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CHAPTER 3 AFFECTED ENVIRONMENT

3.3 CURRENT SOCIAL AND ECONOMIC CONDITIONS AND TRENDS

Provide a general, short introduction to these section, including applicable laws, requirements, and relevance in planning.

3.3.1 Overview of the Socioeconomic Study Area

3.3.2 General Economic Characteristics

3.3.3 Employment and Earnings by Industry

3.3.4 Value of Production

3.3.4.1 Energy and Minerals

3.3.4.2 Livestock

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3.3.4.4 Lands and Realty

3.3.4.5 Other Industries

3.3.4.6 Subsistence

3.3.5 Property Values

3.3.6 Public Finance and Government Services

3.3.6.1 Government Revenues from BLM lands

3.3.6.2 Government Expenditures, Public Infrastructure and Services

3.3.7 Social and Demographic Conditions

3.3.7.1 Demographic Conditions

1.1.1.1.1. Demographics for Moffat County

In 2005, Moffat County has a projected 13,560 residents, ranking it at about the median population of Colorado counties. In 2000, 9,189, or 70%, of the county's population resided in Craig, the county seat. From 1970 to 2002, Moffat County population grew by 6,897 people, a 106% increase in population, or 2.3% per year. Over that period, Moffat County's population growth rate has been faster than the state of Colorado and the United States. However, from 1990 to 2000, Moffat County grew by a steady 16.1% while Colorado boomed by 30.6%. Population

growth estimates from the Colorado Department of Local Affairs predict that the population of the county will grow by an average rate of 1.2% annually over the next 20 years. Population growth in the county does not appear to be sensitive to national booms and recessions, though it is sensitive to changes in the oil and gas industry.

Moffat County is relatively sparsely populated with a population density of 2.8 persons per square mile. By comparison, the state of Connecticut, which is similar in land area, has a population density of 679 persons per square mile and the state of Colorado has an average population density of 41.5 persons per square mile.

Moffat County is slightly less female than the rest of the state and the nation, having 48.1% of the county population is female, compared to 49.6% statewide and 51% nationwide. The leading industries in the county (e.g. agriculture, oil and gas) tend to be more male dominated, potentially explaining this difference. Ethnically, the county is overwhelmingly 'White, Non-Hispanic,' although there are important Hispanic and Asian populations in evidence. The correlation among ethnicity, race and income in Moffat County is discussed more in the Environmental Justice section.

According to the 2000 U.S. Census, 6.8% of the county's population is under 5 years old and 28.5% of the population is under 18 years old, slightly above the state level of 25.6%. The largest age category of county residents is ages 40 to 44 yrs. The fastest growing age category is 45-49 yr olds and the median age was 35.4 yrs in 2000, up from 31.9 in 1990. Of the county's total population, 23% was under the age of 15 yrs, 14% was 15 to 24 yrs, 29.9% was between 25 and 44 yrs, 23.8% was between 45 and 65 yrs, and 9.4% of the population was over the age of 65 yrs.

The 2000 Census indicates 79.6% of the population has a high school diploma, compared to 86.9% of the statewide population. Twelve and a half percent of the county has a bachelor's degree or higher, while 32.7% of the state's population has earned a bachelor's degree.

In 2000, Moffat County had 4,983 households in 5,635 housing units with an average of 2.58 people per household, somewhat higher than the state average. The home ownership rate in the county was 72.1% and 16.4% of the housing units were in multi-unit structures. Two-person households are the most frequently reported in the County, accounting for one third of all households. Single-person households account for 24% of the total, followed by three-person households (17%), four-person (16%), and households with five or more people (10%).

In summary, Moffat County's population is increasing at a moderate rate, is concentrated in Craig, is largely 'white, is growing somewhat older, is more male than average, and is somewhat less educated than average.

1.1.1.1.2. Demographics for Routt County

In 2005, Routt County has a projected 22,103 residents, ranking it above the median population of Colorado counties. In 2000, 9,815, or 50%, of the county's population resided in Steamboat Springs, the county seat. From 1970 to 2002, Routt County population grew by 13,635 people, a 202% increase in population, or 3.5% per year. Over that period, Routt County's population growth rate has been faster than the state of Colorado and the United States. However, from 1990 to 2000, Routt County continued to outpace the growth of Colorado, adding 40% to its population steady versus the quite sizable growth in Colorado of 30.6%. Population growth estimates from the Colorado Department of Local Affairs predict that the population of the county will grow by an average rate of 1.9% annually over the next 20 years. Population growth in the county does not appear to be sensitive to national booms and recessions, though it is sensitive to changes in the oil and gas industry.

Routt County is relatively sparsely populated with a population density of 8.0 persons per square mile. By comparison, the state of Connecticut, which is similar in land area, has a population density of 679 persons per square mile and the state of Colorado has an average population density of 41.5 persons per square mile.

Routt County is substantially less female than the rest of the state and the nation, having 46% of the county population being, compared to 49.6% statewide and 51% nationwide. The leading industries in the county (e.g. agriculture, oil and gas, and skiing) tend to be more male dominated, potentially explaining this difference. Ethnically, the county is overwhelmingly 'White, Non-Hispanic,' although there are important Hispanic and Asian populations in evidence. The correlation among ethnicity, race and income in Routt County is discussed more in the Environmental Justice section.

According to the 2000 U.S. Census, 5.5% of the county's population is under 5 years old and 22.6% of the population is under 18 years old, slightly lower than the state level of 25.6%. The largest age category of county residents is ages 45 to 49 yrs. The fastest growing age category is also the 45-49 yr olds and the median age was 35.0 yrs in 2000, up from 32.5 in 1990. Of the county's total population, 18.4% was under the age of 15 yrs, 14.4% was 15 to 24 yrs, 36.5% was between 25 and 44 yrs, 25.7% was between 45 and 65 yrs, and 5.0% of the population was over the age of 65 yrs.

The 2000 Census indicates 95.3% of the population has a high school diploma, compared to 86.9% of the statewide population. A relatively high 42.5% of the county has a bachelor's degree or higher, while 32.7% of the state's population has earned a bachelor's degree.

In 2000, Routt County had 4,983 households in 5,635 housing units with an average of 2.58 people per household, somewhat higher than the state average. The home ownership rate in the county was 72.1% and 16.4% of the housing units were in multi-unit structures. Two-person households are the most frequently reported in the County, accounting for one third of all households. Single-person households account for 24% of the total, followed by three-person households (17%), four-person (16%), and households with five or more people (10%).

In summary, Routt County's population is increasing at a moderate rate, is less concentrated in Steamboat Springs than Moffat County's is in Criag, is largely 'white, is growing somewhat older, is quite a bit more male than average, and is significantly more educated than average.

1.1.1.1.3. Social Conditions Related To Public Lands

In 2001, Moffat County, with the support and encouragement of its commissioners, engaged in a survey of attitudes and preferences for the use of federal public lands in the county. We conducted a two page mail survey of attitudes and uses of public lands among Moffat County residents. Survey respondents were asked about general and proposed changes in public lands within Moffat County, access, importance to the local economy, their current and projected uses of public lands, and their preferences for public lands in the county. In addition to an overall public perspective, we hypothesize that there may be at least four distinct groups of opinions on these matters: 1) Moffat County residents who own significant amounts of land; 2) Residents who do not own substantial acreages; 3) Nonresidents with acreage; and 4) Nonresident nonlandowners.

A survey was created and distributed to a total of 2,800 residents and non-residents of Moffat County, Colorado in order to elicit preferences for public lands management within the county. County landowners were identified through the county assessor's office. A list was purchased from a survey sampling company that listed addresses and telephone number of county residents. A master list was created that contained a total of more than 6,000 names once

duplicates were removed. Nonlandowners were randomly sampled. All landowners who own 100 acres or more (700 individuals) were included in the survey distribution, because they are such a small population in general.

Overall, a majority of respondents see federal lands as important the Moffat County economy and tax base. That said, they feel the best way to make use of these federal lands is with a multiple use management strategy. While the survey respondents do not generally want to see expansions to Dinosaur National Monument, creation of Vermillion National Monument, or designation of any additional BLM wilderness areas, if any of these proposals were to go through the respondents would like them to allow for multiple use activities such as grazing and oil/gas/mineral exploration and production. The desire for lands to permit grazing on federal lands goes hand in hand with the prominent role ranching plays in the county economy. Overall, there is no desire for any new land designations that would take away current land use practices.

Most statistical differences between means of the various respondent subgroups were not policy relevant. However, the few cases where it was important for policy were for both questions involving gas/oil/mineral exploration and production. There is potential for nonresident nonlandowners to switch from neutral to disagree for policies addressing gas/oil/mineral exploration and production in the proposed Vermillion National Monument, and for resident nonlandowners and nonresident landowners to switch from neutral to either disagree or agree for gas/oil/mineral exploration and production in additions to Dinosaur National Monument. This makes the case that multiple use is the preferred land planning strategy when it includes grazing and motorized recreation, but opinions diverge when it comes to multiple use involving gas/oil/mineral exploration and production. This issue is potentially more controversial.

In terms of public policy implications, particular attention must be paid to the relationship between landowners and nonlandowners. Landowners control the private land resources in the county and arguably have the most to gain or lose financially from policies affecting land use. Nonlandowners constitute the vast majority of local taxpayers and, probably, voters. As a result, local policy is likely to be driven by nonlandowners. When the preferences of these two groups are at cross purposes, local public policy concerns can be expected. However, as a group, resident nonlandowners were rarely in opposition to resident landowners on matters of land use covered in this survey, if perhaps less vociferous in their support or opposition to the various measures proposed. It would be wise to take the stances of the various stakeholder groups into consideration when evaluating the efficacy of potential incentive based or regulatory measures to guide local land use and economic development.

1.1.1.1.4. Social and Economic Perspectives on Hunting and fishing

An important dimension of the Moffat and Routt County economies that is significantly affected by BLM management decisions is the range of recreational activities in these counties. Ideally, BLM should systematically collect recreation visitor use data to capture the full range of these potential uses in the RMPPA. However, there was a reluctance expressed to rely on the BLM's recreation management information system data. We are nonetheless able to present several dimensions of the recreation activities. Despite this limitation, we present several dimensions in this section that come from the Colorado Division of Wildlife's survey results.

Hunting and Fishing

A recent report by BBC Consulting for the Colorado Division of Wildlife (CDOW) looked at the economic impacts of hunting and fishing in both Routt and Moffat counties. The first table below shows their calculations of direct expenditures in each of six categories of hunting and fishing

activities. The largest in both counties is elk hunting, followed by fishing. Fishing is quite a bit more important in Routt than in Moffat County. The values in Routt tend to be larger than those in Moffat. The secondary effects (multipliers through the economy) add about 75% to the direct expenditures in both counties. The last columns show the total values in Colorado for perspective, which indicates that the state in total derives much more revenue and economic activity from fishing than the hunting activity that is most important in the counties in the BLM Little snake RMPPA.

The second table shows how revenues are split between resident and non-resident. Once again, the values for Colorado are also provided for perspective. Moffat county revenues are very dependent on non-residents, with 81.6% of sales from these hunters. Routt County is similar but has about 10 percent more of its revenues from local hunters. These jurisdictions are still much higher than the overall state, which receives about half of its revenue from out of state hunters. The breakdown from the fishing and expenses by CDOW are similar in both counties and across the state, with about 65 percent of income from local fishermen.

Table 1: Expenditures in Hunting and Fishing, Moffat and Routt Counties, and all Colorado, 2004

	Moffat County		Routt County		Colorado	
	Thousands dollars	% of Direct Expenditures	Thousands dollars	% of Direct Expenditures	Thousands dollars	% of Direct Expenditures
Tot. Direct Expenditures	14,500	100%	23,600	100%	845,300	100%
Deer	2,420	17%	2,320	10%	54,600	6%
Elk	7,950	55%	10,540	45%	191,500	23%
Other Big game	120	1%	170	1%	6,600	1%
Small Game	1,510	10%	1,810	8%	85,100	10%
Fishing	2,160	15%	8,140	34%	458,700	54%
CDOW	570	4%	600	3%	48,800	6%
Indirect Expenditures	11,000	76%	18,300	78%	668,700	79%
Total	25,500		41,900		1,514,500	

Source: BBC Consulting

Locations	Hunting ('000 \$)				Fishing ('000 \$)				CDOW
	Residents	Non Residents	Residents (percent)	Non Residents (percent)	Residents	Non Residents	Residents (percent)	Non Residents (percent)	
Moffat County	3,790	16,780	18%	82%	2,500	1,360	65%	35%	1,080
Routt County	7,860	17,450	31%	69%	9,080	5,440	63%	37%	1,120
Colorado	286,180	317,080	47%	53%	553,990	266,030	68%	32%	91,190

The data presented above is not adequate for the purposes of our analysis, which requires that we be able to see these activities in terms of hunter and fisher days, rather than just totals. Therefore, we went to the CDOW database and constructed the number of hunter days in elk and deer hunting for 2004. These figures are contained below and indicate relatively equivalent numbers of hunters in both counties, with a somewhat larger number of days spent in Routt County by elk hunters.

Elk Hunting in Routt and Moffat Counties,
Harvest, Success Rate, Numbers of Hunters and Hunter days
2004

	Routt	Moffat	Total
Harvest	7,259	8,593	15,852
Hunters	23,031	18,989	42,021
Success rate	32	45	38
Hunter days	101,155	72,783	173,939

Deer Hunting in Routt and Moffat Counties,
Harvest, Success Rate, Numbers of Hunters and Hunter days
2004

	Routt	Moffat	Total
Harvest	3,192	5,269	8,462
Hunters	6,980	7,915	1,495
Success rate	46	67	57
Hunter days	27,801	26,699	54,499

1.1.1.1.5. Social and Economic Perspectives on other Recreation

The BLM does not systematically collect recreation visitor use data in the RMPPA. Therefore, the BLM is reluctant to rely on their recreation management information system (RMIS) data. This of course makes performing any quantitative analysis of recreation use, recreation impacts as well as an economic analysis of recreation difficult. Both regional economic analysis (e.g., jobs and county income) and economic value of recreation to visitors depends upon visitor use estimates. The data does not have to be perfect. That is the nature of estimates, whether of recreation or wildlife. Therefore we develop our own recreation use estimates below based on our limited sampling this summer and fall.

In the spirit that having some information quantitative information on the economic effects of recreation is better than treating it only qualitatively as is being done in the recreation section, CSU planned to conduct visitor counts and visitor intercept sampling during the summer and fall of 2005. Due to delays in completing the cooperative agreement with CSU, only limited sampling was possible during the summer and fall. This section reports on the inferences regarding recreation use and initial analysis of visitor expenditures based on surveys returned to date. Once all of the second mailing surveys are returned or our

cut-off date reached, the expenditure analysis will be updated and we will consider whether it is worthwhile to perform any statistical analysis of the economic value of recreation.

In consultation with the Little Snake Field Office, 15 recreation sites were identified to query visitors about their use. We also sampled at many (but not all of these). These sites are shown on map #?? That was given to visitors in the survey packet

[INSERT REC SITE MAP]

These sites are:

1. Cedar Mountain Picnic Area/Trailhead
2. Duffy Mountain Trailhead
3. Duffy Mountain River Access
4. West Juniper Mountain Trailhead & River Access
5. East Juniper Mountain Trailhead
6. Thornburg Draw Trailhead
7. South Cross Mountain Trailhead
8. East Cross Mountain River Access
9. West Cross Mountain River Access
10. Twelve Mile Mesa Trailhead
11. Bear Valley Trailhead
12. Irish Canyon Interpretive Site
13. Irish Canyon Campground
14. Rocky Reservoir Campground
15. Sand Wash Basin Entrance
16. Vermillion Falls (site not included on map).

Generally speaking many of those sites identified as trailheads are part of the Yampa Valley trail used for mountain biking, hiking, horseback riding and motorized use in some segments. To avoid conflicting with visitors recreation experience, on river access we tended to focus on take out points rather than put-ins. Several of the river access sites are administered jointly by BLM and the Colorado State Parks (e.g., Duffy Mountain River Access). Some areas such as West Juniper Mountain trailhead emphasizes non motorized recreation with hiking, horseback riding and mountain biking. This area was heavily used on the day we did our training as there were five tents and several vehicles.

Irish Canyon Interpretive Site consists primarily of a large petroglyph panel. The Irish Canyon Campground consists of seven sites and is a no fee site. Sandwash Basin is a major OHV area used by motorcycles and ATVs throughout the large basin.

Each interviewer would drive to the site and count vehicles when they arrived. Depending on the schedule, the interviewer would remain on-site for 2-3 hours (the amount of time on-site was recorded). If visitors appeared during this time, the interviewer would, introduce themselves as part of the CSU study, obtain commitment to take a mail-back survey package, and obtain the visitors name and address for our follow up mailings.

SAMPLING SCHEDULE

Due to lack of a cooperative agreement in force during the summer and early fall, only the following days were sampled:

Two interviewers for July 2, 3, and 4: Total surveys handed out were 14 surveys

One interviewer for September 3, 4 and 5th: Total surveys handed out were 7 surveys

One interviewer for October 7, 8th: Total surveys handed out were 9 surveys (with 5 of them filled out on site). It would be desirable to re-sample in the spring to have a more complete sample of visitors.

To date we have 20 surveys returned out of the 30 handed out. This represents a 66% response rate, a reasonably good one.

TABLE 1. LOCATIONS OF VISITORS

SITES	# OF INTERVIEWS	RESIDENCE OF VISITORS
Cedar Mountain Picnic Area/Trailhead	5	Craig
Duffy Mountain Trailhead		
Duffy Mountain River Access	3	Craig
East Juniper Mountain Trail & River Access	2	Craig/Hayden
West Juniper Mountain Trail & River Access		
Thornburg Draw Trailhead		
South Cross Mountain Trailhead		
East Cross Mountain River Access		
West Cross Mountain River Access & Twelve Mile Mesa Trailhead	3	Craig
Bear Valley Trailhead		Not sampled
Irish Canyon Interpretive Site	6	Craig, Rock Spgs, Green Riv
Irish Canyon Campground		
Rocky Reservoir Campground		
Sand Wash Basin Area	11	Craig

VISITOR USE ESTIMATION

To estimate visitor use we utilized the number of vehicles observed at the site and the number of surveys handed out (one to each group). This number was then expanded to all weekends and holidays over a six month season using reciprocal of the number of days sampled to the number of weekend days and holidays in a six month season. This assumes visitor use on non-holiday weekdays is essentially zero. We further expanded based on the hours sampled versus the hours the site was available for recreation. The resulting sample expansion factor was multiplied by the number of vehicles and surveys handed out. To convert vehicles to visitor days, we used the returned surveys that provided site specific estimates of annual number of trips, group size and average length of stay.

These estimates are based on small sample sizes thus provide an approximate estimate of use. We suspect that use is not zero at many sites estimated as zero, but it is low enough during the July through October time period that our coarse sampling time period did not observe any visitors. Sites with low use levels would have to be sampled more intensively to obtain an accurate estimate of use, but whether the sampling costs would be justified with such low use estimates is an open question.

Table 2 Estimated Number of Vehicles and Estimated Visitor Days

	Vehicles	Visitor Days
1. Cedar Mountain Picnic Area/Trailhead	503	68,416
2. Duffy Mountain Trailhead	0	0
3. Duffy Mountain River Access	551	4,400
4. West Juniper Mountain Trailhead & River Access	416	3,321
5. East Juniper Mountain Trailhead	126	1,009
6. Thornburg Draw Trailhead	0	0
7. South Cross Mountain Trailhead	0	0
8. East Cross Mountain River Access	N/A	
9-10. West Cross Mtn River Access & 12 Mile Mesa Trail	1,016	61,339
11. Bear Valley Trailhead	NA	
12. Irish Canyon Interpretive Site	648	2,303
13. Irish Canyon Campground	355	1,262
14. Rocky Reservoir Campground	158	562
15. Sand Wash Basin Entrance	1,837	161,000
16. Vermillion Falls (site not included on map).	0	0

NA means not sampled.

Table 3 Primary Recreation Activities at Each Site

Sites	Reported Recreation Activities
Cedar Mountain Picnic Area/Trailhead	Hiking, Picnicking
Duffy Mountain River Access	Rafting
East Juniper Mountain Trail & River Access	Rafting
West Juniper Mountain Trail & River Access	
West Cross Mountain River Access	Fishing, Hiking, Camping, Viewing
Twelve Mile Mesa Trailhead	Hiking, Biking
Irish Canyon Interpretive Site	Rockart, picnic, wildlife viewing
Sand Wash Basin Area	Motorcycles, ATV, Camping

TABLE 4. AVERAGE EXPENDITURES OF VISITORS

		Spent in Moffat/ Routt Counties	Cost	Total Trip Size	Group
Site 1	Cedar Mtn		\$3.00	\$3.00	1
	% Moffat & Routt		100%		
Site 3-4	Duffy/E Juniper	Average	\$170.00	\$198.33	2
	% Moffat & Routt		86%		
Site 9-10	West Cross& 12 Mile	Average	\$108.42	\$150.00	1.3
	% Moffat & Routt		72%		
Site 12	Irish Canyon	Average	\$58.67	\$76.33	1.7
	% Moffat & Routt		77%		
Site 15	Sand Wash	Average	\$114.47	\$156.88	1.3
	% Moffat & Routt		73%		

The Craig and Steamboat area appear to capture a sizeable portion of total visitor spending, with about three-fourths of total visitor spending having been made in Routt and Moffat counties.

This information may be used in the input output model to calculate income and employment related to recreation in the baseline assessment and in the No Action alternative in Chapter 4: Environmental Consequences.

3.3.8 Environmental Justice

Executive Order 12898, issued on February 11, 1994, requires the BLM is to identify and address as actions, leases, and authorizations that cause disproportionately high and adverse impacts to minority populations, low-income communities, and Tribes.

Definitions: There are four key terms and definitions used by BLM in its Instruction Memorandums to the field to interpret and implement this Executive Order.

- Environmental Justice - *The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.*
- Minority - *Individual(s) classified by OMB's Directive No. 15 as Black/African American, Hispanic, Asian and Pacific Islander, American Indian, Eskimo, Aleut, and other non-white persons.*
- Minority Population - *Minority populations are identified as either: (1) the minority population of the affected area exceeds 50 percent, or (2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.*
- Low-Income Population - *Persons living below the poverty level.*

Application to the RMPPA

Moffat and Routt counties have a relatively small proportion of the population that would be considered a minority compared to Colorado or the western U.S. Based on the table below about 8% of Moffat County and 2% of Routt County are Hispanic. Less than 1% of Moffat and Routt Counties are African American or American Indian or Asian American.

In terms of low income populations about 21% of Moffat county households earn less than \$20,000. This varies by race. Below the average are whites with 13% and zero percent for Asian Americans. Hispanics are just below the county average at 19% making below \$20,000. In contrast 100% of African American and 61% of Native American households make less than \$20,000. In Routt County about 14% of the county households earn less than \$20,000. White households are right at this average of 14%, while Native American households are actually below this average with just 9% making below \$20,000. Asian Americans have 18% of their households making \$20,000 or less. The percentage of Hispanic households making below \$20,000 is 19%, higher than the county average. About 44% of African American households make \$20,000 or less.

For the purposes of the later analysis of BLM management alternatives, the link between the income distributions given below and the economic impacts translated from the various outcomes of the alternatives needs to be understood in order to fully assess the issues related to environmental justice. The Census data below provides a good picture of the *household* distributions by race and ethnicity, but they do not indicate what *economic sectors* those households receive income from and therefore what the

actual impact on various groups from a change in management practice will be. Thus, if an alternative opens more land for oil and gas drilling, there will be an increased economic activity from that growth. This will lead to more wages earned that will be distributed across income and ethnicity in particular ways. A different scenario would lead to impacts across these groups in other proportions. At present, we can add to the income distribution picture below the added features of average wages across sectors. That shows a considerable range of wages earned by sector, running from \$10,198 in food service and accommodations to \$65,679 in utilities. Thus, different consequences of management alternatives will lead to different types of impacts on the jobs available and the associated wages, with resulting changes in the positions of different income and racial groups. To our knowledge, the exact translation of wages earned by sector of economic activity to income distribution does not exist in Census data, so we will need to make some assumptions in that regard. As we approach the analysis, we can get wage disruption from the State Demographer's Office, which will be a refinement of the table below contained average wages.

Income	Household Income in 1999, MoffatCounty, Colorado						
	Households						
	Total	African American	American Indian	Asian American	Other races	Hispanic	White
Total households:	5,155	12	18	12	200	419	4,494
Less than \$10,000	408	12	9	0	30	39	318
\$10,000 to \$14,999	297	0	0	0	22	41	234
\$15,000 to \$19,999	362	0	2	0	40	39	281
\$20,000 to \$24,999	291	0	0	0	11	30	250
\$25,000 to \$29,999	390	0	0	0	18	55	317
\$30,000 to \$34,999	415	0	0	8	24	49	334
\$35,000 to \$39,999	292	0	0	4	9	48	231
\$40,000 to \$44,999	489	0	0	0	20	33	436
\$45,000 to \$49,999	280	0	7	0	8	25	240
\$50,000 to \$59,999	522	0	0	0	18	28	476
\$60,000 to \$74,999	671	0	0	0	0	18	653
\$75,000 to \$99,999	596	0	0	0	0	14	582
\$100,000 to \$124,999	70	0	0	0	0	0	70
\$125,000 to \$149,999	34	0	0	0	0	0	34
\$150,000 to \$199,999	12	0	0	0	0	0	12
\$200,000 or more	26	0	0	0	0	0	26

Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

Variables

African American (P151.B). HOUSEHOLD INCOME IN 1999 (BLACK OR AFRICAN AMERICAN ALONE HOUSEHOLDER)
 American Indian P151C. HOUSEHOLD INCOME IN 1999 (AMERICAN INDIAN AND ALASKA NATIVE ALONE HOUSEHOLDER) [
 Asian American (P151D). HOUSEHOLD INCOME IN 1999 (ASIAN ALONE HOUSEHOLDER)
 Other Races (P151F And P151G). HOUSEHOLD INCOME IN 1999 (SOME OTHER RACE ALONE OR TWO OR MORE RACES AS HOUSEHOLDERS)
 Hispanic (P151H). HOUSEHOLD INCOME IN 1999 (HISPANIC OR LATINO HOUSEHOLDER)
 White (P151I). HOUSEHOLD INCOME IN 1999 (WHITE ALONE, NOT HISPANIC OR LATINO HOUSEHOLDER)

Household Income in 1999, Routt County, Colorado

Income	Households						
	Total	African American	American Indian	Asian American	Other races	Hispanic	White
Total households:	8497	9	43	44	81	183	8137
Less than \$10,000	360	2	2	8	8	10	330
\$10,000 to \$14,999	385	0	0	0	13	13	359
\$15,000 to \$19,999	461	2	2	0	4	12	441
\$20,000 to \$24,999	347	0	10	0	0	9	328
\$25,000 to \$29,999	403	0	0	0	9	6	388
\$30,000 to \$34,999	447	0	3	10	3	8	423
\$35,000 to \$39,999	501	0	3	0	3	14	481
\$40,000 to \$44,999	564	0	2	0	13	12	537
\$45,000 to \$49,999	472	0	8	0	1	9	454
\$50,000 to \$59,999	902	0	0	0	0	12	890
\$60,000 to \$74,999	1112	5	0	8	13	40	1046
\$75,000 to \$99,999	1238	0	11	18	5	22	1182
\$100,000 to \$124,999	535	0	2	0	7	2	524
\$125,000 to \$149,999	326	0	0	0	2	7	317
\$150,000 to \$199,999	192	0	0	0	0	7	185
\$200,000 or more	252	0	0	0	0	0	252

Data Set: Census 2000 Summary File 3 (SF 3) – Sample Data

Variables are:

African American (P151.B). HOUSEHOLD INCOME IN 1999 (BLACK OR AFRICAN AMERICAN ALONE HOUSEHOLDER)

American Indian P151C. HOUSEHOLD INCOME IN 1999 (AMERICAN INDIAN AND ALASKA NATIVE ALONE HOUSEHOLDER) [

Asian American (P151D). HOUSEHOLD INCOME IN 1999 (ASIAN ALONE HOUSEHOLDER)

Other Races (P151F And P151G). HOUSEHOLD INCOME IN 1999 (SOME OTHER RACE ALONE OR TWO OR MORE RACES AS HOUSEHOLDERS)

Hispanic (P151H). HOUSEHOLD INCOME IN 1999 (HISPANIC OR LATINO HOUSEHOLDER)

White (P151I). HOUSEHOLD INCOME IN 1999 (WHITE ALONE, NOT HISPANIC OR LATINO HOUSEHOLDER)

Table 2: Average Annual Wage by Industry, 2001 to 2003

	2001	2002	2003
Transformative	Adjusted to 2003 Dollars		
Agriculture & Ag Services	\$16,368	\$16,035	\$16,085
Construction	29735	27798	25812
Mining	54154	54581	54324
Manufacturing	31441	30090	30855
Distributive			
Utilities	61389	59205	65679
Transportation & Warehousing	33636	37754	37510
Wholesale Trade	31220	33283	34480
Retail Trade			
Motor Vehicle & Part Dealers	38040	32407	38835
Building Material & Garden Supply	19916	19803	24906
Food & Beverage	24622	25595	26274
All Other Retail	17285	17747	17806
Services			
Consumer			
Other Services	21103	21255	21468
Arts, Entertainment & Recreation	15015	14623	12935
Accommodations & Food Services	9491	9560	10198
Personal Services	15274	14519	13829
Professional			
Information	29677	29730	31621
Finance & Insurance	30548	31260	31351
Real Estate	31658	27560	31151
Professional & Technical	17756	18835	20058
Social			
Health	22480	25072	26391
Education	14369	14667	14667
Government	31347	31567	31845
County Average for All Industries	30659	31295	31919
Statewide Average for All Industries	39433	38878	38942

3.3.9 Place-based Values

Routt and Moffat County society demonstrates many features considered typical of the Intermountain West. The mix of public and private lands, of wild rivers, open meadows, alpine climes, wildlife and cattle, harsh winters and temperate, dry summers, help to create a human ecology as diverse as the natural environment that attracted it. The social fabric of the region is clearly rooted in the Old West, but substantially adapted to New West ideas and ideals. All are closely tied to the native and environmental features of the landscape

Directly or indirectly the county economy is based upon its natural resource base. Economies dominated by cattle and sheep ranching, timber extraction, oil and gas have increasingly given way to year round outdoor recreation (e.g., hunting, skiing, fishing, mountain biking, etc) and amenity migrants, including retirees, lone eagles and telecommuters. Directly, the Moffat economy is largely dependent on the base industries of mining and power generation while the Routt economy is now largely tourism driven. These base industries generate new dollars in the economy and fuel a growing service sector. Service and trade industries represent the fastest growing segments of the Moffat County economy and seem poised to continue their growth in the coming years. Another important generator of outside dollars is the large non-labor income generated from government transfer payments and retirement incomes. The growth of the service sector through tourism and retirees as engines of economic development are largely due to the richness of the natural resource base and rural lifestyle the region offers. Thus, the natural resource base indirectly drives the economic base in this case. The primary drivers of this economy may, therefore, be at crosspurposes.

Here you will see Carharts and cappuccinos, steak and sushi, shreaders and shearers, conservationists and cowboys, often in the same place and sometimes associated with the same person. The vast majority of the private lands are still held in traditional uses. However, substantial pressures to alter the landscape and the traditional way of life are ubiquitous. The somewhat uneasy evolution of these sometimes competing and sometimes coincident world views will shape the future of human and non-human ecology in the region through the foreseeable future. Economic development strategies for Moffat and Routt Counties must consider both private and public lands management alternatives and pay close attention to the direct, indirect, induced and the nonpecuniary costs and benefits of economic development alternatives. As such, any long term economic development plan for the county must take the role of mining, drilling, agriculture, outdoor recreation and amenity migrants into explicit consideration.

1.1.1.1.6. Current Perspectives on Agricultural Land Values

One topic that illustrates well the merging of issues and ideas between the Old West and the New West is attitudes on the preservation of agricultural lands. A recent MS thesis by Nicholas Magnin “The Value of Ranchland to Routt County residents, 1995-2005” is useful in this regard. The following discussion is taken from a summary of that work entitled “The Societal Value of Ranchland to Routt County residents, 1995-2005,” which can be found as Economic Development Report 05-01 at <http://dare.agsci.colostate.edu/csuaecon/extension/pubstools.htm>. This paper was written by Nicholas Magnan, Andrew Seidl, C.J. Mucklow, and Deborah Alpe. The substance of that summary follows:

Among the principal growth related concerns of Routt county residents is the conversion of privately held farms and ranches on large tracts of land into rural residential properties. Only the productive value of ranchland is fully captured in its market price. Other valuable features of ranchland are reflected indirectly in the market (e.g., viewscape, recreation). And for some very real and important values of ranchland (e.g., culture, environmental quality), market signals scarcely exist at all.

Consequently, the market will undervalue the contribution of ranchland to society and market transactions will result in less ranchland than would be socially desirable. Here, we estimate the non-productive benefits of Routt County ranchland that accrue to Routt County residents. We will use an economic valuation method called contingent valuation to replicate a study done in Routt County a decade ago. This estimate will contribute to our understanding of the implications of local land use change and policies on local residents. In August of 2004, surveys were sent to 1,074 registered voters and a return rate of 44% was obtained from the sample.

Survey approach. The survey used in this study is nearly identical Rosenberger (1996) and Rosenberger and Walsh (1997) in order to obtain data that allow for intertemporal comparisons for the value of ranch open space in Routt County. These studies confronted residents with a hypothetical referendum regarding ranch open space conservation. Residents were asked what the ideal amount of ranchland to conserve would be and if they would vote “yes” on a referendum to conserve that amount of ranchland. These questions were asked in that order to set up the CVM question that asked what dollar amount would be the highest they would have to pay and still vote “yes” on the referendum.

Summary of results

- Practically no change from 1994 to 2004 was observed concerning a referendum to protect ranch open space. In 1994, 96.5% of respondents said they would have voted “yes” on such a referendum at no cost to them. In 2004, 93.7% said they would. When the referendum would cost respondents at least \$1.00, 91.1% said they would have voted “yes” in 1994, 91.3% in 2004.
- Respondents in 1994 would be willing to pay a maximum of \$182.02 on average to protect local ranch open space through the county government. In 2004 the average WTP reported rose to \$220.38. The mean WTP for ranchland in and around Steamboat Springs rose from \$90.09 to \$119.41. The mean WTP for ranchland elsewhere in Routt County increased from \$94.68 to \$105.58. Residents were WTP more for conservation in the Steamboat Springs region in 2004 than they were in 1994, and at least as much in other areas in the county.
- The number of households in Routt County in 2004 was about 9,890. Using mean WTP values, the total annual benefit of ranch open space conservation to Routt residents was \$2,175,800 in 2004 or nearly three times the 2005 county program budget of \$748,000. Using the median values the total annual benefit of ranch open space conservation was \$989,000 in 2004. Over a 30 yr time horizon, the total value of ranchlands accruing to current Routt residents is approximately \$20-30 million.
- The 1994 and 2004 surveys both asked respondents to rate a series of natural and man made features of Routt County regarding their contribution to their wellbeing. The rank order of characteristic categories changed slightly from 1994 to 2004. In 1994 the highest rated characteristic categories were natural environment, ranch open space and recreation investments, followed by western ranch culture, community services and urban development. In 2004 the highest rated characteristics were natural environment, ranch open space and western heritage, followed by community services, recreation attributes and urban characteristics.
- The factors that increase residents’ likelihood of voting “yes” on a referendum to protect ranch open space at no cost were how important they felt the issue was (positively), the distance they live from ranchland (positively), their age (negatively until middle age, then positively), the number of years they have lived in the county (negatively), and if they come from an agricultural background (positively). The factors that influenced residents’ likelihood to vote “yes” on a referendum to protect ranch open space at a cost of at least \$1.00 are the how important they felt the issue was (positively), their income (positively),

their age (negatively until middle age then positively) and the number of years they have lived in the county (negatively).

- Residents' WTP to protect ranch open space were influenced by how important they felt the issue was (positively), the amount they wished to protect (positively), their incomes (positively), and whether they come from an agricultural background (positively). Ranch open space in and around Steamboat Springs was treated separately from ranch open space elsewhere in the county and residents were sensitive to these differences.
- From the comparative statistics and economic models it appears that income is the primary determinant of WTP. Of all the demographic changes occurring in Routt County, only income showed to influence WTP to protect ranch open space. Increasing income could mean more funds available to support conservation initiatives, but it is likely that land values will increase as well, causing additional pressure to develop.

3.3.10 Summary

3.4 REFERENCES

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