey of high-tech workers showed that a job's attractiveness increases by **33 percent** in communities with a high quality of life.





Photo credits top to bottom: credit not available; Judy Swenson; Richard Snell

Larimer County and its municipalities are repeatedly recognized for a high quality of life based in part on the region's conservation and recreation investments.

**3rd** Skinniest Metro Area on the Well-Being Index, Fort Collins-Loveland: *Gallup and Healthways* - Mar 2012

**Top 10** Best Places to Retire, Fort Collins: *CBS Money Watch* - Feb 2012

**3rd** on the Best Bicycle Cities list, Fort Collins: *League of American Bicyclists and TheStreet.com* - Aug 2011

**Top 15** Best Places for triathletes to live and train, Fort Collins: *Triathlete Magazine* - Aug 2011

**5th** Best Places for Business and Careers, Fort Collins: *Forbes* - Jun 2011

**#1** Colorado City for Job Growth, Fort Collins-Loveland: *2011 Best Cities for Job Growth, newgeography.com* - May 2011

**Top 10** Places to Retire in the Nation, Fort Collins: *Charles Schwab's On Investing* - Apr 2011

**3rd** Happiest Metro Region, Fort Collins-Loveland, CO: *Gallup-Healthways Well-Being Index* - Mar 2011

**Top 10** Best American cities to invest your real estate dollars in 2011, Fort Collins: *Trulia.com* - Dec 2010

**4th** Best State for Business, Colorado: *Forbes magazine* - Oct 2010

**Top 25** Best Places to Retire, Fort Collins: *CNNMoney.com* - Sep 2010

**6th** Best Place to Live in the Nation, Fort Collins: *Money Magazine* - Jul 2010

**One** of the Most Under-rated Cities in the West, Fort Collins: *Life.com* - Jun 2010

**One** of the Greatest Places to Live in the West, Fort Collins: *American Cowboy magazine* - Apr 2010

Ranked **4th** Best Places for Business and Career, Fort Collins: *Forbes* - Apr 2010



## Enhanced Property Value

Study after study has shown that land conservation has a positive impact on nearby residential property values. All things being equal, most people are willing to pay more for a home close to a nice natural area, nature-based recreation area, or conserved working farm or ranch. The property value added by natural areas and nature-based recreation areas incidentally is separate from the direct use value gained; property value goes up even if the resident never visits the natural area or nature-based recreation area. A recent study found that land conservation in Larimer County can add up to 30 percent to the value of homes in conservation developments.<sup>17</sup>

Property value is affected primarily by two factors: distance from, and the quality of, the natural areas, nature-based recreation areas, and conserved working farms and ranches. While proximate value (“nearby-ness”) can be measured up to 2,000 feet from a large natural area, nature-based recreation area, or conserved working farm or ranch most of the value – whether such spaces are large or small – is within the first 500 feet. Therefore, the analysis of enhanced property value has been limited to 500 feet for this study. Moreover, people’s desire to live near a natural area, nature-based recreation area, or conserved working farm or ranch also depends on the quality of those areas. Beautiful natural resource areas with access, vistas, rivers, and mountains are markedly valuable. Those with excellent recreational facilities are also desirable (although sometimes the greatest property value is a block or two away rather than directly adjoining it, depending on issues of noise, lights and parking). However, less attractive or poorly maintained natural areas, nature-based recreation areas, and conserved working farms or ranches can be only marginally valuable.

Determining an accurate view of every property value next to every natural area, nature-based recreation area, and conserved working farm and ranch is technically possible but prohibitively time-consuming and costly. Therefore, an extrapolative methodology was formulated to arrive at a reasonable estimate. All homes within 500 feet, or within one to two blocks, of natural areas, nature-based recreation areas, and conserved working farms and ranches in Larimer County were identified in this study. A home consists of a residential structure that is owned and taxed; thus, this analysis includes mobile homes, multiple unit dwellings, and residential properties.<sup>18</sup> Homes near natural areas, nature-based recreation areas, and conserved working farms and ranches in Larimer County had a total market value of \$2.07 billion in 2012.

Typically the amount that conserved lands add to the value of any property is determined based on the quality of the natural area, nature-based recreation amenity, or conserved working farm or ranch. That is, high quality lands add significant value, average quality lands add slight value, and low quality lands reduce the value of surrounding residences. Data is not readily available to assess the quality of these spaces. A 2004 study found that 5 percent is a conservative value for the amount that these conserved lands add to the market value of all dwellings within 500 feet of them.<sup>19</sup> A 2009 report from the National Association of REALTORS® also found the premium for homes near natural areas, nature-based recreation areas, and conserved working farms and ranches can extend three blocks and starts at 20 percent for those homes directly adjacent.<sup>20</sup> Using these two values, the estimate for 2012 is that an added \$104 to \$414million in residential property value exists because of proximity to natural areas, nature-based recreation areas, and conserved working farms and ranches in Larimer County (Table 4.4).

**Table 4.4: Range of Enhanced Residential Property Value Due to Proximity to Natural Areas, Nature-Based Recreation Areas, and Conserved Working Farms and Ranches in Larimer County**

	Total Market Value	Additional Market Value	Additional Property Tax Revenue
5% Enhanced Property Value	\$2,070,000,000	\$104,000,000	\$750,000
20% Enhanced Property Value	\$2,070,000,000	\$414,000,000	\$3,000,000



The residential property tax rates for each parcel provided by Larimer County were used to determine how much additional tax revenue was raised by local units of government. While property tax rates differed by district, the total value captured in property tax revenue derived from properties adjacent to natural areas, nature-based recreation areas, and conserved working farms and ranches within Larimer County is between \$750,000 to \$3 million each year.

This estimated range is conservative for the following reasons. First, the estimate leaves out all the value of dwellings located between 500 feet and 2,000 feet from a natural area, nature-based recreation area, or conserved working farm or ranch even though evidence exists for marginal property value at such distances. Second, the study only uses a 5 percent marginal value though studies have shown up to a 5 to 20 percent premium and marginal values increase up to distances of 2,000 feet. Third, passive parks and open space generally add more value than active parks, as the lights, noise, and traffic associated with sports can deter some homebuyers. This conservative range is supported by a recent study found that land conservation in Larimer County can add up to even 30 percent to nearby homes.<sup>21</sup> Therefore, these figures provide a low to moderate estimate of the “true” impact of natural areas and nature-based recreation areas have on property values in Larimer County.

Not only do natural areas, nature-based recreation areas, and conserved working farms and ranches contribute additional property tax revenue they save local municipal governments money. Working farms and ranches and open lands save communities money through avoided costs on expensive infrastructure and other municipal services such as schools, police and fire protection, and other services required by residentially developed areas. Studies have consistently shown that open space and working lands, while often removed from property tax rolls, contribute more in taxes than they require in municipal services. Residential land, however, contributes less in taxes than it receives in municipal services, representing a net loss to local governments. The national median across 151 communities over 25 years is that for every \$1 paid in local taxes, working lands and open space require \$0.35 in services compared to \$1.16 in services for the average home.<sup>22</sup> Two studies in Colorado counties confirm these findings. In Custer and Sagauche Counties working and open lands require only \$0.54 and \$0.35, respectively, in services for every \$1 generated to the community in tax revenues. Residential lands in these communities, meanwhile, require \$1.16 and \$1.17, respectively, in services for every \$1 in tax revenues received by the municipality.<sup>23</sup>



Photo by Charlie Johnson

**In 2012, proximity to open space resulted in an increase of up to \$414 million in residential property value in Larimer County. The resulting annual property tax gain from proximity to open space is estimated from \$750,000 to \$3 million.**





Visitor spending attributable to open space is  
**\$4.2 to \$5.6 million** annually.

Horsetooth Reservoir; photo by Dave Marvin

## Recreation and Tourism

Larimer County, in the peaks, foothills, and plains of the Rocky Mountains, is a renowned destination for outdoor recreation. In 2010, the top three primary reasons for choosing the Fort Collins area to visit were being on vacation, visiting family and friends, and outdoor recreation. Approximately one-in-four non-resident visitors come to the area primarily for outdoor recreation according to one survey.<sup>24</sup> A 2011 City of Fort Collins statistical survey found that residents appreciate the ways in which natural areas contribute to the community, 70% of respondents indicated that natural areas contributed to at least a “moderate” extent to various aspects of the community. Recreation and wellness opportunities at natural areas were seen as the greatest areas of contribution to the community, followed by the overall quality of life in the city and habitat conservation.<sup>25</sup>

The county’s natural areas and nature-based recreation areas play an important role in attracting visitors to the county who spend money at local businesses. This analysis provides an estimate for the amount of tourism spending in the county that can be attributed to local natural areas and nature-based recreation areas (i.e., excluding state and federal land) and the amount of tax revenue generated by that spending. No previous studies have directly measured visitation and spending to natural areas and nature-based recreation areas, therefore data from a variety of sources are used to estimate spending by non-residents (i.e., visitors from outside of Larimer County). The economic value of direct recreational use by residents is estimated in the Direct Use Value section.

As shown in Table 4.5, there are between 113,000 and 152,000 (with a mean of 132,000) visits by non-residents to Larimer County’s natural and nature-based recreation areas each year.<sup>26</sup> Not all of these visitors and their spending can be attributed to natural areas, however, because many of these visitors came to the county primarily for other reasons (e.g., visiting family and friends).<sup>27</sup>





Table 4.5: Local Natural Areas and Annual Tourism Spending in Larimer County (annually)			
	Low	Mid	High
Total visits to natural areas	2,680,000	3,150,000	3,610,000
Non-resident visits to natural areas	113,000	132,000	152,000
Non-resident visitors to natural areas whose primary reason for visiting the county is outdoor recreation	50,630	59,500	68,300
Average spending per visitor	\$82.04	\$82.04	\$82.04
Total direct spending	\$4,150,000	\$4,880,000	\$5,600,000
Percentage of all overnight travel spending	0.90%	1.00%	1.20%
Total state and county tax receipts attributable to non-resident natural areas visitors	\$134,000	\$158,000	\$181,000
Sources used in analysis: Dean Runyan Associates, 2012. The Economic Impact of Travel on Colorado: 1996-2011. Loomis, J. and J. McTernan, 2010. Results of a Survey of Summer Non-Resident Visitors to Selected Fort Collins Area Attractions. White, E.M. and D.J. Stynes, 2010. Spending Profiles of National Forest Visitors, NVUM Round 2 Update. Corona Research, 2009. Colorado State Parks Marketing Assessment: Visitor Spending Analysis 2008-2009. Carona Research, 2006. Natural Areas Observational and Intercept Surveys. Prepared for The City of Fort Collins.			

To calculate the impact natural and nature-based recreation areas have in terms of tourism, the analysis considers only those visitors to natural areas that came to the county primarily because of outdoor recreation. Between 50,600 and 68,300 visitors come annually to Larimer County primarily because of local natural areas and nature-based recreation areas.<sup>28</sup> On average, natural areas visitors reported spending just under two hours during their most recent visit, and those traveling from outside Fort Collins tended to have longer visits.<sup>29</sup>

Visitor spending profiles are assumed to be similar to types of trips and spending patterns of visitors to federal and state natural areas in Larimer County. On average, each non-resident visitor spends approximately \$82 per trip.<sup>30,31</sup> This means that the county's natural areas and nature-based recreation areas account for between \$4.15 million and \$5.60 million (with a mean of \$4.88 million) in non-resident visitor spending each year in Larimer County. This represents between 0.9 percent and 1.2 percent of all overnight travel (i.e., tourism) spending in the county as of 2011.<sup>32</sup>

Translated to sales tax revenues, non-resident recreation visitor spending (by visitors who came to the county primarily for its natural areas and nature-based recreation areas) generates between \$134,000 and \$181,000 in combined annual state and county sales tax revenue.

While natural areas are overwhelmingly used by residents of Larimer County compared to non-residents, the results show clearly that the impact of these areas to the local tourism industry is noteworthy. This conservative analysis does not estimate any "multiplier" effect of how visitor spending ripples throughout the economy. The total economic impact from non-resident spending would therefore be greater than the estimate of direct visitor spending calculated here.

Similarly, if the current natural areas were not provided, Larimer County residents would likely seek these recreational experiences elsewhere, representing a loss in income and spending that is directly attributable to local natural areas.



## DIRECT USE VALUE

While Larimer County’s natural areas and nature-based recreation areas provide much indirect value (e.g., community character, air pollution removal, water quality protection, etc.), they also provide direct recreational value to residents through such activities as walking, hiking, running, biking, and wildlife watching.

As an indicator of the value Americans place on outdoor recreation, even during the recent economic recession, the outdoor recreation economy grew annually by approximately 5 percent<sup>33, 34</sup>.

As found by the U.S. Fish and Wildlife Service, 47 percent of Colorado’s population participates in wildlife-associated recreation, including hunting, fishing and wildlife viewing. The 2011 Survey found that 2.3 million Colorado residents and nonresidents 16 years old and older fished, hunted, or wildlife watched in Colorado in 2011<sup>35</sup>. This is a major economic industry for the state, as nearly 3 billion dollars were spent on wildlife-related recreation in Colorado<sup>36</sup>.

Anglers .....	767,000
Days of fishing.....	8,433,000
Total expenditures .....	\$648,563,000
Hunters .....	259,000
Days of hunting .....	2,184,000
Total expenditures .....	\$460,914,000
Total wildlife-watching participants.....	1,782,000
Days of participation away from home.....	6,937,000
Total expenditures .....	\$1,432,083,000

Most direct uses in public parks are free of charge, but economists can still calculate value by determining the consumer’s “willingness to pay” for the recreation experience in the private marketplace. In other words, if parks were not available in Larimer County, how much would the resident (or “consumer”) pay for similar experiences in commercial facilities or venues? Rather than income, the direct use value represents the amount of money residents save by not having to pay market rates to indulge in the many nature-based activities they enjoy. The average values per visitor-day were taken from a U.S. Forest Service analysis of published literature that placed values on a range of recreation activities on public lands in the Intermountain Region.<sup>37</sup> The study examined 1,239 value estimates providing values for 30

outdoor recreation activities. These values are consistent with the visitor day estimate of \$16 for the value of water based recreation on the Poudre River.<sup>38</sup>

An average “season” for different natural area uses was estimated to take into account reduced participation rates in the off-season. Although some people are active in parks 365 days a year, seasons where participation rates drop to low levels (e.g., participation in boating during the winter months) were eliminated. The season for most activities is assumed to be 6 months. This assumption is based on the results of an observational and intercept survey of visitation to Fort Collins natural areas and is consistent with the methodology of similar analyses. The 2006 Fort Collins study estimated 1.15 million visits during the three-month Summer season (from the week of May 22nd to August 14<sup>th</sup>) and 2.6 million visits during the “Non-Summer” season (from August 21st to November 27<sup>th</sup>).<sup>39</sup>

The number of natural area or open space visits and the activities engaged in were determined via the professionally conducted mail survey of residents in Larimer County discussed in Chapter 2. Residents were asked to answer for themselves; for those adults with children under the age of 18, a representative proportion was also asked to respond for one of their children. The calculation only includes residents of Larimer County; the value from non-resident uses of natural areas and nature-based recreation areas is measured separately in the Recreation and Tourism Section. Larimer County residents engage in an estimated 2.57 million to 3.46 million, with an average of 3.01 million, trips annually to natural areas and nature-based recreation areas. This range in estimates of annual visitation represents the 95 percent confidence interval of the mean. In other words, there is a 95 percent likelihood that the “true” number of resident visits to Larimer County natural areas and nature-based recreation areas falls within this range.

This estimate of resident’s visits to Larimer County natural areas and nature-based recreation areas is consistent with available visitor counts at various natural areas and trails performed by the City of Fort Collins and Larimer County. Over time the City of Fort Collins and Larimer County have used a variety of methods to estimate site specific visitor trips to natural areas and trails, including observational

**“Two million people - 47% of Coloradans age 16 and older - participated in hunting, fishing and wildlife-watching activities in 2011, according to the results of the U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation. ...Colorado boasted nearly \$3 billion in outdoors expenditures in 2011, about half of which went toward fishing and hunting equipment and trips - good news for the incoming Bass Pro Shops coming to the Centerra shopping center in Loveland next year.”**

Quoted in *The Coloradoan*, September 23, 2012



Activity	Low		Mean		High	
	Participation	Value	Participation	Value	Participation	Value
Biking (on paved trails, roads, and unpaved trails)	738,000	\$51,000,000	867,000	\$59,900,000	996,000	\$68,800,000
Boating (motorized and non-motorized)	43,400	\$1,840,000	51,000	\$2,160,000	58,600	\$2,480,000
Camping (including backpacking or backcountry)	155,000	\$5,630,000	182,000	\$6,610,000	209,000	\$7,600,000
Education Programming	25,200	\$167,000	29,600	\$196,000	34,100	\$225,000
Fishing	106,000	\$5,410,000	125,000	\$6,350,000	143,000	\$7,300,000
Horseback Riding	29,900	\$552,000	35,100	\$648,000	40,300	\$744,000
Picnicking	109,000	\$3,180,000	128,000	\$3,730,000	147,000	\$4,290,000
Photography/ Drawing/ Painting	117,000	\$2,560,000	137,000	\$3,010,000	157,000	\$3,460,000
Recreating with Dogs	268,000	\$12,200,000	315,000	\$14,300,000	361,000	\$16,400,000
Rock Climbing/ Bouldering	26,000	\$1,500,000	30,600	\$1,760,000	35,100	\$2,020,000
Shooting/ Archery	11,000	\$581,000	12,900	\$682,000	14,900	\$783,000
Walking/ Running/ Hiking (on natural surfaces: roads or trails, and pavement: roads or trails)	785,000	\$29,900,000	922,000	\$35,100,000	1,060,000	\$40,400,000
Watching Wildlife/ Birding	133,000	\$4,810,000	156,000	\$5,650,000	179,000	\$6,490,000
Winter Activities (as permitted by snow/ ice levels)	20,000	\$643,000	23,500	\$755,000	27,000	\$867,000
<b>Total</b>	<b>2,570,000</b>	<b>\$120,000,000</b>	<b>3,010,000</b>	<b>\$141,000,000</b>	<b>3,460,000</b>	<b>\$162,000,000</b>

Note: Participation totals include resident adults and children.

surveys, intercept surveys, trail counters, and car counters on a portion of system entry points. Due to the variations in counting methods the visitor counts cannot be aggregated but the results through 2011 have been found to support the estimates of total visitation calculated above. It is expected that a more comprehensive county-wide analysis using direct visitor counts would yield similar findings.

The result of the Direct Use Calculator for Larimer County ranges from \$120 million to \$162 million, with an average of \$141 million, for the year 2012 (see Table 4.6). The most popular activities include walking, running, hiking and biking. Together these activities account for 59 percent of the participation and 67 percent of the economic value.

In addition to conservation, outdoor recreation is a high priority for Americans. The Outdoor Industry Association reports that more than 140 million Americans participate in outdoor recreation<sup>40</sup>. More specifically, the U.S. Fish and Wildlife Service estimate that almost 90.1 million Americans (38 percent of the population) participated in fishing, hunting or wildlife-associated recreation in 2011<sup>41</sup>. The outdoor recreation industry is a major economic driver, supporting 6.1 million American jobs, \$646 billion in consumer spending, \$39.9 billion in federal tax revenue, and \$39.7 billion in state and local tax revenue annually. One out of every 100 dollars of all U.S. goods and services is spent on wildlife-related recreation<sup>42</sup>.



## CONCLUSION

Larimer County residents have long valued their natural areas, nature-based recreation areas, and conserved working farms and ranches but may have wondered just how much they are worth. This study shows that Larimer County's natural areas, nature based recreation areas, and conserved working farms and ranches are major economic drivers that contribute to the local economy.

This report found that Larimer County natural areas and nature-based recreation areas provide recreational opportunities and attract tourism. In 2012, residents gained value between \$120 million to \$162 million, with an average of \$141 million, in direct use value because of natural areas and nature-based recreation areas. In addition, tourists from outside of Larimer County that visited natural areas and nature-based recreation areas spent between \$4.15 million and \$5.60 million, generating between \$134,000 and \$181,000 in combined annual state and county sales tax revenue in addition to supporting local business, etc.

Larimer County's conserved working farms and ranches help support a strong agriculture industry. Agriculture sales in the county topped \$128 million in 2007, accounting for 2 percent of the state's agricultural output. This makes Larimer County the 10th ranked county in agricultural output in Colorado based on sales.

Natural areas, nature based recreation areas, and conserved working farms and ranches in Larimer County raise the value of nearby residential properties and increase property tax revenues. In 2012, these areas added an estimated \$104 to \$414 million in value to residential property values, which generated an additional \$750,000 to \$3 million in property taxes.

Conservation = Economic Development = Quality of Life



Horsetooth Reservoir; photo by Charlie Johnson

Larimer County is well known across the state and the country as a place with an especially high quality of life due in large part to the area's natural areas, nature-based recreation areas, and conserved working farms and ranches. The county has had great success in attracting businesses because of its superior quality of life. Protecting the county's natural resources will ensure that workers and businesses are attracted to Larimer for years to come.

This study found that land conservation in Larimer County provides real economic value to the community. This is consistent with studies The Trust for Public Land has conducted in cities and counties across the country. The highest economic value that land conservation provides is the direct recreational use provided to residents and visitors to the county.



## CHAPTER ENDNOTES

- 1 USDA Census of Agriculture, 2007. The Census of Agriculture is prepared every 5 years. The next report should be available in late 2013.
- 2 Northern Colorado Regional Food System Assessment, 2011. Final Report.
- 3 Dollar Amount adjusted to 2011 dollars. USDA Census of Agriculture, 2007
- 4 USDA Census of Agriculture, 2007
- 5 Ibid.
- 6 Ibid.
- 7 Source: U.S. Census Bureau, 2009 County Business Patterns.
- 8 The Trust for Public Land's Conservation Almanac. Available at [www.ConservationAlmanac.org](http://www.ConservationAlmanac.org)
- 9 American Planning Association, 2002. How Cities Use Parks for Economic Development.
- 10 CNBC, 2011. "America's Top States for Business 2011, A CNBC Special Report." <http://www.cnbc.com/id/41666600/>
- 11 Ibid.
- 12 Badenhausen, Kurt, 2011. Forbes. "The Best States for Business and Careers" (November 22, 2011). [http://www.forbes.com/special-report/2011/best-states-11\\_land.html](http://www.forbes.com/special-report/2011/best-states-11_land.html)
- 13 CBS Money Watch, 2012. "The 10 best places to retire" (February 22, 2012). [http://www.cbsnews.com/8334-505146\\_162-57382790/the-10-best-places-to-retire/?pageNum=4](http://www.cbsnews.com/8334-505146_162-57382790/the-10-best-places-to-retire/?pageNum=4)
- 14 Northern Colorado Economic Development Corporation, 2012. Fort Collins – Honors and Awards. <http://www.ncedc.com/wp-content/uploads/2012/07/fort-collins-honors-and-awards-may-20121.pdf>
- 15 Northern Colorado Economic Development Corporation. "Why Northern Colorado." Accessed online at <http://www.ncedc.com/why-northern-colorado/> (11-26-2012).
- 16 Ibid.
- 17 The study found that in Larimer County, a home in a conservation development (an approach to the site design of a development property that combines residential development and land conservation) adds 30 percent to the sales price compared to an otherwise similar subdivision. Haunnum, Christopher, Steven Lapos, Sarah E. Reed, Liba Pejchar, and Lindsay Ex. 2012. Comparative Analysis of Housing in Conservation Developments: Colorado Case Studies. The Journal of Sustainable Real Estate. 4(1): 149-176.
- 18 Other property types were not considered in this analysis because sufficient data are not available to quantify the benefit. Non-residential property types are rarely studied in the literature as they are much more difficult to statistically analyze because there are more variables that influence value and fewer real estate transactions to compare.
- 19 Crompton, John L. (2004) The Proximate Principle: The impact of parks, open space and water features on residential property values and the property tax base. Second Edition: Ashburn, Virginia: National Recreation and Park Association. <http://www.rpts.tamu.edu/faculty/crompton.htm>.
- 20 National Association of Realtors. 2009. On Common Ground (Winter). <http://www.realtor.org/publications/on-common-ground/winter-2009>
- 21 Haunnum, Christopher, Steven Lapos, Sarah E. Reed, Liba Pejchar, and Lindsay Ex. 2012. Comparative Analysis of Housing in Conservation Developments: Colorado Case Studies. The Journal of Sustainable Real Estate. 4(1): 149-176.
- 22 American Farmland Trust, 2010. Cost of Community Services Fact Sheet. Farmland Information Center, Northampton, Massachusetts.
- 23 Ibid.
- 24 Loomis, J. and J. McTernan, 2010. Results of a Survey of Summer Non-Resident Visitors to Selected Fort Collins Area Attractions.
- 25 City of Fort Collins Natural Areas Program, 2011. Fort Collins Natural Areas Resident Survey Report of Results.
- 26 Based on the estimate of resident visits in the Direct Use Value section and the ratio of resident to non-resident visitors documented in: Carona Research, 2006. Natural Areas Observational and Intercept Surveys. Prepared for The City of Fort Collins. According to the report, approximately 4 percent of Fort Collins natural area visitors are non-resident (i.e., from outside of Larimer County).



- 27 This analysis only considers the spending by visitors who come to the county primarily to visit natural and nature-based recreation areas. While those who come to Larimer County for other purposes may visit natural and nature-based recreation areas as part of their visit, they still would have visited Larimer County and spent money, even if these areas did not exist.
- 28 Based on the proportion of non-resident visitors participating in outdoor recreation that came to the Fort Collins area primarily for outdoor recreation found in: Loomis, J. and J. McTernan, 2010. Results of a Survey of Summer Non-Resident Visitors to Selected Fort Collins Area Attractions.
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- 32 Dean Runyan Associates, 2012. The Economic Impact of Travel on Colorado: 1996-2011.
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- 34 Ibid.
- 35 Ibid.
- 36 Loomis, John. 2005. Updated Outdoor Recreation Use Values on National Forests and Other Public Lands. Gen. Tech. Rep. PNW-GTR-658. Portland OR: U.S. Department of Agriculture, Forests Service, Pacific Northwest Research Station. 26 p.
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- 38 The City of Fort Collins. 2006. Natural Areas Observational and Intercept Surveys. Prepared by Corona Research.
- 39 Outdoor Industry Association. (2012). The Outdoor Recreation Economy. Accessed from: [http://www.outdoorindustry.org/images/researchfiles/OIA\\_OutdoorRecEconomyReport2012.pdf](http://www.outdoorindustry.org/images/researchfiles/OIA_OutdoorRecEconomyReport2012.pdf)
- 40 Ibid.
- 41 U.S. Fish and Wildlife Service. (2012). 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation: National Overview. Issued August 2012. Accessed at <http://www.census.gov/prod/2013pubs/fhw11-co.pdf>
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