

Economic and Cultural Report on Livestock Grazing

in

The Grand Staircase Escalante National Monument

to

The Kane County Board of Commissioners

Executive Summary

To determine the economic impact of livestock grazing in the Grand Staircase Escalante National Monument(GSENM), Utah State University Extension and Economic Associates of Utah, Inc. developed a survey to gather information from livestock grazing permit holders. Data from the completed surveys were used in developing revenue models of livestock grazing on GSENM. The output from the revenue models was analyzed for the economic impacts in the Garfield-Kane Counties Economic Region using the input-output model IMPLAN developed by Minnesota IMPLAN Group, Inc

The results of the analysis of the surveys and the economic models show:

- (1) Livestock grazing on GSENM is essential to the ranching industry in the Garfield-Kane Counties Economic Region;
- (2) Ranching is a highly valued culture in the Region. It is the base of many community activities and traditions. It also provides social and cultural stability to communities in the Region;
- (3) Ranching is an important part of diversifying the economy of the Region;
- (4) Tourism cannot replace livestock grazing in the GSENM without substantial investments by GSENM, local governments, and the private sector into new tourist support infrastructures and services; and
- (5) GSENM is a multiuse National Monument with many defined missions in the proclamation including, livestock grazing and science research, which can include rangeland restoration and range management research at an allotment scale.

Recommendation: Garfield-Kane Counties should propose an active management alternative livestock grazing plan for the GSENM Grazing EIS that:

- (1) Provides for the activation of all suspended AUMS in the GSENM;
- (2) Provides for flexibility in managing timing and placement of cattle within allotments;
- (3) Provides for restoration of rangelands to promote rangeland health and sustainability;
- (4) Provides for large scale science research on rangeland restoration
- (5) Provides for allotment-scale science research with integrated range management;
- (6) Provides for reseeding using appropriate grasses, forbs, and shrub species;
- (7) Provides for watershed development by removal of invading woody species that create risky biological monocultures;
- (8) Provides for development, improvement and maintenance of water facilities; and
- (9) Provides for the multiple-use aspects of the monument proclamation i.e. it is not to be managed as a national wilderness.

Survey

Utah State University Extension and Economic Associates of Utah, Inc. developed a detailed survey to gather information from Grand Staircase Escalante National Monument (GSENM) livestock grazing permit holder on their operations. The purpose of the survey is to determine the importance of livestock grazing on GSENM to their operation and to determine how they utilize the Animal Unit Months (AUMS) of the permits in the operations.

The survey covered livestock and economic data for the individual permit holders. To assure confidentiality of the individual permit holders operations, Utah Sate University Extension distributed and collected the surveys and Economic Associates of Utah, Inc. compiled the survey data into spreadsheets and documents for analysis and summary without knowledge of which permit holders completed which surveys. At the time of this report approximately forty percent (40%) of the surveys had been returned to the Extension Office and forwarded to Economic Associates of Utah, Inc.

Summary of Survey Results

The Grand Staircase Escalante National Monument provided 35.94% of the AUMS for permit holders' ranching operations. Other BLM permits provide 8.22% of AUMS. The Glen Canyon National Recreation Area supplied only 3.56% of the AUMS. The Forest Service provided 20.31% of the necessary AUMS. State Lands contribute 0.89% of the AUMS. Private Native Rangelands provide 8.70% of the AUMS needed by permit holders. Private Improved Rangelands provide 1.70% of the AUMS. Irrigated pastures contribute 5.90% of the AUMS. Feeding hay and all other sources of AUMS contribute 14.77% of the needed AUMS annually.

Brood Cows consume 86.19% of all AUMS. Replacement Heifers use 9.17% and Bulls use 4.64% of the total AUMS.

GSENM permit holders who rent or lease livestock grazing allotment(s) from others permit holders account for only 16.13% of permit holders. Because, the question did not specify the location of the leased permits, it is impossible to determine if these lease or rental agreements are for permits within GSENM.

Permit holders are dependent upon their GSENM permits. One hundred percent of permit holders said there is no cost effective way to replace their GSENM AUMS. Seventy nine (79.31%) percent said they could not reduce the size of their operation to their private property and survive. Seventy two (72.24%) percent stated they would be out of ranching. The difference between the two numbers is that some indicated that they would move to another location to continue ranching.

Nearly sixty two (61.90%) said they would need to sell the private holdings to developers. Sixty two and one half percent (62.5%) said they would need to find off-ranch work if they were not already working off-ranch. Most of the others said they would retire in place of finding off-ranch work.

Most permit holders have hiking trails or other recreational uses within their allotment(s) (93.35%). The typical problems with recreational use were (1) gates left open; (2) trash; and (3) damaged property. Many were not having any serious trouble with recreational users. A number of the permit holders said that recreational users enjoyed watching them “work the cattle”.

The permit holders that indicated the Wilderness Study Areas were part of their allotment(s) said that limited access is the major affect on their operations, so far. But that encroachment by Pinion-Juniper is becoming a major problem for the future.

GSENM permit holders stated that there are a number of projects that are needed to improve their allotment(s). Reseeding is needed on 74.19% of allotments. Fencing is needed on 67.74% of allotments. Water development projects are needed on 93.55% of allotments. Thinning woody plants is needed on 70.97% of allotments. A flexible livestock grazing plan is needed for 64.52 % of allotments. With these improvements, the AUMS are estimated to increase by an average of 88.41%.

Ranching culture within the GSENM is long and extensive. Many families have ranched there for 100 years or more (44.82%). Five and six generations have ranched in the same areas, long before there was a BLM or Monument. Another 19.23% have ranched over 50 years. Only 34.48% have ranched within GSENM for less than 50 years. Ranching is a big part of the culture of the Kane and Garfield Economic Region.

GSENM Livestock grazing Economic Impact on Garfield-Kane Counties Economic Region.

Two economic models were developed to estimate revenues from livestock grazing within GSENM. The first model was used to estimate revenues generated from the Active AUMS in GSENM permits. The second model was used to estimate the revenues that would be generated if the Suspended AUMS were to be restored to the permits. (Printouts from the models are in Appendix I)

Primary data from the completed surveys were used in both models. Average percent of weaned calves to brood cows, average brood cow death rates, brood cow culling rates, average bull culling rates, average replacement heifer culling rates, average replacement heifer death rates, average price for steers calves, average price for heifer calves sold, average price for cull brood cows sold, average price of culled bull sold and other relevant data were used in the models.

The model for Active AUMS treated the livestock grazing operation as a single ranching operation including all Active AUMS for the livestock grazing allotments within the GSENM, without regard to whether cattle were actually utilizing all AUMS. Since the GSENM livestock grazing permits are essential to most of the ranching operations, all revenues generated on the ranches are dependent utilization of the GSENM AUMS. Without GSENM AUMS no revenues for most ranches would be generated. Imposing an economic loss to both ranchers and Garfield-Kane Counties Economic Region. The models for both Active and Suspended AUMS used the same methodology.

The revenues estimated in both models were use in the Garfield-Kane Counties Economic Region IMPLAN models for impact analysis. IMPLAN v3 is an input-output model developed by Minnesota IMPLAN Group, Inc. This model is commonly used by Federal, State, and Local Governments to determine the economic impacts of various public policies, public investments, and private economic activities. The BLM is one of the Federal Agencies that use IMPLAN on a continuing basis. (Printouts from IMPLAN models are found in Appendix II)

Summary of Economic Impact of Livestock grazing on GSENM

GSENM AUMS are used during the times when other livestock grazing AUMS are not available. Therefore, all revenues are dependent on utilizing GSENM livestock grazing permits. The Revenue Model for Active GSENM AUMS estimated that \$11,929,380.75 was generated from utilizing GSENM AUMS when all Active AUMS were available. When this revenue is put into the IMPLAN Model the results are summarized below.

ACTIVE AUMS

**Impact
Summary**

*Copyright 2014 Minnesota IMPLAN Group, Inc.

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	111.3	\$974,174.2	\$2,087,184.9	\$11,929,380.9
Indirect Effect	90.0	\$1,053,293.6	\$3,120,590.5	\$10,703,373.4
Induced Effect	6.7	\$195,407.0	\$501,394.0	\$810,118.6
Total Effect	208.0	\$2,222,874.9	\$5,709,169.4	\$23,442,872.9

Active GSENM livestock grazing permits have the following estimated benefits to the Garfield-Kane Counties Economic Region: Two hundred and eight (208) people are employed generating \$2,223,000 in labor income. \$5,709,000 in total value added production is added to the Garfield-Kane Counties Economic Region because of utilizing the GSENM livestock grazing allotments. The total output affect of the Active GSENM AUMS is \$23,443,000.

The revenue model for Active and Suspended GSENM AUMS estimated that \$16,561,052.32 was generated from utilizing GSENM AUMS of both Active and Suspended AUMS if all were available. When this revenue is put into the IMPLAN Model, the results are summarized below:

Impact Summary

Copyright 2014 Minnesota IMPLAN Group, Inc.

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	154.5	\$1,352,404.7	\$2,897,550.1	\$16,561,052.5
Indirect Effect	124.9	\$1,462,242.8	\$4,332,183.2	\$14,859,038.5
Induced Effect	9.3	\$271,275.2	\$696,064.0	\$1,124,653.2
Total Effect	288.7	\$3,085,922.7	\$7,925,797.3	\$32,544,744.2

The Suspended GSENM AUMS cost the Garfield-Kane Counties Economic Region 81 jobs, \$863,049 in lost labor income, \$2,216,628 in lost total value added, and \$9,101,801 in lost output.

These lost economic values reduce the quality of life for the people who live and work in the Garfield-Kane economic region.

Evaluation of Tourism as Replacement for GSENM Livestock grazing Allotments.

From the time President Theodore Roosevelt “liberally interpreted the 1906 Antiquities Act when he established by proclamation the 1,279-square-mile area Grand Canyon National Monument in 1908.”(National Park Service Administrative History of the Grand Canyon National Park) tourist activities and livestock grazing have compatibly been part of Garfield-Kane Counties Economic Region.

Rancher are an important part of the public safety and rescue elements within GSENM. They provide directions and assist lost tourist. GPS systems often lead tourist to places and circumstances they cannot get out of on their own. Rancher report and monitor activities within GSENM that would otherwise go unreported and the therefore unknown to GSENM personnel for long periods.

Some tourists and others oppose livestock grazing. Others tourist and individuals support livestock grazing. Many tourist from foreign countries state that see cowboys and cattle on the open range in the American West is the highlight of their trip to America. Rancher report that when tourist see them “working cattle” they take many pictures to record their experience.

Replacing the \$11,929,380.75 in revenues generated for the Active GSENM allotment AUMS with tourist spending requires: (1) A major shift from “windshield tourism” and tour bus accommodations to active destination tourism utilizing the resources found within GSENM.

These resources include, but are not limited to, Archaeology, Paleontology, Geology, Biology, Scenic Views and Vistas, Cultural Sites and Folklore, and Motorized Recreation; and (2) The Garfield-Kane Counties Economic Region governments and the GSENM will need to invest limited budgets, resources and personnel on public safety and resource management issues on a greater scale than current resources permit. New economic sources and additional personnel will need to be developed.

With an interior GSENM tourism focus replacing the Active GSENM AUMS, when all AUMS are utilized, is analyzed in the following model. Destination tourist might spend \$200 each per day. \$200 divided into \$11,929,380 means that 59,647 visitor days are required to generate the same revenue as the livestock grazing allotments. Prime tourist days in the Garfield-Kane Counties Economic Region are approximately 120 days. That means 497 tourists per day must be fed, housed, and have a quality vacation experience. With an average of 2 people per motel room, it would require 249 new rooms to maintain the current service level. Local governments in some communities will need to upgrade water systems, sewer systems, streets, and public safety and emergency facilities and equipment. These needed upgrades require substantial public investment, which must be coupled with private investment in tourism supporting facilities, equipment, and programs. Credit in Garfield-Kane Counties Economic Region is asset-based and requires cash-flow to cover all expenses within a short period of time. This results in limited opportunities for current residents to fill tourist needs. Outside capital and management would need to be recruited to fill the needs.

If tourism was to be used to replace both the Active and Suspended GSENM AUMS the challenges are even greater, It would take 82,805 tourist days, 345 more motel rooms, etc. to replace the \$16,561,052 from livestock grazing.

The Total Impact Multipliers for Direct, Indirect and Induced are: Cattle Ranching 1.957599; Hotel and Motels 1.343255; Food Services and Drinking Places 1.305925; Gasoline Stations 1.321562; Retail 1.303830.

Cattle ranching's Total Multiplier is 45.74% larger than the highest tourist related multiplier.

Conclusions and Recommendations

Replacing livestock grazing on the GSENM with revenues would require substantial investment by the GSENM, local governments, and the private sector. The type of tourism would need to be changed to include destination tourism to use the resources and values of GSENM to sustain the economy of the Garfield-Kane Counties Region.

Tourist visitations in the Garfield-Kane Economic Region are dependent upon fuel cost, income levels, and exchange rate. Therefore, tourist visitations are variable.

Limiting or removing livestock grazing and replacing with tourism changes the culture, heritage and values of the Region.

The economic sustainability of the Garfield-Kane Counties Economic Region is greatly weakened if GSENM livestock grazing allotments are lost by removing an industry, its supporting industries, and reducing the economic diversity of the Region.

Ranching families provide year around stability to communities that have a relatively high population turnover rate.

Ranching has fewer impacts on public safety, emergency, and other public infrastructure resources than tourism.

Therefore, Garfield-Kane Counties Economic Region local governments and citizens should vigorously oppose any livestock grazing plan that reduces or eliminates livestock grazing in GSENM.

Garfield-Kane Counties Economic Regional local governments and citizens should propose an alternative that:

- (1) Provides for the activation of all suspended AUMS in the GSENM;
- (2) Provides for flexibility in managing timing and placement of cattle within allotments;
- (3) Provides for restoration of rangelands to promote rangeland health and sustainability,
- (4) Provides for large scale science research in rangeland restoration;
- (5) Provides for allotment-scale science research with integrated range management;
- (6) Provides for reseeding using appropriate grasses, forbs, and shrub species;
- (7) Provides for watershed development by removal of invading woody species that create risky biological monocultures;
- (8) Provides for development and maintenance of water facilities; and
- (9) Provides for the multiple-use aspects of the monument proclamation, i.e. it is not to be managed as a national wilderness.

Appendix I

Revenue Models

Appendix II

IMPLAN Models