Introduction

The aim of this study was to provide information about the value that Chaffee County residents and visitors to the Chaffee County area place on local ranchland open space and water quality. This report provides a summary of results from a survey of residents that was conducted in the spring of 2007 and a survey of visitors to the area that was conducted in the summer of 2007. First, the results of the resident survey are summarized, including demographic information and respondents’ willingness to pay for natural resources. Next, the survey results of summer tourists are summarized, with details provided on the demographics of the average visitor, as well as the characteristics of their trip and changes in behavior due to changes in natural resources and their willingness to pay to maintain current levels of those natural resources. Detailed results from the surveys are available in Cline and Seidl (2008a) and Cline and Seidl (2008b).

Resident Survey

A mail survey of Chaffee County residents (randomly chosen from the population of registered voters) was conducted in the spring of 2007. Approximately 50 percent of the residents contacted responded to the survey, for a total of 638 respondents. Response rates by locality were as follows: Buena Vista 53 percent, Salida 50 percent, Nathrop 52 percent, and Poncha Springs 33 percent.

Resident Demographic Profile

The resident survey respondents had an average age of 58 years, with 56 percent being male and 57 percent having a Bachelor’s degree or higher. Forty-eight percent of respondents were employed, and 43 percent were retired. The average income range was between $40,000 and $59,999. The average respondent has lived in Chaffee County for 19 years, and most respondents were full-time residents. The average respondent lived 1.8 miles from the nearest ranchland.

Resident Survey Results

- When asked their preference for the protection of the current area of working landscapes in the county, nearly 50 percent thought 100 percent of the land should be protected, 28 percent chose 75 percent, 10 percent chose 50 percent, three percent chose 25 percent, and one percent thought none of the current area should be protected.
Eighty-two percent of resident respondents supported a referendum to guarantee the protection of privately-owned working landscapes, if it were to result in no additional cost to them.

If the same referendum were framed with a cost of $1 to the respondent, 79 percent would vote Yes.

The average willingness to pay (WTP) for the protection of working landscapes was $153.

In the case of water quality protection, 81 percent of respondents would vote Yes on a referendum to provide additional funding to protect water quality at no cost to them.

If the same referendum were to cost the respondent $1, 79 percent of the respondents would support the measure.

The average WTP of residents to provide additional funding for water quality was $114.

If the WTP results are extrapolated to the voting population, we find an annual WTP of $1,617,516 for working landscape protection and $1,205,208 for water quality improvement.

Visitor Survey

A survey of tourists to Chaffee County was conducted in the summer of 2007. Visitors to Chaffee County were contacted at various locations around the county and asked to participate in the survey. If they agreed, the visitor was provided with either a paper copy of the survey that they could mail back or a postcard explaining how to access the survey on the Internet. A total of 902 surveys were distributed and 377 surveys were returned, for a response rate of 42 percent.

Tourist Demographic Profile

The average summer tourist to Chaffee County was 52 years of age, with an average income of $99,000. Slightly over half (52 percent) of respondents were male, 68 percent were employed and 25 percent were retired. Respondents to the visitor survey were highly educated, with 36 percent having a graduate or professional degree and another 31 percent having a Bachelor’s degree.

Trip Characteristics

On average, tourist respondents had made 6 trips to Chaffee County in the past year, with 47 percent of the sample making only one trip in the past year. The average respondent had spent 14 days in Chaffee County in the past year, with 78 percent of the respondents spending a total of 14 days or less in the county. When considering the current trip, approximately 25 percent of the respondents were on a day trip, while another 22 percent were weekend visitors. Eighty-four percent of all respondents were spending a week or less in the county. Most visitors were traveling in small groups, with 56 percent of respondents traveling in a group of two or by themselves. Most survey respondents traveled 200 miles or less to reach Chaffee County, with a mean travel time of 7.36 hours and a median travel time of 3 hours.

The average expenditures were $796 per group per trip, $386 per person per trip, and $111 per person per trip day. Lodging made up the largest portion of expenditures per trip (per group), followed by travel expenses, food and drink, other retail purchases, other expenses and outdoor recreation fees.

Visitor Survey Results

Visitor respondents were asked how their visitation would change given a 25 percent, 50 percent or 75 percent decline from the current level of ranchland open space. With a 25 percent decline, 16 percent of respondents said they would visit fewer times per year, with a 50 percent decline 17 percent said they would come fewer times per year and 1 percent said they would visit more times per year, and with a 75 percent decline, 28 percent stated they would come fewer times per year and 3 percent said they would visit more times per year.

The average decrease in number of trips per year were 1.8, 2.9, and 1.9 for 25 percent, 50 percent, and 75 percent change in working landscapes, respectively.

Across all three levels of change, the annual aggregate economic impact of changing visitation would be $3.77 million.
The mean WTP value for a 25 percent decrease in local working landscape area is $59.61, $42.80 for a 50 percent decrease, and $66.55 for a 75 percent decrease.

The average aggregate WTP per year to avoid a decrease in working landscapes across all three levels of change is $5.6 million for the total estimated summer tourist population.

Visitor respondents were also asked how their visitation would change given a decrease in water quality from a swimmable level to either fishable or boatable. With a change to fishable, 34 percent of respondents said they would visit fewer times per year, and with a change to boatable 43 percent said they would come fewer times per year.

For both levels of water quality change, respondents would make an average of 2.7 fewer trips per year.

The average annual impact across different levels of water quality change (including both fishable and boatable) was approximately $14.4 million.

The mean WTP to avoid a decrease to a boatable water quality level was $72, while the mean WTP to avoid a decrease to fishable water quality was $45.

Based on the estimated number of summer tourists to Chaffee County, the aggregate WTP to avoid a decrease in water quality is estimated at $5.9 million annually.

Conclusions

This study was undertaken to determine what value, if any, residents and tourists place on ranchland open space and water quality in Chaffee County, Colorado. From our initial survey results, we find that both residents and visitors to Chaffee County place a positive value on the maintenance of the current levels of working landscapes and water quality in the area. Residents of Chaffee County have a higher willingness to pay for the protection of working landscapes than for water quality, while tourists place a higher value on water quality than on working landscapes. In addition, the tourist survey shows the potential for a loss in visitation given declining ranchland open space and water quality. Our estimates show that decreased ranchland open space could lead to a nearly $4 million loss in tourism revenue annually, while decreased water quality could decrease tourism revenue by approximately $14 million.

A rural area with a significant tourism industry such as Chaffee County should consider the tradeoffs between preservation of natural resources and additional tourism development in future planning. The results of this study show that both residents and tourists to the area are willing to pay to preserve the area’s natural resources. Careful future planning should consider different options that may aid in this effort. Possible policy options available include zoning or other conservation initiatives. Funding for these conservation initiatives could be raised from a variety of taxes including sales taxes, a mill levy or lodging taxes. The economic information provided in this study can be used by area stakeholders and policymakers in order to determine the best most appropriate options for the Chaffee County community.

References


Acknowledgements

This research was financially supported by Chaffee County and the Colorado Conservation Trust. The authors would like to gratefully acknowledge Ellen Olson, Lee Rooks and Cara Russell for their support of this project, and the assistance of several individuals that helped with the survey implementation during the summer of 2007. Finally, we wish to thank all of the residents and visitors who participated in the survey.