

APPENDIX T.

UTAH STATE UNIVERSITY STUDY RESULTS

T.1 UTAH PUBLIC LANDS STUDY – KEY SOCIAL SURVEY FINDINGS FOR GRAND AND SAN JUAN COUNTIES

A statewide social survey was conducted by Utah State University in 2007 to assess the ways in which Utah residents use and value public land resources, and their views about public land management. Random samples of residential households were selected in each of the state's 29 counties. Sampled households were contacted by mail, and a randomly-selected adult from the household was asked to participate in the survey. Self-completion questionnaires were distributed to potential survey participants using a multiple-wave survey administration procedure. The discussion that follows is focused on key survey results obtained for Grand County (n = 146 survey responses) and for San Juan County (n = 124 survey responses).

T.2 ECONOMIC LINKAGES TO PUBLIC LANDS

One major focus of the survey questionnaire involved assessment of the various ways in which Utahans' may engage in economic activities that are linked directly or indirectly to public land resources in the state.

T.2.1 PERMIT-BASED ECONOMIC ACTIVITIES

As indicated in Table 1, only a minority of survey respondents in either Grand or San Juan Counties reported that a portion of their household income is directly linked to activities that involve permitted uses of lands or resources administered by the U.S. Forest Service, the Bureau of Land Management (BLM), other federal agencies, or the State of Utah. In both counties permit-based economic activities on public lands were more commonly linked to lands administered by the BLM than lands administered by other agencies. In addition, the percentage of respondents indicating that some portion of their household incomes is derived from such permit-based activities was uniformly higher for each of the agency categories in San Juan County than was the case in Grand County.

Table 1. Percent of Survey Respondents Reporting that a Portion of Household Income is Directly Linked to Permitted Use of Public Lands or Resources

Agency	Grand County	San Juan County
Forest Service	4.1	13.9
BLM	11.0	18.9
Other federal agency	8.2	7.4
State of Utah	6.2	11.5
Number of cases	146	124

As indicated in Table 2, the percentage of respondents reporting these types of permit-based economic linkages to public lands who indicated that 25% or more of their total household income is derived from those activities was highest among Grand County respondents who reported use of BLM, other federal agency, and State-administered lands, and highest among San Juan County respondents who reported use of lands administered by federal agencies other than the Forest Service or BLM, or of lands administered by the State of Utah.

Table 2. Percent of Survey Respondents Reporting Permit-based Economic Activities on Public Lands who Indicated that 25% or More of Their Household Income is Derived From Those Activities

Agency	Grand County	San Juan County
Forest Service	16.7	23.5
BLM	50.0	29.2
Other Federal Agency	53.8	55.6
State of Utah	45.5	42.9

T.2.2 HOUSEHOLD PARTICIPATION IN SELECTED COMMERCIAL ACTIVITIES

The next series of questions asked respondents to indicate whether they or members of their households participate in any of a number of commercial activities that, while commonly associated with public land use, can involve the use of either public or private lands. Results summarized in Table 3 indicate that for any of these activities only a minority of survey respondents in either Grand County or San Juan County reported participation. Among Grand County respondents, the activities reported most frequently were operation of an outfitting or guiding business (9.7% of respondents), other miscellaneous commercial activities (5.2%), and mining of coal, uranium or other minerals (4.9%). In San Juan County participation was reported most frequently for livestock grazing and related work (20.2% of respondents), commercial firewood cutting (17.6%), logging and other timber-related work (11.8%), mining of coal, uranium or other minerals (10.1%), and oil and gas exploration or development (9.2%). On balance, these response patterns indicate that there is a substantially higher level of engagement in nearly all of these types of resource-based commercial activities among residents of San Juan County than is the case in Grand County.

Table 3. Percentage of Survey Respondents Reporting that They or Members of Their Households Participate in Selected Resource-based Commercial Activities, on Either Public or Private Lands

Economic Activity	Grand County	San Juan County
Livestock Grazing and Related Work	2.8	20.2
Commercial Firewood Cutting	1.4	17.6

Table 3. Percentage of Survey Respondents Reporting that They or Members of Their Households Participate in Selected Resource-based Commercial Activities, on Either Public or Private Lands

Economic Activity	Grand County	San Juan County
Logging, Post and Pole Cutting or other Timber-related Work	1.4	11.8
Mining of Coal, Uranium or Other Solid Minerals	4.9	8.5
Mining of Sand, Gravel, or Other Construction Materials	2.8	10.1
Oil and Gas Exploration and Development	2.8	9.2
Operating an Outfitting or Guiding Business	9.7	6.8
Film Making/Commercial Photography	3.5	5.9
Other Commercial Activities	5.2	3.5

T.2.3 HOUSEHOLD INVOLVEMENT IN BUSINESSES LINKED TO RECREATION/TOURISM

Survey respondents were also asked whether they or any member of their household operates or works at a business linked to recreation or tourism activity that is influenced by the presence of public lands and resources. Over one-third (38.5%) of Grand County respondents and over one-fourth (26.7%) of San Juan County respondents said “yes” to this question. When asked to assess how important activities and uses linked to public lands are to the success of this business, nearly two thirds (63.6%) of Grand County respondents and over one-half (53.1%) of San Juan County respondents who reported involvement in such businesses said that the influence of public lands is “extremely important.”

T.2.4 HOUSEHOLD INVOLVEMENT IN BUSINESSES LINKED TO COMMODITY PRODUCTION

A similar question asked about the involvement of survey participants and members of their households in business that provide services and supplies to farming or ranching operations, logging firms, or other commercial enterprises that use or process natural resources located on public lands. The percentage of respondents reporting participation by a household member in such businesses was considerably lower in Grand County (6.9%) than in San Juan County (15.7%).

T.2.5 OWNERSHIP OF PROPERTY OR ASSETS WITH VALUES INFLUENCED BY NEARBY PUBLIC LANDS

When asked whether they own land, buildings, or other assets that they believe have a monetary value that is significantly influenced by the presence and condition of nearby public lands, 55.2% of Grand County respondents and 40% of San Juan County respondents said “yes.” Those who did perceive the existence of such a relationship were then asked to identify specific types of assets that they own and that they believe have a value influenced by the close proximity of public lands. Respondents in both counties most frequently cited their residential property, (48.6% in Grand County, 27.4% in San Juan County). The only other types of asset identified by more than 10% of respondents in either county were undeveloped non-agricultural land (12.1% of respondents in San Juan County) and agricultural land (12.7% of respondents in San Juan County).

T.3 PERCEIVED IMPORTANCE OF PUBLIC LANDS FOR OVERALL QUALITY OF LIFE

Survey participants were also asked to report how important they think fifteen different types of public land resources and resource uses are for the overall quality of life experienced by people living in their communities. Table 4 summarizes response patterns to this series of questions for Grand and San Juan Counties, with a focus on the percentage of respondents from each county who indicated that they consider a particular type of resource use to be “very important” for local quality of life.

In Grand County six of the fifteen types of public land resource use presented in this question were considered “very important” by fewer than one-half of respondents (grazing of livestock, energy resource development, sand/gravel or other construction-related mineral development, timber production, opportunities to hunt, and opportunities to fish).

Table 4. Percentage of Survey Respondents Indicating that Selected Public Land Resource Uses are “Very Important” to the Overall Quality of Life in their Community

Resource Use	Grand County	San Juan County
Grazing of livestock on public lands	34.6	74.4
Water resources used to irrigate crops and pastures	64.0	89.8
Water resources used to supply homes and businesses	83.6	94.1
Water resources that provide important fish/wildlife habitat	82.0	76.9
Energy resources such as oil, gas, coal or uranium	48.2	72.0

Table 4. Percentage of Survey Respondents Indicating that Selected Public Land Resource Uses are “Very Important” to the Overall Quality of Life in their Community

Resource Use	Grand County	San Juan County
Sand, gravel or other minerals used in building and construction industries	28.8	53.0
Forested areas that provide timber used by logging operations and lumber mills	21.3	33.0
Areas where trees or other vegetation provide important wildlife habitat	73.9	74.4
Areas that attract tourism and recreational activity	78.8	61.0
Opportunities to enjoy off-road vehicles, snowmobiling, or other motorized recreation	62.1	70.3
Opportunities to enjoy hiking, backpacking, cross-country skiing, horseback riding, or other types of non-motorized recreation	74.3	65.3
Opportunities to hunt for wild game	41.3	66.6
Opportunities to fish in area lakes, streams and rivers	47.9	58.5
Undeveloped landscapes where motorized access and resource development are restricted	56.9	30.7
Areas managed to maintain biodiversity and protect habitat for sensitive or important plants or wildlife	54.4	28.1

At the same time, over three-fourths of Grand County respondents considered water resources used to supply homes and businesses, water resources used to supply fish and wildlife habitat, and the presence of areas that attract tourism and recreation activity to be “very important” to the local quality of life.

In San Juan County only three of these resource uses were considered “very important” by fewer than one-half of respondents (timber production, undeveloped landscapes where motorized access and resource development are restricted, and areas managed to maintain biodiversity and to protect habitat). Conversely, three resource uses -- water resources used to irrigate crops and pastures, water resources used to supply homes and businesses, and water resources used to provide important fish and wildlife habitat -- were considered “very important” to the local quality of life by more than three-fourths of San Juan County respondents.

T.4 RECREATIONAL USES OF PUBLIC LANDS

Survey participants were also asked to report whether they had participated in any of a broad range of outdoor recreation activities and other non-commodity use activities on Utah public lands during the prior twelve months. Results from this series of questions are reported in Table 5 and Table 6. These findings clearly indicate that there is widespread participation in many of these public land activities among residents of both Grand County and San Juan County.

Table 5 reports the extent of reported participation in thirty different outdoor recreation activities. Among survey participants living in Grand County, more than one-half reported participation in camping, picnicking, day hiking, wildlife viewing, visiting historical sites, 4-wheel driving, and driving for pleasure/sightseeing on public lands during the preceding twelve months. In San Juan County over half of respondents reported that they had participated in camping, picnicking, day hiking, wildlife viewing, hunting, fishing, visiting historical sites, , ATV riding, 4-wheel driving, and driving for pleasure/sightseeing.

Responses to a question focusing on participation in a variety of non-commodity use activities on public lands are summarized in Table 6. Among this list of activities, Grand County respondents were most likely to report that they participate in collection of rocks for home landscaping and collecting fossils, rocks or other minerals from public land areas. In San Juan County, respondents most frequently reported that they collect firewood for home use, collect rocks for home landscaping, and gather pinyon nuts from public lands.

Respondents were also asked to identify the one or two activities from the lists presented in these questions that they participate in most often, and to provide detail on where they engage in those activities. Among Grand County respondents the first of these activities listed by respondents most often involved day hiking (27.8% of responses) or camping (18.8% of responses). In San Juan County the first listed activity most often involved ATV riding (21.2% of responses), camping (13.6%), day hiking (12.7%) or hunting (11.9%). When asked to indicate where they participate in the first-listed of their “most frequently pursued” activities, 81.8% of Grand County respondents and 97.5% of San Juan County residents identified a location within the county where they live.

Table 5. Percentage of Survey Respondents Reporting Participation in Selected Recreation Activities on Utah Public Lands During the Past Twelve Months

Activity	Grand County	San Juan County
Camping	67.4	72.7
Picnicking	77.1	84.4
Backpacking	30.4	29.6
Day hiking	72.4	70.0
Bird watching	35.8	37.2
Wildlife viewing	67.4	80.2
Nature photography	42.3	41.2
Canoeing/kayaking	23.5	10.8
River rafting	33.1	9.1
Motor boating	19.4	20.4
Jet skiing	5.9	8.2
Swimming	39.0	36.3
Rock climbing	18.4	21.4
Mountain climbing	22.2	22.8
Hang gliding	0.0	0.0
Mountain bike riding	33.3	17.7
Hunting	25.0	55.1
Fishing	43.3	50.4
Horseback riding	15.6	33.0
Orienteering/geo-caching	7.5	15.7
Rock hounding	39.3	33.6
Visiting historical sites	62.9	68.9
Resort skiing/snowboarding	7.5	3.7
Backcountry skiing/snowboarding	19.1	4.6
Snowshoeing	9.6	4.5
Snowmobiling	7.4	8.9
ATV riding	29.5	65.0
Dirt bike riding	16.5	20.4
4-wheel driving/jeeping	51.1	60.2
Sightseeing/pleasure driving	83.2	87.9

Table 6. Percentage of Survey Respondents Reporting Participation in Selected Non-commodity use Activities on Utah Public Lands During the Past Twelve Months

Activity	Grand County	San Juan County
Collecting firewood for home use	25.9	4.75
Cutting Christmas trees	19.9	29.4
Collecting material for craft projects	22.0	29.1
Collecting rocks for home landscaping	42.7	46.6
Collecting plants for home landscaping	12.1	20.0
Gathering wild mushrooms	7.9	4.5
Gathering pinyon nuts	13.6	47.5
Gathering berries, herbs or wild foods	15.0	13.4
Collecting fossils, rocks or minerals	34.7	28.0

T.5 ATTITUDES AND PREFERENCES REGARDING PUBLIC LAND MANAGEMENT

Two similar sets of survey questions focused on respondents' attitudes and preferences regarding the extent to which various natural resource use activities or management practices should be reduced or increased by those responsible for managing public lands in Utah. Response patterns to these questions are summarized in Table 7 and Table 8.

The data presented in Table 7 indicate that Grand County respondents were considerably more likely to prefer an increase rather than a decrease in protection of important fish and wildlife habitat, protection of endangered species, use of controlled burns to improve ecological conditions, thinning of forested areas to reduce wildfire risk, designation of wild and scenic rivers, and development of water storage and delivery systems on Utah public lands. They were also more likely to prefer a reduction in timber harvest levels and in livestock grazing levels. On the other hand, attitudes were more evenly split between preferences for reducing and preferences for increasing mineral exploration/extraction and for designation of wilderness areas.

Among San Juan County residents respondents were more likely to prefer an increase rather than a decrease in mineral exploration/extraction, timber harvest, oil and gas development, protection of fish and wildlife habitat, use of controlled burns to improve ecological conditions, livestock grazing, and development of water storage and delivery systems. They also expressed a strong preference for a reduction in the designation of wilderness areas, and were more likely to prefer a reduction as opposed to an increase in designation of wild and scenic rivers.

Results summarized in Table 8 indicate that Grand County respondents were more likely to prefer an increase rather than a reduction in permitting of commercial guiding or outfitter services, provision of road access to recreation areas, provision of hunting opportunities, development of trails for non-motorized recreation, regulations that restrict motorized vehicles to designated trails, and regulations to limit noise and emissions from snowmobiles and ATVs.

More evenly mixed attitudes were evident with respect to development of trails for off-highway motorized recreation, and for development of visitor facilities to increase tourism. In San Juan County, respondents were far more likely to prefer an increase rather than a decrease in provision of road access to recreation areas, provision of hunting opportunities, development of trails for off-highway motorized recreation, and development of trails for non-motorized recreation.

Table 7. Survey Respondents' Attitudes Regarding the Extent to Which Various Activities Occurring on Utah Public Land Should be Reduced or Increased*

Type of Use/ Activity	Grand County		San Juan	
	Reduce (%)	Increase (%)	Reduce (%)	Increase (%)
Mineral exploration/extraction	28.5	37.2	17.2	58.7
Timber harvest	37.4	15.2	15.8	47.4
Designation of wilderness areas	34.3	33.6	63.9	15.1
Exploration for/development of oil and gas resources	33.8	41.2	15.5	53.5
Protection of important fish and wildlife habitat	6.6	61.4	13.7	41.9
Protection of endangered species	17.4	50.7	30.8	26.5
Use of controlled burns to improve ecological conditions	13.8	48.7	13.4	46.4
Thinning of forested areas to reduce wildfire risk	15.1	52.3	5.3	60.2
Livestock grazing	36.2	23.9	13.8	39.6
Designation of wild and scenic rivers	18.4	40.4	32.1	17.5
Developing water storage and delivery systems to meet needs of nearby communities	11.9	63.5	1.7	86.4

* Original response categories were "major reduction" and "moderate reduction" (combined to create "reduce") and "major increase" and "minor increase" (combined to create "increase"). "Stay about the same" responses not reported here.

Table 8. Survey Respondents' Attitudes Regarding the Extent to Which the Emphasis Placed on Various Activities Occurring on Utah Public Land Should be Reduced or Increased by Public Land Managers*

Type of Use/ Activity	Grand County		San Juan	
	Reduce (%)	Increase (%)	Reduce (%)	Increase (%)
Permitting of commercial guiding or outfitter services	12.8	21.2	22.5	21.6
Providing road access to recreation areas	19.7	33.1	11.7	61.7
Providing hunting opportunities	17.9	27.2	10.2	50.8
Developing trails for off-highway motorized recreation	28.4	34.1	15.3	61.0
Developing trails for hiking, biking, and other non-motorized recreation	7.1	53.9	12.0	46.1
Regulations that require motorized vehicles to stay on designated trails	10.6	62.0	26.3	37.3
Regulations that limit levels of noise and emissions from snowmobiles and ATVs	10.1	59.0	33.3	26.5
Developing visitor facilities to increase tourism	21.4	35.0	20.9	32.2

* Original response categories were "major reduction" and "moderate reduction" (combined to create "reduce") and "major increase" and "minor increase" (combined to create "increase"). "Stay about the same" responses not reported here.