KANE COUNTY RESOLUTION NO. 2015 - 5

A RESOLUTION AMENDING THE KANE COUNTY RESOURCE MANAGEMENT PLAN

WHEREAS, Kane County has previously adopted a comprehensive, long-range general plan, pursuant to Utah Code §17-27a-401;

WHEREAS, Kane County has also adopted, as part of its overall general plan under separate cover, the Kane County Resource Management Plan, in order to address the (1) "present and future needs of the county," and (2) "growth and development of all or any part of the land within the unincorporated portions of the county;"

WHEREAS, as part of the Kane County Resource Management Plan, Kane County has addressed aspects of the health, general welfare, safety, transportation, prosperity, civic activities, recreational and cultural activities, and the efficient economic use of the land within the unincorporated portions of the county;

WHEREAS, as part of the Kane County Resource Management Plan, Kane County has addressed the "local customs, local culture, and the components necessary for the county's economic stability;"

WHEREAS, the Kane County Planning Commission and the Kane County Board of Commissioners desire to updated and clarify the Kane County Resource Management Plan;

WHEREAS, the Kane County Planning Commission, after a duly noticed public hearing, held March 11, 2015, recommended for approval the amendments to the Kane County Resource Management Plan;

WHEREAS, both the Kane County Planning Commission and Kane County Board of Commissioners desire to implement the recommended changes;

WHEREAS, the Kane County Board of Commissioners, in a duly noticed public meeting, received the recommended amendments to the Kane County Resource Management Plan and desires to enact the recommendations;

NOW THEREFORE, BE IT RESOLVED BY THE KANE COUNTY BOARD OF COMMISSIONERS, IN AND FOR KANE COUNTY, STATE OF UTAH, AS FOLLOWS:

The Kane County Resource Management Plan shall be amended pursuant to the changes outlined in the attached copy of the Resource Management Plan.

This resolution and the corresponding changes to the Kane County Resource Management Plan shall be effective immediately upon passage. A copy of this resolution shall be deposited in the Office of the County Clerk and the County Clerk is ordered to publish a short summary of the resolution with the name of the members voting for and against the resolution, together with a

statement that a complete copy of the resolution is available at the Office of the County Clerk, for at least one publication in a newspaper of general circulation in the county.

ADOPTED this 23rd day of March, 2015.

_____
DOUG HEATON, Chair
Board of Commissioners
Kane County

ATTEST:

_____
KARLA JOHNSON
Kane County Clerk/Auditor

Commissioner Clayson voted ____
Commissioner Matson voted ____
Commissioner Heaton voted ____

KANE COUNTY, UTAH
RESOURCE MANAGEMENT PLAN

For the Physical Development of the
Unincorporated Area

Pursuant to Section 17-27a-401 of the Utah Code

AMENDED March 23, 2015

Should any part of the Kane County Resource Management Plan be determined invalid, no longer applicable or need modification, those changes shall affect only those parts of the Plan that are deleted, invalidated or modified and shall have no effect on the remainder of the Resource Management Plan.

Acknowledgments

Every effective planning process includes a multitude of individuals if it is to be successful. This effort is no different. Many individuals have had an impact upon the preparation and adoption of this Plan. However, most important are the residents of Kane County, who have responded to surveys, interviews, and attended public meetings and hearings. All who did so should be commended for their desire to be a participant in determining the future of Kane County. Some specific individuals and groups have had intensive involvement in the Kane County planning process, and are acknowledged below:

Kane County Commission
Doug Heaton, Chairman
Dirk Clayson
Jim Matson

Kane County Land Use Authority
Tony Chelewski, Chairman
Roger Chamberlain
Wade Heaton
Robert Houston
Harold Hamblin
Dale Spencer
Dale Clarkson

Kane County Staff
Shannon McBride, Land Use Administrator
Mary Reynolds, Land Use Assistant
Karla Johnson, County Clerk/Auditor
Robert Van Dyke, Kane County Attorney
Linda Little, Kane County Assessor/Building Official
Ryan Maddux, Kane County Chief Deputy Assessor/Building Department Supervisor
Kent A. Burggraaf, Deputy County Attorney

Kane County Resource Development Committee
Jim Matson, *Ex officio*
Marty Ott. Chairman
Byard Kershaw
Charlie Saba
Bob Wallen
Tony Wright
Bill May

Resource Development Steering Committee
Douglas Heaton, Kane County Commission
Jim Matson, Kane County Commission
Karla Johnson, Kane County Clerk/Auditor
Linda Little, Kane County Assessor
Harold Hamblin, Chairman
Shannon McBride, Land Use Administrator
Lou Pratt, Kane County GIS
Kent Burggraaf, Deputy County Attorney
Byard Kershaw
Todd Phillips/Jill Phillips
Margaret Byfield
Dan Byfield
Randall Violet
Durant McArthur, PhD.
Gilbert D. Miller, PhD
Kevin Heaton, USU Extension
Dell LeFevre
Mary Reynolds
LaMar Smith
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Section One
Preamble

A. Customs and Culture of Kane County, Utah

Kane County is a huge natural resource-oriented county. Isolated geography, a semi-arid climate, sparse vegetation, and rugged terrain kept both Native American and pioneer settlements relatively small. Experienced desert colonizers of the Mormon faith found homesteading to be very difficult, resulting in most of the land base remaining under public management. Early Mormon settlements were centered on limited irrigated croplands near reliable water sources that supported sheep and cattle ranching. From the first pioneering efforts in the early 1860s to the present day, ranching has been important to the people who settled and now live in Kane County. The objects and values gleaned from these early Kane County pioneers are essential elements of Kane County's economy and culture.

1. Historical Perspective

Native Americans inhabited Kane County for thousands of years prior to European contact. Nomadic hunter-gatherers passed through the area as they traveled to the nearby plateaus to hunt. The first semi-permanent settlement of the area was undertaken by the Anasazi or Ancestral Puebloans around the birth of Christ. About the same time the Fremont culture established semi-permanent settlements in the Long Valley area. These groups left the area in approximately 1300 A.D. Most researchers believe the movement was caused by a combination of drought and raids by other Native Americans. Paiute, Navajo, and Hopi tribes used the area as hunting grounds, but permanent settlements were scarce. European explorers and settlers found mainly nomadic Southern Paiutes inhabiting the area during the late 18th and early 19th centuries.

The barrier created by the Grand Canyon and Colorado River kept early Spanish explorers from reaching Kane County for hundreds of years. The Escalante/Dominguez party was the first European group to enter the region. They explored a lot of Utah and Northern Arizona searching for a route from Santa Fe to California. In 1776, they crossed the Colorado River at the "Crossing of the Fathers". A spur of the Old Spanish Trail is said to have crossed through Kane County near the Utah/Arizona border. This trade route carried considerable traffic during the early 19th century. However, no permanent settlement was attempted. The area became part of the United States in 1848 as a result of the Treaty of Guadalupe Hidalgo.

The first settlement in Kane County was undertaken in the mid-19th century by Mormon ranchers and settlers. These members of the newly-formed Church of Jesus Christ of Latter-day Saints arrived in the Great Basin in 1847 after being driven from their homes in Illinois and Missouri. They established several small agrarian villages and extended their colonization into California, Nevada, Arizona, and Mexico.

The desert highlands south of Kanab were found to be excellent winter range for livestock. A number of Mormon ranchers established grazing operations in the early 1860s. The Long Valley area north of the desert was the first area to be settled permanently. Small settlements were established in the mid-1860s at Glendale and Alton.
Mormon settlers established Kanab in 1870.

Settlers farmed the bottom lands near streams grazing livestock on the high plateaus during the summer and desert highlands in the winter. The small towns prospered because residents established orchards, field crops, and livestock grazing operations. Unfortunately, a drought from 1879-82 caused a severe shortage in irrigation water. The drought was followed by three years of flooding which deepened the channel of Kanab Creek by almost 60 feet. This caused most of the farm land to wash away.

But the early settlers were experienced desert colonizers and they survived the trying times. They continued to expand the agricultural base upon which their livelihood was dependent. Population levels remained fairly constant during the late 19th century. One of the most successful communal organizations in the history of the United States was established by Mormons in Orderville.

Early explorers also brought prospectors searching for minerals and high grade uranium deposits were discovered in the mid 20th century. Most deposits played out quickly, but resulted in a comprehensive view of mineral resource potential, focused on large coal pockets near Alton and the Kaiparowits plateau. Miners and supporting businesses settled in Kane County, but worked mainly in Arizona where significant uranium deposits were located.

High plateaus covered with timber also brought timber harvesting operations which supplied building materials to local residents and timber to larger markets The Kaibab Forest Products sawmill in Fredonia, Arizona became a major year-round employer. But concerns with wildlife habitat and other environmental issues, combined with economic downturns caused major reduction in timber harvests.

The economy of the area remained based upon livestock grazing. In the 1930s the establishment of Grand Canyon National Park and the Kaibab Game Reserve created a demand for tourist services. The first economic "boom" in the tourism industry occurred during the 193050 as the area became a famous location for shooting western films and television episodes. Over 100 feature length westerns have been filmed in Kane County.

And although eastern Kane County had been sparsely settled the construction of Glen Canyon Dam in the 1950s created the towns of Page, Arizona, Big Water, Utah, and Bullfrog Marina on the northeastern side.

The Colorado River formed the eastern boundary of Kane County. Efforts to harness the river by the construction of Glen Canyon Dam created Lake Powell, a huge reservoir that impounded over 24 million acre feet of water (when full). Creation of the dam brought new employment

opportunities in construction, electricity generation, maintenance, recreation, and hospitality services.

2. Kane County Today

Kane County, Utah was named for Thomas L. Kane – "Friend of the Mormons"

The county seat is Kanab, which is also known as "Little Hollywood" because over 100 western films and television episodes have been filmed in the county. Film making continues to the present day, as evidenced by a recent shoot of *John Carter on Mars* (Walt Disney Pictures) completed in 2010.

World class scenic attractions abound in and around Kane County. Visitors come to experience Zion National Park to the west, Bryce Canyon National Park to the north, Grand Canyon National Park to the south, and Glen Canyon National Recreation Area to the east. In the center of this majestic landscape is Grand Staircase-Escalante National Monument and to the northeastern corner is Lake Powell, which draws millions of visitors each year. Many outfitters, guides, hotels, motels, restaurants, gas stations and other service providers cater to the multitude of tourists who come on an annual basis to enjoy the grandeur found in the county.

Recreational use of the land in Kane County has rapidly increased as populations in Arizona, Nevada, California, and Utah have grown. Those seeking recreation (through motorcycling, trail biking, snowmobiling and other motorized and non-motorized vehicle use, horseback riding, hiking, fishing and hunting) have flocked to the open spaces the county offers. In addition, more and more people are coming to Kane County for retirement living. Although recreational and traditional uses of the land are increasing, so far, cooperative efforts have kept conflicts to a minimum.

However, economic forces and federal land management schemes in the early 21st century have combined to force dramatic changes in Kane County. Forest product producers have disappeared. Uranium mining in Arizona is being curtailed because of a 20-year withdrawal established in 2013. Only two mines are currently operating on the Arizona Strip and ranching is becoming more challenging every year. Yet, these natural resource-based activities are elemental to the customs and culture that formed the quality of life in Kane County.

Kane County has maintained its customs and culture throughout its history. Mining, ranching, and farming operations are still a priority. Life for the early settlers was never easy; water was scarce and access difficult. The early residents worked hard to establish their livelihood, and today's residents work hard to maintain it. They have always been diligent in pursuing legal protection of their private property rights and today's residents continue with that diligence.

Residents of Kane County are independent and strong-willed. They must be to survive the rigorous life in this country. Private property rights and interests are important to the residents of Kane County. Private ownership and the incentives provided by that ownership are a driving force behind the innovativeness which has allowed the continuation of the custom, culture and lifestyle of the county.

3. Main Concerns

One of the common themes that cross all economic and cultural foundations in Kane County is a**ccess to public lands**. Access rights-of-way and water rights were critical to the early pioneers in Kane County and remain critical today. The federal government controls 85.5% of the 2.6 million acres of land in the county. The State of Utah owns 8.1% of the land, leaving only 6.4% in private ownership. Crossing federal land is necessary for many private land owners to access their property and to exercise water rights, as well as to use adjudicated grazing preference rights. Viable and effective use of private land is totally dependent upon how federal and state lands are managed.

To manage land within the Escalante Region Multiple Use/Multiple Functions Grazing Zone, Kane County promotes responsible management, enhancement, and development of existing and future livestock grazing resources. Accountable planning would provide protection for the resources that established the customs, culture, and values of Kane County. This includes the responsible development of abundant deposits of energy and mineral resources, such as oil, natural gas, oil shale, oil sands, coal, gold, uranium, and copper, which are compatible with grazing activities in the region.

B. Revised Statute 2477 Assertions

In 1866, Congress enacted a law to provide and protect access across federal lands for people reliant upon water, minerals and homesteads to earn their livelihood. That law, Revised Statute 2477 (“R.S. 2477”), provided simply that, *"The right-of-way for the construction of highways over public land, not reserved for public uses, is hereby granted*." Kane County ranchers developed such rights-of-way in the form of roads and trails which continue to be used today. This original grant of rights-of-way (established in 1866) did not require any formal recording, the rights-of-way being established by their construction, use, and subsequent acceptance by the State of Utah or a political subdivision thereof. R.S. 2477 was subsequently repealed by the Federal Land Policy and Management Act in 1976. A large number of R.S. 2477 roads had been constructed, used, and accepted by Kane County and the State of Utah prior to the 1976 repeal. Kane County has initiated litigation to perfect its ownership of such roads.

C. Grazing Rights

In most of Kane County, privately owned land is adjacent to federal and state lands. Therefore, management decisions for federal and state lands directly impact the use and economic value of private land. Restrictions on, and reductions of grazing on federal lands, will require the ranchers

to greatly increase grazing on private lands, reduce herd sizes, find alternative grazing land, or seek relief through a combination of these measures in order to remain economically viable. If ranchers are forced to graze herds solely on private land, the primary source of winter forage will be lost. Furthermore, forage costs will dramatically increase. There is no alternative land available in Kane County for grazing, so even if alternative forage is found outside the county, transportation costs will be extremely high. Reductions in herd size, higher feed costs, and increased transportation costs will result in a critically adverse outcome. Economists that have studied the local grazing impact hold that for every dollar loss to the rancher, there will be a four-fold loss to business income in the surrounding areas of the county.

Kane County supports efficient and responsible (full) development within the Escalante Region Multiple Use/Multiple Functions Grazing Zone of all permitted, existing and future grazing resources, and other uses compatible with grazing activities.

Residents and visitors of Kane County have enjoyed and receive significant benefits to their health, welfare and economic stability and sustainability, through the custom, culture and heritage of livestock grazing.

D. Water Rights

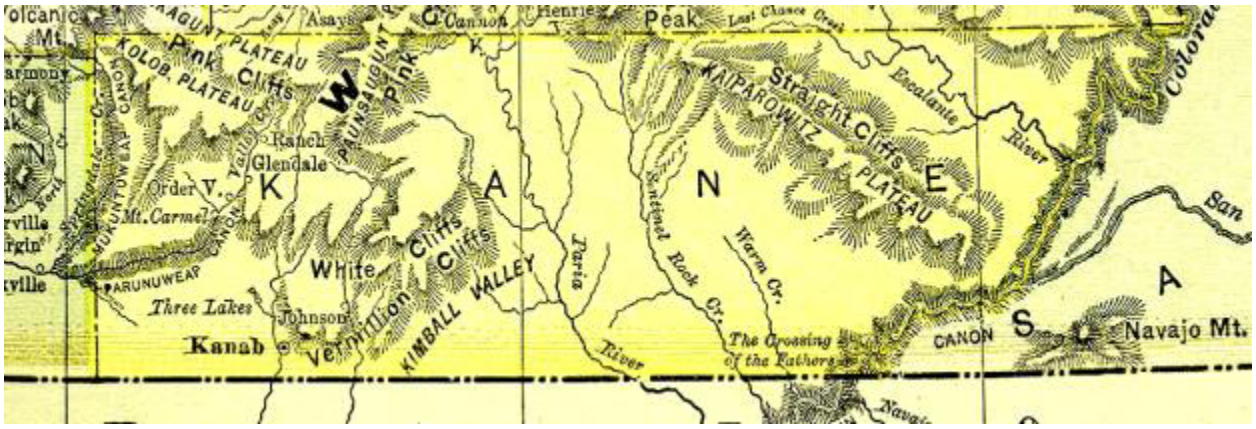
Adequate water supplies are essential to farming and ranching activities in Kane County. Restrictions on use of irrigation water by federal management agencies through the guise of protecting wilderness, native species, and wild and scenic rivers will severely impact the economy of the county. Failure to manage uplands in a manner that maintains productive watersheds will likewise decrease irrigation water supplies and also adversely impact the economy of the county.

Early ranchers established water rights through the doctrine of prior appropriation. The earliest adjudicated rights in Kane County date to 1864. Today, holders of water rights continue to struggle to preserve water rights against federal land management encroachment.

E. Multiple Use of Public Lands

The economic stability of Kane County rests upon continued multiple uses of federal lands. Tax revenue is available to the county mainly through the ad valorem property tax and the county's share of sales tax receipts. The limited amount of private property greatly restricts the tax revenue of the county. That limited tax base must be protected, and the continued vitality of that tax base is dependent upon continued multiple uses of federal lands. If multiple uses are restricted, business income will suffer and sales tax will be reduced. If grazing is restricted, financial pressure will be placed on the rancher which could result in ranchers going out of business. When that happens, the tax base of the county suffers, and the business income is also reduced.

Reductions in recreational use by federal management agencies result in adverse economic impact on the businesses which serve the users. Many of the recreational users of federal lands journey into Kane County from the surrounding areas for food, lodging and other services. They make convenience purchases on a regular basis. Such purchases aid the business income throughout the county.



Historic Map of Kane County, Utah before the creation of Glen Canyon Dam and Lake Powell, showing the Vermillion, White and Pink Cliff of the geologic Grand Staircase.

Photo by Dr. Jack Share at http://written-in-stone-seen-through-my-lens.blogspot.com/2011/01/grand-staircase.html

Section Two
Legal Authority

Kane County asserts the following principles and legal authority as an integral component of its land use and resource management policy:

A. County Resource Development Committee

The State Legislature has given county commissions the authority to appoint a Resource Development Committee pursuant to Utah Code Ann. § 17-53-312. The Committee is charged with promoting the development of the county's mineral, water, manpower, industrial, historical, cultural and other resources, and makes recommendations to the County Commission. This Plan lays out a series of resource development goals, objectives, and policies which will guide the efforts of the Resource Development Committee in coordination with the county Land Use Authority. Both the Resource Development Committee and the Land Use Authority advise the County Commission regarding planning and development issues.

Kane County Commissioners will work hand in hand with the Resource Development Committee and the Land Use Authority to be an active coordinating partner with other government entities, in order to foster a sustainable, broad-based economy which allows traditional economic uses to remain vibrant, while fostering new economic activities with the potential to expand economic opportunity and protect important scenic, cultural and social qualities.

Federal land management planning processes shall include Kane County as an active, coordinating, on-going partner, consistent with federal mandates involving coordination. Federal land management plans shall be consistent with county goals and policies, such as: the Kane County Land Use Ordinance; the Kane County General Plan; the Kane County Resource Management Plan; and any other plans, policies, resolutions, or ordinances relevant to land and resource management, that shall be utilized in coordinating for consistency in the coordination process, where not unreasonably constrained by federal rules or law.

B. Utah State Planning Coordination

The State of Utah has enacted a statewide Resource Management Plan for federal lands found in Title 63J, Chapter 8 of the Utah Code, and reproduced in Appendix C. This section was developed for the specific purpose of setting forth policies the federal natural resource agencies must coordinate with in the development and management of public lands within the State of Utah. The State of Utah Resource Management Plan for Federal Lands is hereby incorporated into this Kane County Resource Management Plan, as amended, including, but not limited to, the following provisions requiring the BLM and Forest Service to create and/or modify their planning documents to be consistent state and local land use plans, to the maximum extent consistent with federal law and FLPMA's purposes, as follows:

1. Preserve traditional multiple-use, sustained-yield management processes.
2. Do not employ management prescriptions that parallel, duplicate, or resemble wilderness management without congressional designation of wilderness areas.
3. Coordinate inventories for wilderness characteristics with state and local governments.
4. Achieve and maintain highest reasonably sustainable levels of energy, hard rock, and nuclear resources, with economically recoverable amounts.
5. Achieve and maintain highest reasonably sustainable levels of livestock grazing.
6. Achieve and maintain highest reasonably sustainable levels of watersheds.
7. Preserve traditional access for recreational opportunities.
8. Recognize and incorporate county transportation plans for motorized access, including recognition of R.S. 2477 rights-of-way, the county's right to maintain, repair, and make reasonable improvements to such roads, and the additional roads and trails that may be needed for reasonable access for a broad range of resources and opportunities.
9. Protect and preserve cultural resources in cooperation with the State Historic Preservation Office.
10. Preserve property rights of private landowners.
11. Recognize and incorporate State School and Institutional Trust Lands Administration fiduciary agreement provisions when planning for uses near trust lands.
12. Oppose the designation of Areas of Critical Environmental Concern (ACECs) except in well-documented special cases.
13. Coordinate Visual Resource Management provisions with state and local governments. Class I and II VRM designations are generally not compatible with state and local plans.

Objectives for Visual Resource Classes:

(i) Class I Objective. The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

(ii) Class II Objective. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

(iii) Class III Objective. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

(iv) Class IV Objectives. The objective of this class is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These

management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

14. Include a comprehensive analysis of the social and economic impact in all decision documents.

According to Utah Code 63J-4.401(6*), "The state planning coordinator shall recognize and promote a comprehensive set of principles when preparing any policies, plans, programs, processes, or desired outcomes relating to federal lands and natural resources on federal lands."* This set of principles is found in Appendix B. Major provisions include:

1. Incorporate the plans, policies, programs, processes and desired outcomes of counties into state responses to federal resource management planning processes.
2. Identify inconsistencies and conflicts between state and local resource management plans, and seek resolution of the conflicts as early as possible.
3. Present unresolved conflicts to the Governor for a decision on how the state will proceed.
4. Develop, research, and use factual information, legal analysis and documents to aid in planning coordination activities.
5. Establish and coordinate agreements between the state and federal land management agencies.
6. Work in conjunction with political subdivisions to establish agreements for coordinated participation in federal land management planning processes.

Utah also employs a Public Lands Policy Coordinating Office, charged to assist in fulfilling the state planning coordinator's duties. Relevant direction in the statute includes:

1. *"Differences of opinion between the state's plans and policies on use of the subject lands and any proposed decision concerning the subject lands pursuant to federal planning or other federal decision making processes should be mutually resolved between the authorized federal official, including federal officials from other federal agencies advising the authorized federal official in any capacity, and the governor of Utah."* Utah Code § 63J-8-103(2).
2. *"The subject lands managed by the BLM are to be managed to the basic standard of the prevention of unnecessary or undue degradation of the lands, as required by Federal Land Policy and Management Act (FLPMA). A more restrictive management standard should not apply except through duly adopted statutory or regulatory processes wherein each specific area is evaluated pursuant to the provisions of the BLM's planning process and those of the National Environmental Policy Act."* Utah Code § 63J-8-103 (3).

C. Federal Land and Natural Resource Planning

Two of the major federal land managers in Utah, the Bureau of Land Management (BLM), and the US Forest Service (Forest Service), are required to engage in land and natural resource planning processes, which can affect the use and development of natural resources. The BLM is required by United States Code, Section 1712, the Federal Land Policy and Management Act of 1976 (FLPMA) to *"develop, maintain, and...revise land use plans which provide by tracts or areas for the use of the [BLM] lands."* Similarly, the Forest Service is required to *"develop, maintain, and...revise land and resource management plans for units of the National Forest System."* 16 U.S.C. § 1604(a).

1. Coordination and Consistency with State, Local and Tribal Government Plans

Both the BLM and the Forest Service are required to coordinate their land and resource planning efforts with those of state, local and tribal jurisdictions. Congress recognized that the federal policies developed through the planning process can harm the county if the uses of the natural resources are diminished or restricted. To ensure neither the local economy nor the citizens would be harmed by federal policies, Congress requires federal agencies to coordinate their planning and management activities with local governments.

FLPMA, 43 U.S.C. § 1712(b)(9), sets forth what Congress defined as the minimum requirement for coordination to be carried out by federal agencies. These are:

(i) Keep apprised of state, local and tribal land use plans;
(ii) Assure that consideration is given to state, local and tribal plans that are germane to plans for public lands;

These two provisions place the duty on federal agencies to ensure that the county's plans and policies will be continually reviewed and incorporated into the federal planning and management process.

(iii) Assist in resolving....inconsistencies between federal and non-federal government plans;(iv) Provide for meaningful involvement of state and local governments, including early public notice of proposed decisions;

Provisions three and four require the federal agencies to resolve any conflicts between the local plans and policies, and the federal objectives prior to the action being carried out. Congress directed the agencies to meaningfully involve the local governments early in the process, prior to public involvement, so that these conflicts could be resolved before the release of proposed decisions. Further, state and local officials are *"authorized to furnish advice to the [BLM] with respect to the development and revision of land use plans....guidelines....rules and regulations for the public lands."* 43 U.S.C. § 1712(b)(9). Congress clearly intended for the policies and plans of local governments to be an essential part of the federal planning process.

(v) Make federal plans consistent with local plans to the maximum extent consistent with federal law and purposes of the Act.

The fifth provision for coordination defined in FLPMA places the obligation on the federal agency to modify its plans and policies to be consistent with local plans. As long as the local plans are consistent with federal law, or do not conflict with federal statutes, and the purposes of the federal planning acts, this duty is required of the federal agency, and the burden falls to them to either incorporate the local policies or demonstrate how the local plans conflict with federal law.

The duly adopted regulations of the BLM further define this consistency requirement by requiring that the BLM's resource management plans be *"consistent with officially approved or adopted resource related plans, and the policies and programs contained therein, of....State and local governments, and Indian tribes, so long as the guidance and resource management plans are also consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands."* 43 C.F.R. § 1610.3-1.

BLM regulations also provide that *"in the absence of officially approved or adopted resource management plans of State and local governments...[Federal] resource managements plans shall, to the maximum extent practical, be consistent with officially approved and adopted resource related policies and programs of state and local governments' to the extent the policies and programs are consistent with the policies, programs, and provisions of federal laws and regulations applicable to public lands."* 43 C.F.R. § 1610.3-2(b).

The Forest Service is also required to coordinate with local governments. The National Forest Management Act of 1976 (NFMA) directs the agency to *"develop, maintain, and as appropriate, revise land and resource management plans…coordinated with the land and resource management planning processes of State and local governments…"* 16 U.S.C. § 1640(a). The NFMA planning regulations further direct the agency to specifically address and resolve inconsistencies with local plans.

(i) The responsible official shall coordinate land management planning with the equivalent and related planning efforts of…local governments.

(ii) For plan development or revision, the responsible official shall review the planning and land use policies of…local governments, where relevant to the plan area. The results of this review shall be displayed in the environmental impact statement (EIS) for the plan (40 CFR 1502.16(c), 1506.2). *The review shall include consideration of:*

(a) The objectives of…local governments, as expressed in their plans and policies;

(b) The compatibility and interrelated impacts of these plans and policies;

(c) Opportunities for the plan to address the impacts identified or contribute to joint objectives; and

(d) Opportunities to resolve or reduce conflicts, within the context of developing the plan's desired conditions or objectives. 36 C.F.R. § 219.4(b)(1).

Forest Service rules further emphasize the need to closely involve local governments in the planning and management process and to work towards achieving consistency with local plans. Where this is not accomplished they are to provide a reasonable explanation as to why this was not achieved. The acknowledgement in the directive is clear that Congress views the role of local governments to be higher than that of the public, as they are elected by the public and trusted with their representation. The county should be coordinated with on all planning and management issues early in the process.

Notably, the statutory language requiring both the BLM and Forest Service to involve local governments, does not limit this coordination to just the planning phase of projects, but rather directs the agencies to coordinate continuously in all management and implementation phases as well.

It is the policy of Kane County to provide every opportunity to the federal agencies to coordinate continuously with their planning and management activities.

2. Federal Planning Criteria

Kane County affirms and adopts as its policy the following federal planning criteria: Counties may use duly adopted plans, programs or policies to directly influence federal natural resource and land planning efforts by informing the federal agencies of the plans and their provisions. As part of these plans, counties may want to make known their interpretation of the criteria the federal planning agencies must consider as land and resource management plans are developed. This could be used to define the desired future conditions for the county's economy, lifestyle, or recreational needs of the citizens, and the necessary use of the federal natural resources to achieve these desired future conditions.

The BLM is specifically directed to coordinate the federal planning criteria with Kane County early in the process when preparing management plans, revisions or amendments. "*Planning criteria will generally be based upon applicable law…and coordination with…local governments* …." 43 C.F.R. § 1610.4-2(b).

It is the policy of Kane County to coordinate the development of the planning criteria with federal agencies at the beginning of the planning stages of all federal projects that impact the county's natural resources.

3. Forest Service

The national forests were originally set aside to provide a continuous supply of timber and for the protection of water sources for local communities and agricultural needs. Later, through the adoption of the Multiple-Use Sustained-Yield Act of 1960, Congress determined that the forests should be "*administered for outdoor recreation, range, timber, watershed, and fish and wildlife purposes,*" which purposes were declared to *be "supplemental to, but not in derogation of the original purposes*." 16 U.S.C. § 528.

The Forest Service is required to *"use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences,"* in its land and resource plans. The Forest Service must assure that the plans *"provide for the multiple-use and sustained-yield of the products and services obtained there in accordance with the Multiple-Use Sustained-Yield Act of 1960, and, in particular, include coordination of outdoor recreation, range, timber, watershed, fish and wildlife, and wilderness."* The plans must *"determine forest management systems, harvesting levels [of timber] and procedures,"* based upon all of the uses mentioned above, the definitions of multiple-use and sustained-yield as laid out in the law, and the availability of lands and their suitability for resource management. 16 U.C.S. § 1604(b) and (e).

The regulations of the Forest Service specifically define principles of planning natural resources. *See* 36 C.F.R. § 219 et seq. Land management planning is an adaptive management process that includes social, economic, and ecological evaluation; plan development, amendment, revision, and monitoring. The overall aim of planning is to produce responsible land management for the national forest system based on useful and current information and guidance. Land management and planning guides the Forest Service in fulfilling its responsibilities for stewardship to best meet the needs of the American people.

Sustaining the productive use of the national forests and grasslands is part of the overall principles of the federal laws and rules regulating lands managed by the Forest Service. Specifically, at 36 CFR 219.1(b), the rules identify the lands wide variety of uses, including human uses:

> *(i) The national forests and grasslands provide a wide variety of uses, values, products, and services that are important to many people, including outdoor recreation, forage, timber, wildlife and fish, biological diversity, productive soils, clean air and water, and minerals. They also afford intangible benefits such as beauty, inspiration, and wonder;*

Sustainability of these uses is the overall goal for these lands.

> *(ii) To assure the continuation of this array of benefits, this regulation affirms sustainability as the overall goal for stewardship of the natural resources of each national forest and grassland consistent with the laws that guide management of these lands;*

The rules recognize that these productive uses of natural resources must continue to support the ecological, social and economic needs of the people, which are represented by the county. Impairment to the productivity of the land must be avoided. This includes understanding the historic uses of the land are now part of the ecological balance; removing these would dramatically change the sustainability of the land by the social and economic structure dependent upon its uses.

(iii) Sustainability, composed of interdependent ecological, social, and economic elements, embodies the principles of multiple-use and sustained-yield without impairment to the productivity of the land. Sustainability means meeting needs of the present generation without compromising the ability of future generations to meet their needs. Planning contributes to social and economic sustainability without compromising the basic composition, structure, and functioning of ecological systems. The progress toward achievement of sustainability is assessed through monitoring and evaluation.

It is the policy of Kane County that the historic productive uses of the national forests and grasslands within the political boundaries of the county continue to be incorporated into all management plans and policies as necessary components of the multiple-use and sustained-yield of these lands, and for the purpose of avoiding harm to the county and its residents.

4. Bureau of Land Management

FLPMA provides that the BLM must manage the land under its jurisdiction (called public lands) *"in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values"* and will provide for, among other things, *"outdoor recreation and human occupancy and uses,"* and *"food and habitat for fish and wildlife and domestic animals."* However, the BLM must specifically manage the public lands *"in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands."* 43 U.S.C. § 1701(8) and (12).

The BLM is required to *"use and observe the principles of multiple-use and sustained-yield"* just as the Forest Service, must *"use a systematic and interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences"* in the preparation of its plans. 43 U.S.C. § 1712(c)(1) and (2). The BLM must also *"consider present and potential uses of the public lands"* and *"provide for the compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans."* 43 U.S.C. § 1712(c)(5) and (8).

5. Multiple-Use and Sustained-Yield

Both the Forest Service and the BLM are required to manage the lands under their jurisdiction pursuant to the principles of multiple-use and sustained-yield. These terms have been defined within the provisions of FLPMA for the BLM and within the provisions of the Multiple-Use Sustained-Yield Act of 1960 for the Forest Service.

The definitions state that multiple uses are to be considered in the context of the best combination of land use that meet the present and future needs of the nation with respect to recreation, range, timber, minerals, watershed, fish and wildlife, and natural, scenic, and historical values. Furthermore, these resources are to be managed in a '*"harmonious and*

coordinated manner that does not lead to permanent impairment of the productivity of the land and quality of the environment." Finally, multiple-use does not, by definition, mean the greatest economic return or the greatest unit output for the natural resources. 43 U.S.C. §1702(c); s*ee also* 16 U.S.C. § 531(a).

For the Forest Service, the *"establishment and maintenance of areas of wilderness"* is specifically determined to be consistent with the principle of multiple-use. 16 U.S.C. § 529. The term "sustained-yield" is defined to mean the achievement of a *"high level annual or regular periodic output of the various renewable resources of the public land consistent with multiple-use."* 43 U.S.C. § 1702(h); *see also* 16 U.S.C. § 531(b).

6. National Environmental Policy Act

Preparation of land and natural resource management plans by BLM and the Forest Service is a major federal action requiring the preparation of an Environmental Impact Statement (EIS) under the provisions of the National Environmental Policy Act (NEPA). *See* 42 U.S.C. § 4231 et seq.

NEPA requires federal agencies to fully disclose the nature and condition of the environment within the area of interest. Under NEPA, agencies must formulate various alternatives for proposed management, and to compare those alternatives to a "no-action" alternative of continuing the current management scheme. NEPA specifically requires the agency preparing the EIS to seek decisions that, *"attain the widest range of beneficial uses of the environment without degradation," "preserve important historic, cultural and natural aspects of our national heritage," "achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities."* 42 U.S.C. 4331 (b).

The development of an EIS by a federal agency as part of the process to decide upon a land and resource management plan or proposed project has a number of well established steps. Each of these steps provides an opportunity for comment by local government based upon their own plans and policies. These steps, in general, are:

- The "scoping" of the issues;
- Preparation of an analysis of the management situation;
- Preparation of the various alternatives with the associated necessary management scenario and conditions;
- Issuance of a "draft EIS" for public comment;
- Issuance of a "final EIS" and the "proposed record of decision" (ROD), which lays out the proposed final decision, including the terms and conditions for management of the lands and natural resources for the life of the plan or for that specific project; and
- Issuance of the proposed ROD is followed by a period for protest by interested parties, which, upon resolution of the protests, is followed by adoption of the ROD and implementation of the plan.

The Governor of the State of Utah is given an opportunity for a consistency review of BLM plans immediately following the issuance of the Proposed Record of Decision. BLM is required to *"identify any known inconsistencies with State or local plans, policies, or programs,"* and to *"assist in resolving, to the extent practical, inconsistencies between federal and non-federal government plans."* The Governor is given sixty (60) days to *"identify inconsistencies and provide recommendations in writing"* in response. The BLM must accept the recommendations of the Governor if the BLM State Director determines the recommendations *"provide for a reasonable balance between the national interest and the State's interest."* 43 U.S.C. § 1712(b)(9); 43 C.F.R. § 1610.3-2(e); *see also* 40 C.F.R. § 1506.2(d).

The Federal Council on Environmental Quality (CEQ) has issued regulations related to the implementation of NEPA. One of these regulations provides for the elimination of duplication with state and local processes. The regulation requires federal agencies to cooperate with state and local agencies to the fullest extent possible to reduce duplication between NEPA and state and local requirements. This cooperation specifically includes:

- Joint planning processes;
- Joint environmental research and studies;
- Joint public hearings; and
- Joint environmental assessments. 40 C.F.R. § 1506.2(b).

The Council on Environmental Quality has also supported an invitation to state and local governments to become cooperating agencies in the preparation of federal land and natural resource management plans and associated EIS's. The invitation to become a cooperating agency is specifically based upon the state or local government's position, having jurisdiction by law in the planning area, or professionals holding special expertise in an issue that will be addressed in the analysis or decision (June 24, 2005, memo from James Connaughton, Chairman of the CEQ). This status does not relieve the federal agency of the responsibility as the decision-maker, and does not guarantee a decision that the cooperating agency may necessarily favor. Cooperating agency status does allow the cooperators to participate in the scoping process, the inventory of data and analysis, the preparation of alternatives, the impact analysis, and in the preparation of the draft and final EIS's.

Kane County understands that as a cooperating agency, the input of the county may or may not be incorporated into the federal plans as provided by cooperating agency. However, federal law distinguishes between input from a cooperating agency and the requirement of coordination.

NEPA requires federal agencies to coordinate the analysis with local governments. Congress declared the national environmental policy to be the creation and maintenance of conditions under which man and nature can exist in "productive" harmony and to carry out this policy, coordinate the federal plans with state and local governments.

(a) "The Congress…recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man,

declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments,…to use all practicable means and measures…to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of Americans.

(b) In order to carry out the policy set forth in this chapter, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate federal plans, functions, programs and resources…" 42 USC § 4331.

Congress defined coordination to mean that local plans and policies are not only to be considered during the planning process, and in this case the environmental analysis, but the federal planning efforts work to be consistent with these plans. NEPA and the corresponding Council on Environmental Quality give specific direction to the federal agencies as to how this is to be achieved.

First, the agency is to *"study, develop and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."* 42 USC § 4332(e). When there is a conflict between the federal proposal and the local plan and policies, the analysis must include an alternative that resolves this conflict.

Second, the agency is required to resolve these conflicts early in the process. *"Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts."* 40 CFR § 1501.2. This requires that coordination with the county begin early in the development of the EIS in order to identify and resolve policy conflicts before they cause delays. This also infers if the agency does not perform this coordination early, and conflicts are later identified, the obligation is on the agency to delay the study until resolution can be made.

Third, the position of the county should be clearly stated and identified in the analysis, especially if it is in conflict with the proposal, so that decision makers and the public can weigh this in their analysis of the overall impact of the action. In the Environmental Consequences section of the study, there should be a section discussing the *"Possible conflicts between the proposed action and the objectives of Federal, regional, State and local…land use plans, policies and controls for the area concerned."* 40 CFR § 1502.16(c).

Fourth, where there is inconsistency with the local plans, the federal agency needs to provide a reasonable explanation as to how the agency will reconcile this conflict. *"…[S]tatements shall discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law."* 40 CFR § 1506.2(d).

Resolving the specific inconsistencies between the federal proposal and local plans and policies is to be done in the coordination process, government-to-government. While the local governments must be invited to participate as a cooperating agency in the development of the EIS, the federal government is required to coordinate that same decision making process with local governments for the purpose of resolving conflicts between federal and local plans.

It is the policy of Kane County to require coordination of all federal agencies in relation to federal land management decisions, including with NEPA studies. The county may also participate as a cooperating agency as appropriate.

7. Federal Advisory Committee Act

The Federal Advisory Committee Act of 1972 (FACA) was enacted to formalize and stabilize the process where federal agencies receive advice from interested parties. FACA establishes conditions under which federal agencies may establish committees of interested parties, how they must be composed and chartered, and requires meetings and activities to be open to the public. FACA does not affect the requirement under FLPMA to coordinate with state and local governments, nor does it affect the establishment of a cooperating agency relationship. FACA also does not apply to any state or local committee or other group including land and natural resource utilization issues. 5 U.S.C. Appendix 2.

8. Federal Standards and Guidelines for Grazing

Kane County affirms and adopts, as policy, the Standards & Guidelines for Grazing Administration (43 CFR §§ 4180.2 & 4100.0-5), included, but not limited to, the following:

(i) *If a standards assessment indicates to the authorized officer that the rangeland is failing to achieve standards or that management practices do not conform to the guidelines, then the authorized officer will use monitoring data to identify the significant factors that contribute to failing to achieve the standards or to conform to the guidelines. If the authorized officer determines through standards assessment and monitoring that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards, and conform with the guidelines that are made effective under this section, the authorized officer will, in compliance with applicable laws and with the consultation requirements of this part, formulate, propose, and analyze appropriate action to address the failure to meet standards or to conform to the guidelines.*

(ii) *The authorized officer will take appropriate action as defined in this paragraph by the deadlines established in paragraphs (c)(1) and (c)(2) of this section [43 CFR § 4180.2]. Appropriate action means implementing actions pursuant to subparts 4110, 4120, 4130, and 4160 of this part that will result in significant progress toward fulfillment of the standards and significant progress toward conformance with the guidelines. Practices and activities subject to standards and guidelines*

include the development of grazing-related portions of activity plans, establishment of terms and conditions of permits, leases, and other grazing authorizations, and range improvement activities such as vegetation manipulation, fence construction, and development of water.

The Taylor Grazing Act of 1934, 43 U.S.C. § 315, authorizes the Secretary of the Interior *"to establish grazing districts, or additions thereto and/or to modify the boundaries thereof, of vacant, unappropriated and unreserved lands from any part of the public domain…which in his opinion are chiefly valuable for grazing and raising forage crops…"* The Act also provides for the classification of lands for particular uses.

The Public Rangelands Improvements Act of 1978, 43 U.S.C. § 1901, provides that the public rangelands should be managed, maintained, and improved *"so that they become as productive as feasible"* in accordance with management objectives and the land use planning process established pursuant to 43 U.S.C. § 1712.

9. Presidential Proclamation 6920, Establishment of the Grand Staircase-Escalante National Monument

In 1996, President Clinton executed Presidential Proclamation 6920 ("Proclamation"), pursuant to the authority granted in Section 2 of the Antiquities Act, 16 U.S.C. § 431, establishing the Grand Staircase-Escalante National Monument (GSENM), containing 1.7 million acres of federally managed lands. The purpose of the Proclamation is to protect various objects indentified in the Proclamation, described in very general terms. The Proclamation specifically recognized livestock grazing as a pre-existing use and provided that it would not be affected by the creation of the Monument:

> **"The establishment of this monument is subject to valid existing rights…**
>
> **"Nothing in this proclamation shall be deemed to affect existing permits or leases for, or levels of, livestock grazing on Federal lands within the monument; existing grazing uses shall continue to be governed by applicable laws and regulations other than this proclamation…"**

This Proclamation is unusually broad in comparison to other proclamations creating national monuments, and indicates a specific intent to protect grazing. This specific provision of the Proclamation precludes any agency authority to categorically eliminate or restrict grazing within the GSENM.

10. National Landscape Conservation System, National Monuments, National Conservation Areas, Similar Designations and Wilderness Study Areas

The National Landscape Conservation System (NLCS) was established through the 2009 Omnibus Public Land Management Act (Omnibus Act). The purpose of the NLCS was to

"*[C]onserve, protect, and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations…*" 16 U.S.C. §7202. However, the NLCS specifically subjugates its authority to any proclamation, thereby foreclosing, what would normally be, its superior statutory authority to modify anything established by proclamation, including the Proclamation establishing the GSENM. The NLCS specifically states:

> ***"Nothing in this chapter enhances, diminishes, or modifies any law or proclamation…including…[any provision in] the Federal Land Policy and Management Act of 1976* (43 U.S.C.§ 1701 et seq.).*"***

Thus, NLCS subjugates its effect to proclamations and other applicable laws, and the Presidential Proclamation establishing the GSENM states the intent of the Proclamation to preclude any affect on existing permits or leases for, or levels of, livestock grazing on the GSENM at the time of establishment, other than by the existing laws that regulated grazing at that time.

Therefore, Kane County asserts as its policy that provisions of the NLCS should not have an effect upon grazing on the GSENM, nor inhibit the normal activities associated therewith.

Section Three
Economic Conditions

Historically, Kane County has had the smallest population of the five-county region with a population that remained below 2,500. Since 1970, the county has added 4,704 residents, with net in-migration accounting for more than half of the county's growth.

The 2010 Census reported Kane County's population reached 7,125 residents. The minority population is small in both number and share. Three hundred nine minority persons were living in the county, representing 4.3 percent of the population. Hispanics are the single largest group, representing 85 percent of the minority population.

Non-agricultural employment in Kane County totaled 2,927 in 2010, a five-fold increase since 1970, but a decrease from levels before the economic decline of 2008. This represents an average annual growth rate of 4.5 percent.

Since 1970, Kane County's economy has shifted from concentrations in government and trade to a significant concentration in services, primarily tourism-related. In 1970, government and trade accounted for 60 percent of jobs in the county. By 2010, government's share of employment had fallen to 28.5 percent, and trade/transportation/utilities to 14.3 percent. Employment in services totaled 1,161 and accounted for 45 percent of all jobs. The leisure and hospitality sector is currently the largest of the service sectors, accounting for 20 percent of all non-farm jobs.

The Census indicates the average monthly wage in Kane County is $2,207— 68 percent of the state average. The highest paying jobs are in manufacturing ($3,206), followed by professional, scientific and technical services ($2,805). The lowest-paying jobs are administrative and technical support ($1,393) and retail trade ($1,358).

Kane County has the region's largest share of its workforce working out-of-state and the largest number of net out-commuters (312). In 2009, 21 percent of Kane County workers commuted to jobs outside the county; 10.8 percent worked outside Utah, primarily in Arizona.

In 2010, Kane County had a housing inventory of 5,815 units. Over 41 percent of these were seasonal or recreational units, the highest percentage of the five southwestern counties. The number of occupied units was 2,900, of which 737 or 25.4 percent were rental units.

More than 64 percent of all housing units in Kane County have been built since 2000, reflecting the housing boom that began in the region in 2005 when residential construction reached an all-time high (300 new units). From 2000 to 2010, 1,487 permits for dwelling units were issued.

By 2020, Kane County's population is projected to be 8,746, growing at an annual rate of 1.9 percent. Most of this gain will be in the working-age population (18–64), which is projected to increase from 3,246 in 2000 to 4,910 in 2020. The school-age population (0–17) is expected to

grow at the slowest rate and by 2020 will represent about 27 percent of the population, down from 29 percent in 2000. The retirement-age group (65+) will increase to 456, but as a share of total population remains unchanged at 16.8 percent.

Employment in Kane County is projected to increase at an annual rate of 2.6 percent, (from 4,116 in 2005 to 6,028 by 2020), with little change in the overall structure of the economy. The fastest growing sector will be leisure and hospitality, adding 630 jobs and accounting for about 28 percent of all jobs. Other fast-growing sectors will be other services (305 new jobs) and government (304 new jobs). The fewest job gains will be in information (13) and manufacturing (80). Kane County General Plan research references the fact that beginning in 2011 Alton Coal will provide 152 new jobs, created due to truck driving and mining.

In 2014, a study was conducted on the dependency of livestock operators on the Grand Staircase-Escalante National Monument (GSENM), researched by Kevin Heaton, Dr. Bruce Godfrey, and Kim Chapman from Utah State University. They sent letters and surveys to every person or business that had a permit to graze an allotment within the boundaries of the Monument, asking questions like: How many acres do you own and/or lease? How many livestock do you own and what percentage of the year do they spend on the monument? Where do you receive your gross income? The ranchers surveyed indicated other businesses in the area were dependent on these ranchers. The ranchers indicated they purchased more than 90% of their operating inputs from local sources. In addition, they locally purchased a high percentage of equipment used on the farm or ranch. The 24 ranchers that returned surveys indicated they employed 35 full time employees (including owners), and 37 part time employees (including owners). This would suggest these ranchers were also a major source of local employment and income.

From the same report, receipts from the sale of livestock were the primary source of gross income for all the livestock operators who returned a survey. The small operators indicated 74% of their gross income was from the sale of livestock with 3% from crop sales and 23% from off-farm income. The mid-sized operations tended to be the most diverse with 70% of gross income from livestock, 8% from crops, 10% from recreation and 7% from off-farm. The large operations were most specialized with 100% of gross income coming from livestock sales.

Results of the survey indicate large operators are most dependent on monument resources for grazing. Their cow herds spend 81% of the year grazing the monument. In comparison, the small and mid-sized operators spend 54% and 43% respectively. The survey respondents manage 1,276 acres of alfalfa hay which would supply approximately 10,700 AUMs (animal unit months). They also manage about 5,600 acres of pasture and 17,500 acres of rangeland. It is not known how many AUMs these lands currently provide because their productivity is unknown. If grazing was eliminated from the GSENM, there would be major changes in the management and use of private resources. All sizes of operations would feel the effects, particularly the large operators. It is not possible to determine at this point in time which, if any, ranchers would go out of business if use of the GSENM was reduced or eliminated. But any reduction would likely have a negative impact on income and employment in Southern Utah.

A. Economic and Cultural Report on Livestock Grazing in the Grand Staircase Escalante National Monument (2014)

1. Executive Summary

To determine the economic impact of livestock grazing in the Grand Staircase-Escalante National Monument (GSENM), Utah State University Extension (USU Extension) and Economic Associates of Utah, Inc. developed a survey to gather information from livestock grazing permit holders. Data from the completed surveys was 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 County's 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:

(i) Livestock grazing on GSENM is essential to the ranching industry in the region;
(ii) 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;
(iii) Ranching is an important part of diversifying the economy of the region;
(iv) 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
(v) GSENM is a multiple-use 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.

Kane County has implemented and supports an active management alternative livestock grazing plan for the GSENM that:

(i) Provides for the activation of all Suspended AUMs in the GSENM;
(ii) Provides for flexibility in managing timing and placement of cattle within allotments;
(iii) Provides for restoration of rangelands to promote rangeland health and sustainability;
(iv) Provides for large scale science research on rangeland restoration;
(v) Provides for allotment-scale science research with integrated range management;
(vi) Provides for reseeding using appropriate grasses, forbs, and shrub species;
(vii) Provides for watershed development by removal of invading woody species that creates risky biological monocultures;

(viii) Provides for development, improvement and maintenance of water facilities; and
(ix) Provides for the multiple-use aspects of the monument Proclamation i.e. it is not to be managed as a national wilderness.

2. **Survey**

USU Extension and Economic Associates of Utah, Inc. developed a detailed survey to gather information from GSENM livestock grazing permit holders on their operations. The purpose of the survey was to determine the importance of livestock grazing on GSENM to their operation and to determine how they utilized the 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, USU 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 the compilers.

3. **Summary of Survey Results**

The GSENM 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%. Bulls use 4.64% of the total AUMs.

GSENM permit holders who rent or lease livestock grazing allotment(s) from other permit holder's 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 percent (79.31%) said they could not reduce the size of their operation to their private property and survive. Seventy two percent (72.24%) 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 percent (61.90%) said they would need to sell their private holdings. 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, instead 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 limited access is the major affect on their operations, so far. But encroachment by pinyon-juniper was becoming a major problem.

GSENM permit holders stated there were a number of projects needed to improve their allotment(s). Reseeding was needed on 74.19% of allotments. Fencing was needed on 67.74% of allotments. Water development projects were needed on 93.55% of allotments. Thinning woody plants was needed on 70.97% of allotments. A flexible livestock grazing plan was needed for 64.52% of allotments. With these improvements, the AUMs were 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 County economic region.

4. GSENM Livestock Grazing Economic Impact on Garfield-Kane Counties

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 E.]

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 steer 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 on 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

County's economic region. The models for both Active and Suspended AUMs used the same methodology.

The revenues estimated in both models were used in the Garfield-Kane County's 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 F.]

5. 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 annually 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 County's 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 County's economic region because of utilizing the GSENM livestock grazing allotments. The total annual 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 County's 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 County economic region.

6. 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 County's economic region.

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

Some tourists and others oppose livestock grazing. Other tourists and individuals support livestock grazing. Many tourists from foreign countries state that seeing cowboys and cattle on the open range in the American West is the highlight of their trip to America. Ranchers report that when tourists 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 County's 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, they are analyzed. Destination tourists might spend $200 each 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 County's 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 two 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 upgrades require substantial public investment, which must be coupled with private investment in tourism supporting facilities, equipment, and programs. Credit in Garfield-Kane County's 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 total multiplier is 45.74% larger than the highest tourist related multiplier.

7. 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 County's region.

Tourist visitations in the Garfield-Kane County's 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 County's 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-round 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 County's economic region, local governments, and citizens should vigorously oppose any livestock grazing plan that reduces or eliminates livestock grazing in GSENM.

Garfield-Kane County's economic regional local governments and citizens propose an alternative that:

(i) Provides for the activation of all Suspended AUMs in the GSENM;
(ii) Provides for flexibility in managing timing and placement of cattle within allotments;
(iii) Provides for restoration of rangelands to promote rangeland health and sustainability,
(iv) Provides for large scale science research in rangeland restoration;
(v) Provides for allotment-scale science research with integrated range management;
(vi) Provides for reseeding using appropriate grasses, forbs, and shrub species;
(vii) Provides for watershed development by removal of invading woody species that create risky biological monocultures;
(viii) Provides for development and maintenance of water facilities; and
(ix) Provides for the multiple-use aspects of the monument proclamation, i.e. it is not to be managed as a national wilderness.

The historical, cultural, educational and moral benefits of livestock grazing in the Escalante Region Multiple Use/Multiple Functions Grazing Zone are important to Kane County and its residents; and the loss of its rich historical culture that brings visitors to Kane County would cause irreparable harm to the economy and heritage.

Kane County families have grazed and used the land for multiple generations, a loss of a portion of, or all of, its grazing rights would impact family economics and dynamics that cannot be replaced once lost. Kane County has depended on the livestock grazing industry throughout its history to provide economic stability to the county; therefore, livestock grazing must be protected to ensure the health, welfare and safety of the citizens.

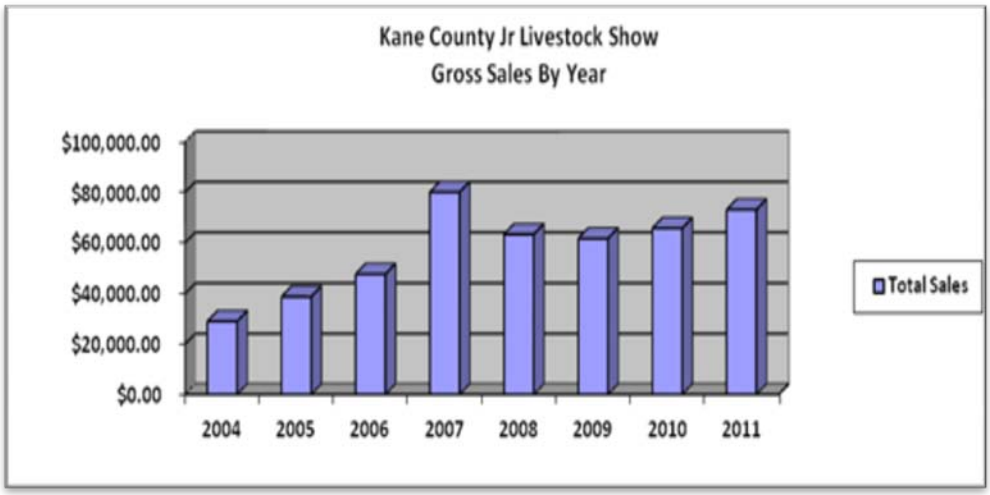
The American legend of the "Cowboy" is found throughout the Escalante Region Grazing Zone and is part of the culture and history of Kane County's "Western Legends." This cultural legend is what brings the tourism and movie industries to the county, and helps fuel the local economy. With livestock grazing being pushed out of the county by federal policies, this cultural icon, so identifiable with the persona of Kane County, is becoming endangered.

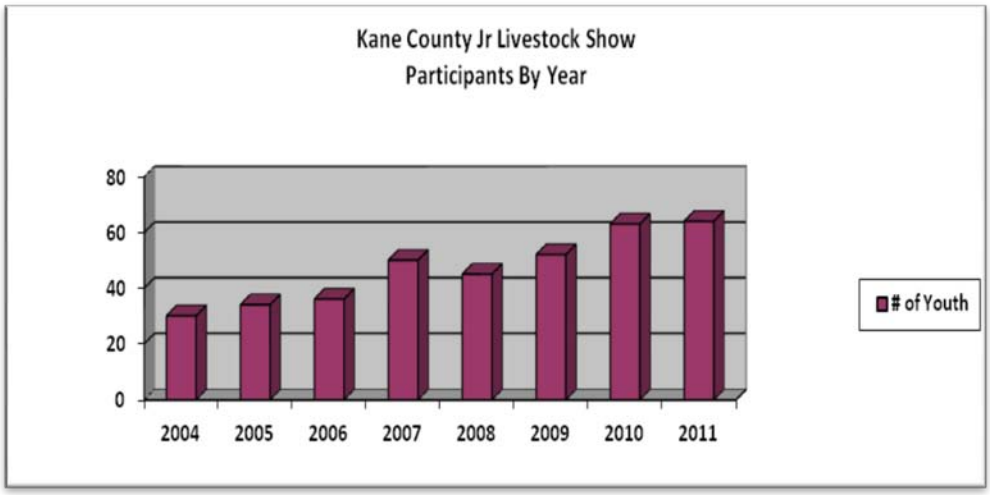
Livestock grazing in Kane County has the greatest impact on county economics and needs to be protected at all costs.

Kane County recognizes the impact and value livestock grazing provides and that the use of its public lands provides an economical benefit for all its residents and tourists. Kane County is sustained by a small population whose livelihoods have maintained the vast openness and natural

beauty of the land treasured by visitors. All sources of economic support must be maintained at their highest possible level in order to sustain the economic stability of the County. To ensure this, the Kane County Board of Commissioners, the Land Use Authority, Resource Management Committee, and the Resource Steering Committee have dedicated themselves to a coordinated land use planning effort, which can hold the federal management agencies to standards set by Congress regarding continuation of multiple uses of federal lands.

The Escalante Region Multiple Use/Multiple Functions Grazing Zone is intended to protect some of Kane County's most valuable assets, our families, our culture and our history that is unique to our area.





The table above shows the Jr. Livestock Show involving youth in Kane County, which is funded on a donation basis and gives scholarship money to the youth through their efforts raising livestock. This is a long-based tradition that has been a part of Kane County's Fair every year. The amount of donations

received demonstrates the dedication families have for livestock grazing in Kane County. The 2013 Livestock show grossed over $100,000 for the youth, according to Kevin Heaton, Utah State University Extension Agent for Garfield and Kane Counties.

Section Four
Statement on Existing Management Conditions

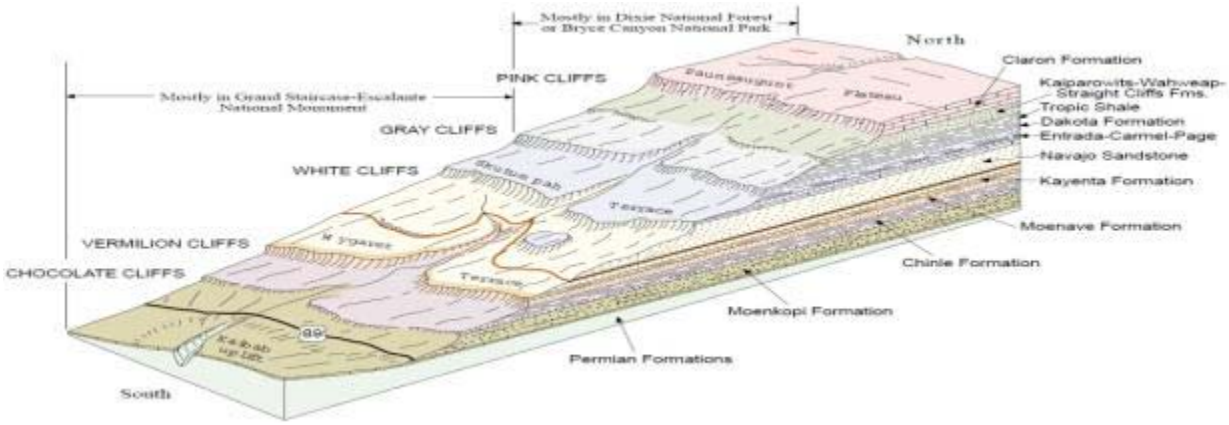
A. Location and Setting

1. Geologic History

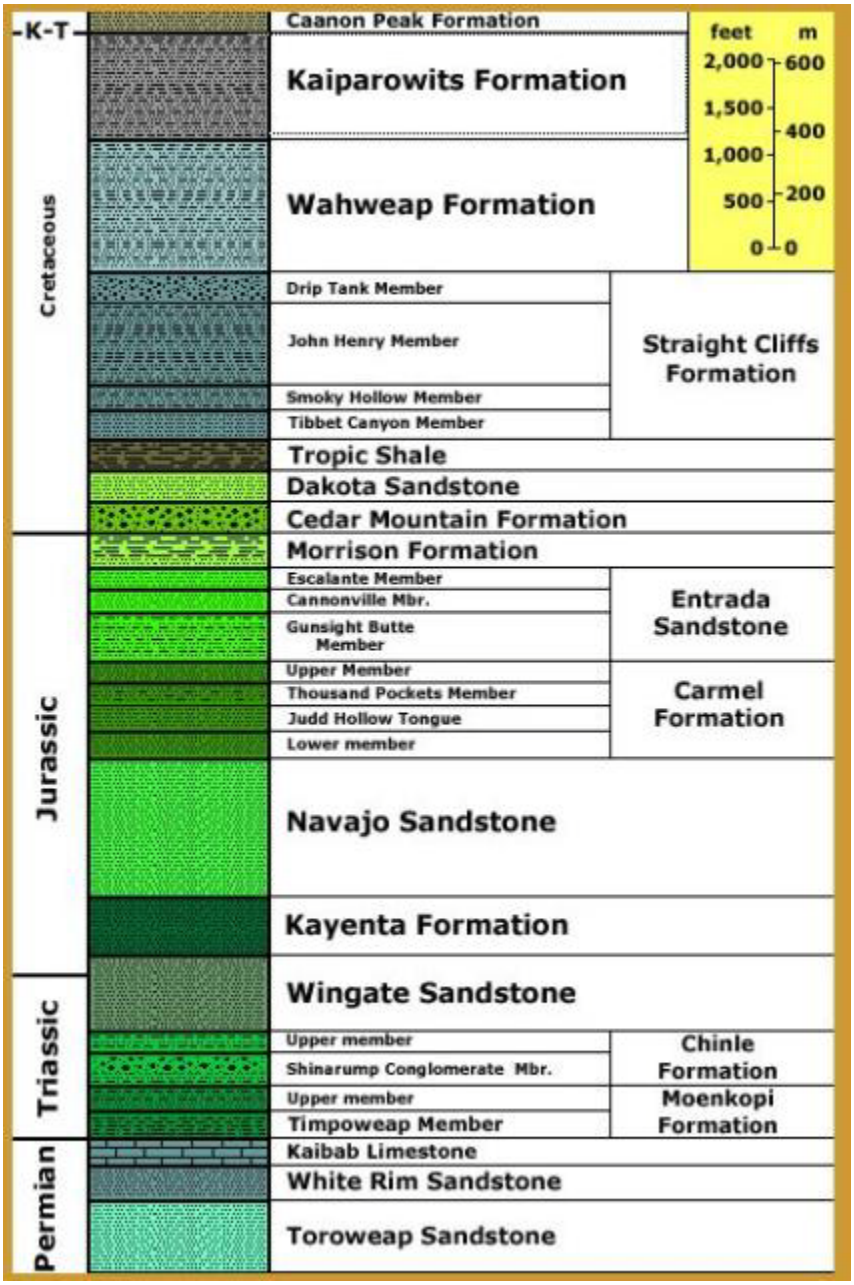
Kane County has a geologic history reaching back over a billion years. Approximately 270 million years of this history is revealed in the rocks, paleontology, and scenery of the county. The oldest rocks found record a time when the equator angled northeast from southern California past the southeastern corner of Utah. Kane County was then marginal marine lowlands of streams, flood plains, and tidal flats. The sea lay to the west, but occasionally spread east across the area leaving beds of limestone with sea shells, sponges, and other fossils between red beds of sandstone and mudstone. Evidence shows Hermit, Toroweap, Kaibab and Moenkopi Formations record periods of erosion before being covered by great sand dunes, and early Jurassic rocks form the Vermillion (Wingate/Moenave and Kayenta Formations) and White Cliffs (Navajo Sandstone) of the Grand Staircase. Though generally void of fossils, these rocks occasionally exhibit the fossilized tracks of reptiles including small to medium sized dinosaurs.

The color banded layers of sandstone, limestone, calcareous shale, siltstone, gypsum, and mudstone are the familiar deposits Kane County is known for and it took four time-periods to form (Permian, Triassic, Jurassic and Cretaceous).

Cross-sectional Diagram of the Grand Staircase from *Geology of Grand Staircase-Escalante National Monument* by Doelling, *et al. (The remaining science is in Appendix G)*



Stratigraphy of Kane County, UT



Stratigraphy after: Doelling, H.H., Blackett, R.E., Hamblin, A.H., Powell, J.D., and Pollock, G.L., 2000, Geology of Grand Staircase - Escalante National Monument: In Geology of Utah's Parks and Monuments, Sprinkel, D.A., Chidsey, T.C., and Anderson, P.B., eds., Utah Geological Association Publication 28., p. 189-231. And, Hintze, L.F., 1988, Geologic History of Utah; A Field Guide to Utah's Rocks: Brigham Young University Geology Studies Special Publication 7, p. 194 [Uinta Basin chart 98].

2. Watersheds

The county lies across four broad watersheds, all part of the Colorado River system. The Escalante River system flows from the Aquarius Plateau and Boulder Mountain into the upper portions of Lake Powell. Last Chance Creek and Wahweap Creek are the principal tributaries off the Kaiparowits Plateau, flowing into the main body of Lake Powell. The Paria River-Kitchen Corral Wash system extends from the Bryce Canyon-Bryce Valley area, terminating below Glen Canyon Dam near Lee's Ferry. Johnson Wash flows southward into Kanab Creek and eventually into the Grand Canyon. Less than ten percent of these are perennial streams and primarily include Kanab Creek, the Paria River, and Last Chance Creek.

Precipitation within the county varies from 7-18 inches annually. Winter-time precipitation varies from 4-12 inches and is the primary source of recharge of ground-water systems. Winter precipitation is the greatest along the northwest border of the county in the higher elevations of the Paunsaugunt Plateau.

3. Riparian Areas

Riparian is simply defined as vegetation and habitats that are dependent upon or associated with the presence of water. Riparian areas comprise the transition zone between permanently saturated soils and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water. Excluded are such sites as ephemeral streams or washes that do not support vegetation dependent upon free and unbound water in the rooting zone of the soil. Examples of riparian areas would include lands along perennially and intermittently flowing rivers and streams and the shores of lakes and reservoirs with stable water levels. Wetlands are represented by marshes and wet meadows. Riparian areas, though they total less than 1 percent of the total lands in the county, are some of the most productive, ecologically valuable, and utilized resources.

Riparian ecosystems in the western states are some of the rarest and most significant in the Western Hemisphere. They are also some of the most affected by the activities of man. As a consequence of western expansion and growth, an estimated 95 percent of riparian habitats have been altered or greatly impacted by such activities as water diversion, channelization, livestock use, clearing, impoundments, and invasion by non-native vegetation. Riparian areas also exhibit a high degree of resiliency when changes in management occur. A large number of plant and animal species depend on riparian areas. In the physiographic region covered by the county, up to 80 percent of vertebrates use riparian habitats at some stage in their life. Over 50 percent of the nesting bird species in this region use riparian habitats as their primary habitat for breeding purposes. This species richness is made possible by the plant diversity, availability of water, prey species, and the proximity to upland communities with their separate flora and faunal diversity.

A base flow of water is mandatory for the health and functioning of riparian areas. Factors which

interfere with these processes include water diversions, ground water pumping, and changes in vegetation type and cover. Human activities can also result in degraded water quality and levels of seasonal flow. Resulting changes may be seen in the type and structure of vegetation communities, increased water temperatures, unsatisfactory physical functioning of hydrologic processes, aesthetics, and wildlife habitat.

As the density of woodlands increases there is a complementary decrease in the amount of grasses and shrubs present. This in turn decreases the rate and amount of water infiltration following precipitation since runoff rates are accelerated.

Availability and location of water is a key component to proper livestock management. The access to reliable water largely determines the timing and intensity of livestock use in an area. By controlling the availability and access to water, resource managers are better able to manage the rangeland resources. Wildlife also depends on developed livestock water sources.

4. Wildlife

The county provides habitat for nearly 400 species of vertebrates and an unquantified number of species of invertebrates. Some animals are migratory through the county and others are year-around residents, and still others use the county as seasonal habitat.

Many species of birds use the county as breeding and nesting areas and populations of elk move onto the county for winter use. Mule deer and Big Horn sheep are year-long residents. The main riparian systems allow fish to move in and out of the county depending on water flows and seasons. These water systems are the main habitat for most of the identified species of birds.

There are several species of wildlife listed as threatened or endangered found within the county. Some are listed under the Federal Endangered Species Act and some are identified under the Utah Sensitive Species List (see chart).

Habitat manipulation has been a customary practice for improving the vegetation for wildlife for many years and should continue until the desired vegetation mix is achieved. Water in this desert environment is essential to maintain the wide variety of wildlife species in the county. This includes the riparian systems of the Kanab Creek and Paria rivers for fish, amphibians and other associated wildlife species that depend on minimum stream flows. Wildlife populations have grown to depend upon water catchment devices constructed over the years.

(i) Collaboration to Protect Wildlife

Prior to 2013, there was a 12-mile stretch of U.S. 89 that was considered a killing zone for the Paunsaugunt mule deer. Seen as one of the most treasured herds in the Southwest, these deer crossed the highway twice a year during its migration; once when it summered in Utah and again

when it wintered in Arizona. The Utah Department of Transportation (UDOT) had historical data indicating an average of 132 mule deer being killed each year in vehicle collisions between Kanab and the Arizona border. According to the Western Transportation Institution (Montana University) these collisions were costing approximately $6,600 each; but when this was reported to Congress in 2007, the amount had risen to $8,388, with a $2,000 value given for the deer.

Per the Utah Division of Wildlife: "The Utah Division of Wildlife uses a variety of tools to identify potential wildlife vehicle collision problem areas throughout the State of Utah. The wildlife collision problem on Highway 89 was highlighted using data from multiple sources such as: agency census counts, habitat mapping using GIS software, UDOr's carcass removal and wildlife collision database, radio telemetry research, input from local sportsmen, and decades of institutional knowledge from current and former DWR personnel. Based on all that data we have gleaned the following facts over the years about the Paunsaugunt mule deer herd as it relates to Highway 89: The UDWR maintains GIS habitat layers for mule deer that are regularly updated and refined to identify mule deer habitat by season of use as well as value. The Paunsaugunt plateau north of Highway 89 is identified as "crucial summer range" and the Buckskin Mountain area and points south of Highway 89 are identified as "crucial winter range". This essentially means that this herd is highly motivated on moving between these two areas and Highway 89 is a dangerous obstacle. The Paunsaugunt mule deer herd is beloved by the sportsmen of Utah for the quality of bucks it produces. The Paunsaugunt Wildlife Management Unit is one of the state's premium limited entry hunt units."

In May 2009, several local, state, and federal agencies gathered together with members of the public to mitigate the problem. Their combined efforts created the "U.S. 89 Kanab Paunsaugunt Project" with the goal of preventing wildlife from entering the highway right-of-way, and/or provide a means for escape if they got trapped there. Over a 12.25-mile stretch of road crews built or upgraded wildlife exclusion fencing on both sides of the highway. Where there were existing culverts, underpasses were built to funnel the deer through, plus three more were added for a total of seven. Wildlife escape ramps were installed every 1.5 to 2.5 miles; right-of-way fences were upgraded; cattleguards were installed at specific locations, and a total of 28 cameras were positioned at each underpass, (at fence ends and at each of two double cattleguards). The cameras were installed and are being monitored by Utah State University.

The U.S. 89 Kanab Paunsaugunt Project was completed in August, 2013 and monitoring will continue until 2018. In the Fall, cameras documented over 3,000 mule deer utilizing the underpasses during peak migration even though they were skittish and had a tendency to gather at the mouth of the tunnels. Crews had to post signs along the highway to warn tourists not to stop and frighten the herds when the phenomena caught the attention of people passing in vehicles.

According to Monte Aldridge, UDOT "This project has been a great example of what our agencies can do when we collaborate to find solutions. In 2009, when we scheduled our first meeting in Kanab we did not have a project scope defined or a funding source identified;

however, we knew we needed to start identifying the challenge or we would never get to a solution. This project is the epitome of collaboration and building partnerships. It would have been impossible for any of the agencies to have independently completed a meaningful project."

The partnership of inter-agencies and non-profit groups that successfully completed this project were: UDOT, Utah Division of Wildlife Resources, Bureau of Land Management (Grand Staircase-Escalante National Monument), Arizona Game & Fish Dept., Federal Highway Administration, Kane County, Mule Deer Foundation, Sportsmen for Fish & Wildlife and others. UDOT provided $625,000 in enhancement funds, BLM obtained $1.5 million in FHWA public lands grant, Kane County provided in-kind contributions through labor and equipment (i.e. cattleguards), and other agencies and groups brought forward more contributions. In all, they raised over $2.5 million.

Total (approximate) Cost: $2,517,000
The following partners contributed to the project:
AZ G&F/Sportsmen: $130,000
UT DWRl Sportsmen: $100,000
GSENM/FHWA Public Roads Grant: $1,525,000
GSENM Cultural Resources Staff Help: $10,000
UDOT R-4 Transportation Enhancement: $625,000
Kane County Cattle Guards Est.: $125,000
SFW Signs & Fence Maintenance Est.: $2,000

AT-RISK SPECIES				
	Common Name	Group	Primary Habitat	Secondary Habitat
FEDERALLY-LISTED				
Endangered:	California Condor (experimental)	Bird	Cliff	
	Kanab Ambersnail	Mollusk	Water - Lentic	Wetland
	Bonytail	Fish	Water - Lotic	
	Colorado Pikeminnow	Fish	Water - Lotic	
	Humpback Chub	Fish	Water - Lotic	
	Razorback Sucker	Fish	Water - Lotic	
	Southwestern Willow Flycatcher	Bird	Lowland Riparian	Mountain Riparian
Threatened:	Mexican Spotted Owl	Bird	Cliff	Lowland Riparian
	Bald Eagle	Bird	Lowland Riparian	Agriculture
	Utah Prairie-dog	Mammal	Grassland	Agriculture
Candidate:	Coral Pink Sand Dunes Tiger Beetle	Insect		
	Yellow-billed Cuckoo	Bird	Lowland Riparian	Agriculture
Proposed:	(None)			
STATE SENSITIVE				
Conservation Agreement Species:	Northern Goshawk	Bird	Mixed Conifer	Aspen
	Bonneville Cutthroat Trout	Fish	Water - Lotic	Mountain Riparian
	Bluehead Sucker	Fish	Water - Lotic	Mountain Riparian
	Roundtail Chub	Fish	Water - Lotic	
	Flannelmouth Sucker	Fish	Water - Lotic	
Species of Concern:	Allen's Big-eared Bat	Mammal	Lowland Riparian	Pinyon-Juniper
	American White Pelican	Bird	Water - Lentic	Wetland
	Arizona Toad	Amphibian	Lowland Riparian	Wetland
	Big Free-tailed Bat	Mammal	Lowland Riparian	Cliff
	Burrowing Owl	Bird	High Desert Scrub	Grassland
	Common Chuckwalla	Reptile	High Desert Scrub	Low Desert Scrub
	Desert Night Lizard	Reptile	Low Desert Scrub	Pinyon-Juniper
	Desert Sucker	Fish	Water - Lotic	
	Ferruginous Hawk	Bird	Pinyon-Juniper	Shrubsteppe
	Fringed Myotis	Mammal	Northern Oak	Pinyon-Juniper
	Greater Sage-grouse	Bird	Shrubsteppe	
	Kit Fox	Mammal	High Desert Scrub	
	Lewis's Woodpecker	Bird	Ponderosa Pine	Lowland Riparian
	Long-billed Curlew	Bird	Grassland	Agriculture
	Spotted Bat	Mammal	Low Desert Scrub	Cliff
	Three-toed Woodpecker	Bird	Sub-Alpine Conifer	Lodgepole Pine
	Townsend's Big-eared Bat	Mammal	Pinyon-Juniper	Mountain Shrub
	Western Toad	Amphibian	Wetland	Mountain Riparian

*Definitions of habitat categories can be found in the Utah Comprehensive Wildlife Conservation Strategy.

(Kane County Resource Assessment, Utah Association of Conservation Districts, August 2005)

5. Vegetation

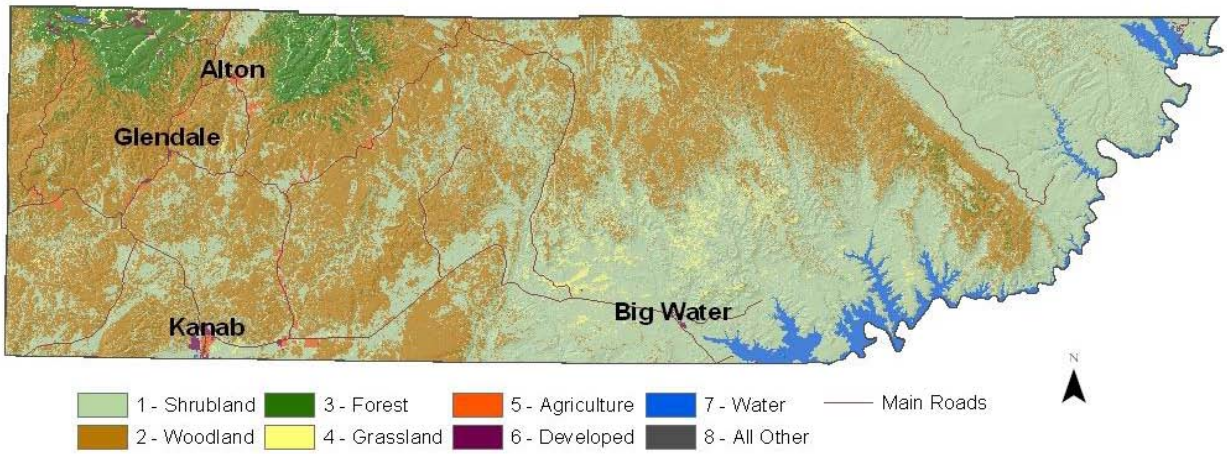
The county is located on the Western edge of the Colorado Plateau just east of the Great Basin region. Steep canyons, limited water, seasonal flood events, unique and isolated geologic substrates, and large fluctuations in climatic conditions have all influenced the composition,

structure, and diversity of vegetation associations of this region. These same factors have also made access into these areas difficult, leaving much undiscovered.

Many systems for classifying vegetation have been produced for this area of the country. Few of these systems have been checked for accuracy as they relate to the county. Coarse scale vegetation mapping exists through the Utah GAP program, but again, this information has not been field checked as it relates to the county. Levels of precipitation (elevation), geology, and soil type are the primary factors influencing the distribution of vegetation associations in the area. Some areas don't fit into these vegetation categories. These included: areas traditionally low in diversity (barren areas), treated areas (seeding, chaining), flooded areas, lava flows, and rock outcrops.

Relict plant communities refer to areas that have persisted despite the pronounced warming and drying of the interior west over the last few thousand years and/or have not been influenced by settlement and post-settlement activities, chiefly domestic stock grazing. This isolation, over time and/or from disturbance, has created unique areas that can be used as baseline for gauging impacts occurring elsewhere in the county. Little if any information has been collected on the composition and structure of the vegetation associations or other physical and biological components. The same factors that have created and protected these areas over time have also contributed to preventing study of these unique and potentially informative associations.

The geologic and geographic conditions for the presence of hanging gardens exist in the county. Inventory work was conducted in conjunction with the Kaiparowits Study (1971-74) which determined the location and species composition of several hanging gardens. The potential for more hanging gardens is also high. Due to the conditions of isolation produced in hanging gardens there is a potential for unique species in these areas.



Kane County Land Cover; Source: Kane County, UT Resource Assessment August 2005

Mosses, liverworts and lichens are vegetative life forms that have historically been overlooked due to their inconspicuous nature. This large group of organisms has been studied to some degree in other areas of Southern Utah, but little information about these organisms exists for the county. Besides the individual study of these organisms there is another association to which they belong. This association, referred to as microbiotic, cryptogamic or crypto biotic crusts, has been found to perform a vital function in dry land ecosystems for infiltration, stabilization, nutrient cycling and seedling establishment. These crusts are also very sensitive to ground disturbance, and specifically compression. Although information on the effects of activities on microbiotic crust exists, this information is based on a limited amount of research. Much study is needed on the role of these organisms on the ecosystem.

6. Woodlands

Numerous studies have documented the *expansion of woodlands* in the Intermountain West; however, few have compared the chronology of expansion for woodlands across different geographic regions or determined the mix and extent of pre-settlement stands. We evaluated tree age structure and establishment for six woodlands in four ecological provinces in the central and northern Great Basin. Since 1860, the area occupied by pinyon and/or juniper has increased 125-625 percent. The increase of trees was a result of infill into shrub-steppe communities with relatively open low density stands of trees and expansion of pinyon and juniper into sagebrush-steppe communities that previously did not support trees. Woodland expansion in Oregon, Utah, and Nevada were similar, but began two to three decades earlier in Idaho. The majority of woodlands are still in the early to mid phases of stand closure, which means they often support an understory of shrubs and herbaceous vegetation. This has implications for future changes that will occur within these woodlands in the next 30-50 years. In the absence of disturbance or management, the majority of these landscapes will become closed woodlands resulting in the loss of understory plant species and greater costs for restoration.
(Miller, Richard F.; Tausch, Robin J.; McArthur, E. Durant; Johnson, Dustin D.; Sanderson, Stewart C. 2008. Age structure and expansion of pinyon-juniper woodlands: a regional perspective in the Intermountain West. Res. Pap. RMRS-RP-69. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 15 p.)

(i) Historical and Modern Disturbance Regimes, Stand Structures, and Landscape Dynamics in Pinyon/Juniper Vegetation of the Western U.S.

Abstract: Pinyon/Juniper is one of the major vegetation types in western North America. It covers a huge area, provides many resources and ecosystem services, and is of great management concern. Management of pinyon/juniper vegetation has been hindered, especially where ecological restoration is a goal, by inadequate understanding of the variability in historical and modern ecosystem structure and disturbance processes that exists among the many different environmental contexts and floristic combinations of pinyon, juniper and associated species. This paper presents a synthesis of what we currently know, and don't know, about historical and modern stand and landscape structure and dynamics in three major and fundamentally different kinds of pinyon/juniper vegetation in the western U.S.: persistent woodlands, savannas, and wooded shrublands. It is the product of a workshop that brought together fifteen experts from across the geographical range of pinyon/juniper vegetation. The intent of this synthesis is to provide information for managers and policy/makers, and to stimulate researchers to address the most important unanswered questions.
(*William H. Romme, Craig D. Allen, John D. Bailey, William L. Baker, Brandon T. Bestelmeyer, Peter M. Brown,, Karen S. Eisenhart, Lisa Floyd-Hanna, David W. Huffman, Brian F. Jacobs, Richard F. Miller, Esteban H. Muldavin, Thomas W. Swetnam, Robin J. Tausch, Peter J. Weisberg; Published by the Colorado Forest Restoration Institute, Colorado State University, Fort Collins, CO, www.cfri.colostate.edu, June 4, 2008)*

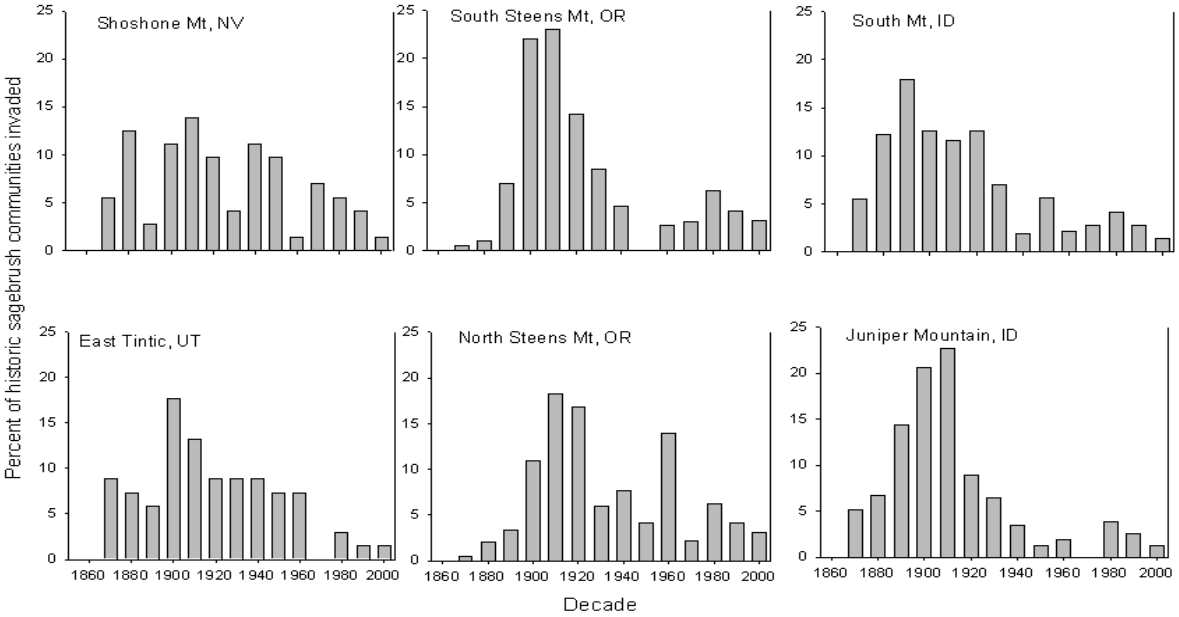


Figure 3. The proportion of decadal encroachment of pinyon and/or juniper between 1860 and 2000 into historic sagebrush steppe stands with no evidence of pre-settlement trees.

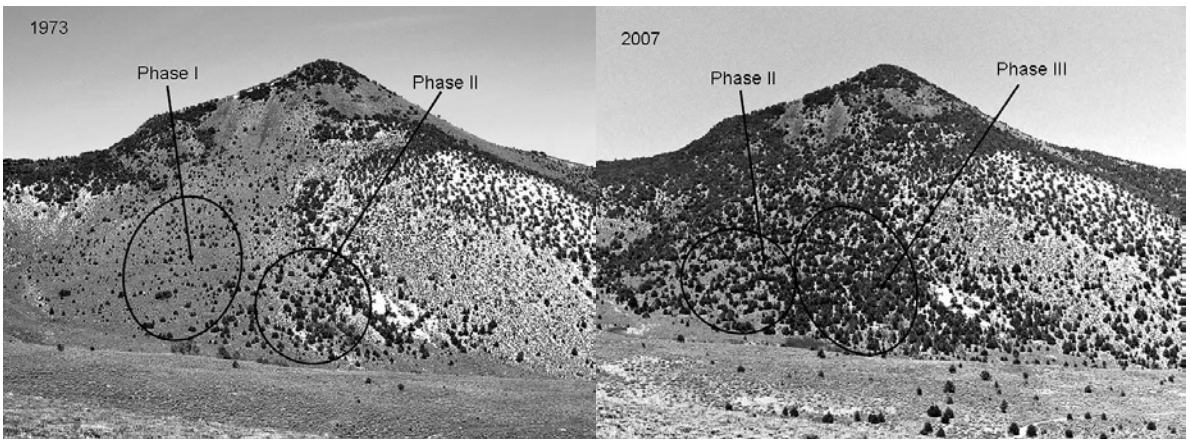


Figure 8. Woodlands closure over the 34-year period from 1973 to 2007, resulting in a shift from Phase I and II to Phase II and III in the Shoshone Mountains, Nevada (photos by Robin Tausch).

(ii) Big and Black Sagebrush Landscapes

Big sagebrush is a medium- to long-lived 20-200+ years aromatic evergreen shrub with one to several main stems. The gray to black bark on older branches is shredded and shaggy. Typical persistent leaves are small, pale green to blue-green, narrowly wedge-shaped, with three blunt teeth on the broadened end. Spring ephemeral leaves are larger and generally more variable in shape and size than persistent leaves.

We suggest that historic MFI values ranged from 40-80 years for mountain big sagebrush and some productive basin and Wyoming big sagebrush communities and were as long as 100-200 years or longer for big and black sagebrush sites with low productivity. We offer broad estimates here in order to capture the range in MFI length we believe existed across the full ecological and geographical distribution of big sagebrush. A range of intervals lengths must be expected in conjunction with a single MFI value. For example, natural variability corresponding to a MFI of 50 years might produce intervals as short as 10-15 years and as long as 100-120 years; however, most intervals would likely fall between 25 and 75 years**.**
(Stanley G. Kitchen and E. Durant McArthur USDA Forest Service Gen. Tech. Rep. RMRS-GTR-202. 2007; McArthur and Stevens 2004; Perryman and others 2001; Beetle 1960; McArthur and others 1979; Miller and Shultz 1987)

7. Soils

Soils present in the county form the base on which ecosystems develop. Understanding the condition of soils is important to the management of many resources. Resource data on soils varies in level of detail across the county, and presently, there are two levels of data available. These data-sets are as follows:

Kane County Soil Survey: This unpublished report is presently only in a file format and was conducted at a scale of 1:63,360 (1 inch per mile).

STATSGO: The State Soil Geographic Database is generalized soil survey information for the entire state of Utah. This data was collected at a scale of 1:250,000 and can be used at a county or regional level.

There are three climatic zones in the county, summarized below, in which soil information can be generalized.

Climate Zones				
Climatic Zones	Precipitation (in)	Temp. (degrees F)	Freeze Free Period (Days)	Elevation (Feet)
Desert	6 to 8	50 to 57	170 to 200	4000 to 4800
Semi-desert	8 to 12	47 to 55	125 to 170	4800 to 6500
Upland	12 to 16	43 to 50	100 to 125	6200 to 7500

The Desert climate zone is found in two general areas of the county:

The Sooner Bench area of the Hole in the Rock Road is typified by soils of very minimal soil development. Soils typically only have developed a horizon of calcium carbonate (lime) accumulation or no other noticeable subsoil development. Structural benches and dunes on Navajo and Entrada Sandstone, the Carmel Formation and quaternary alluvial deposits characterize this area. Important vegetation for this area includes blackbrush, Cutler Mormon-tea, broom snakeweed, Indian rice grass and galleta.

The Big Water area is typified by soils of very minimal soil development, with no noticeable subsurface horizon development. Hill slopes and badlands on Tropic Shale, Dakota Formation and lower members of the Straight Cliffs Formation characterize this area. Important vegetation for this area includes mat saltbush, shadscale, galleta, bottlebrush squirreltail and Indian pipeweed.

The Semi-desert climate zone is found in two general areas of the county:

The Western area of the Hole in the Rock Road is typified by very deep (>60 inches) soils with developed horizons of clay and calcium carbonate (lime) accumulation. Structural benches and dunes on Entrada Sandstone, the Carmel Formation and quaternary alluvial deposits characterize the area. Important vegetation for this area includes Indian rice grass, needle-and-thread grass, globemallow, fourwing saltbush, Mormon-tea and winterfat.

. The Highway 89 area between Johnson Canyon and the Cockscomb is typified by very deep soils (>60 inches deep) with development of calcium carbonate (lime) and clay accumulation subsurface horizons. The Moenkopi Formation and quaternary alluvial deposits dominate as the parent material of this area. Important vegetation for this area includes Indian rice grass, galleta, winterfat and big sagebrush.

The Semi-desert to upland transition climate zone is found in two general areas of the county:

The Death Ridge, Carcass Canyon, and Burning Hills areas is typified by shallow soils (10-20 inches deep) with minimal development of calcium carbonate (lime) horizons or no subsurface diagnostic horizons present. The Straight Cliffs Formation dominates as the parent material of this area. Typical landforms consist of structural benches with highly dissected side slope canyons and badland areas of exposed geologic materials. Important vegetation for this area includes galleta, blackbrush, Mormon-tea and Utah juniper.

The Forty Mile area Wahweap Wilderness Study Area (WSA) is typified by shallow to moderately deep soils (10-40 inches deep) over the John Henry member of the Straight Cliffs Formation. Soil development consists dominantly of a horizon of calcium carbonate (lime) accumulation or little to no subsurface soil horizon development. Typical landforms consist of structural benches with highly dissected side slope canyons. Important vegetation for this area includes Utah juniper, pinyon, galleta, Mormon-tea and Bigelow sagebrush.

The Upland climate zone is found in three general areas of the county:

The Fifty Mile Mountain area is typified by shallow to moderately deep soils (10-40 inches deep) over the John Henry member of the Straight Cliffs Formation. Soil development consists dominantly of a horizon of clay accumulation or little to no subsurface soil horizon development. Typical landforms consist of structural benches with highly dissected side slope canyons. Important vegetation for this area includes Indian rice grass, galleta, rock goldenrod, Bigelow sagebrush, green Mormon-tea, pinyon and Utah juniper.

The Kodachrome basin and Skutumpah Road area is typified by diverse soil properties that are found on the Carmel Formation and quaternary alluvial deposits. Landforms consist of dissected side slopes and alluvial fans and flats. Important vegetation for this area includes Indian rice

grass, galleta, big sagebrush, bitterbrush, pinyon and Utah juniper.

The Paria-Hackberry WSA consists dominantly of Navajo Sandstone geology with varying depths (20-60 inches deep) of sand. Landforms consist of vegetated dunes and outcroppings of sandstone. Important vegetation for this area includes sand dropseed, Indian rice grass, blue grama, green Mormon-tea, pinyon and Utah juniper.

Soils and soil condition affect the degree of water infiltration. This in turn affects basin storage and availability for a range of resource uses. When management activities result in compaction of soils, runoff from precipitation is accelerated and less water is stored in the soil. The result is higher erosion rates and less available water for plants, animals, and ground water recharge.

(i) Summary of Kane County, Utah Vegetation and Soils

Kane County lies along the central southern border of Utah. It is the 8th largest of Utah's 29 counties encompassing 3,990 square miles. Much of the county lies at elevations between 5,000 and 7,500 feet above sea level, but in the northwest part of the county land on the Markagunt and Paunsaugunt Plateaus lies at elevations between 7,500 and 9,400 feet, and the eastern and southeastern portions of the county along Lake Powell lie between 3,500 and 5,000 feet in elevation.

Table 1. Annual Precipitation of selected Kane County locations (in inches)

Alton	16.93
Big Water	6.92
Bullfrog	5.93
Kanab	13.31
Kodachrome Basin	11.92
Orderville	15.98

Precipitation patterns mirror the elevation with more than 40 inches of precipitation falling annually on the high elevations of the Markagunt Plateau and over 25 inches on the balance of the Markagunt Plateau and on the Paunsaugunt Plateau; precipitation tails off to between 16-25 inches as these plateaus drop into foothills and valleys. In much of the area south and east of these plateaus there are broad bands of landscapes with 12-16 inches and 10-12 inches of annual precipitation trailing off to narrower landscape bands of 8-10 inches and 5-8 inches toward to the east and southeast along Lake Powell with the lowest precipitation (6 inches) in pockets of land near Lake Powell, e.g., Bullfrog and Warm Creek Basins. Table 1 presents average annual precipitation of some Kane County locations.

+Table 2. IV Ecoregion Areas of Kane County

Ecoregion	%
High Plateaus (19 e)	5
Semiarid Foothills (19 f)	2
Mountain Valleys (19 g)	1
Semiarid Benchlands and Canyonlands (20 c)	53
Arid Canyonlands (20 d)	25
Escarpments (20 e)	13
Sand Deserts (20 h)	< 1

A useful way to examine landscapes is to view them is in ecoregions. Ecoregions denote areas of general similarity in the type, quality, and quantity of environmental resources. They are designed to serve as spatial frameworks for the

assessment, management, and monitoring of ecosystems and ecosystem components. In that light this summary presents the ecoregions and soils of Kane County. Ecoregions have been prepared and presented in hierarchical levels; the coarsest level is Level 1; the finest level is Level IV Ecoregions are identified through the analysis of spatial patterns and composition of biotic and abiotic phenomena such as geology, physiography, vegetation, climate, soils, land use, wildlife and hydrology. At Level IV Ecoregions, Kane County has 7 ecoregions: three in Utah's Wasatch and Uinta Mountains Ecoregion—Ecoregion 19 (which also includes the Markagunt and Paunsaugunt Plateaus) and four in the Colorado Plateaus Ecoregion—Ecoregion 20 (Figure 1).

In Kane County, Ecoregion 19 consists of dissected plateaus and intervening valleys—the High Plateaus (19e), Semiarid Foothills (19f), and Mountain Valleys (19g) of Figure 1 and occupy 8 percent of the county's land base (Table 2).

The High Plateaus Ecoregion is characterized by subalpine fir, Engelmann spruce, Douglas-fir, and aspen communities as well as some high elevation meadows. Land use includes logging, grazing, and recreation. The Semiarid Foothills Ecoregion has a matrix of sagebrush, grama grass, mountain mahogany, Gambel oak, pinyon and juniper. Grazing is common and some areas have been cleared of trees and reseeded to grasses.

The Mountain Valleys Ecoregion contains terraces, flood plains, alluvial fans, and hills. Sagebrush is common but irrigated cropland and pasturelands as well as managed rangeland have been established.

The four Colorado Plateaus ecoregions occupy over 90 percent of the Kane County land base. These are the Semiarid Benchlands and Canyonlands (20c), Arid Canyonlands (20d), the Escarpments (20e), and the Sand Deserts (20h) Ecoregions of Figure 1.

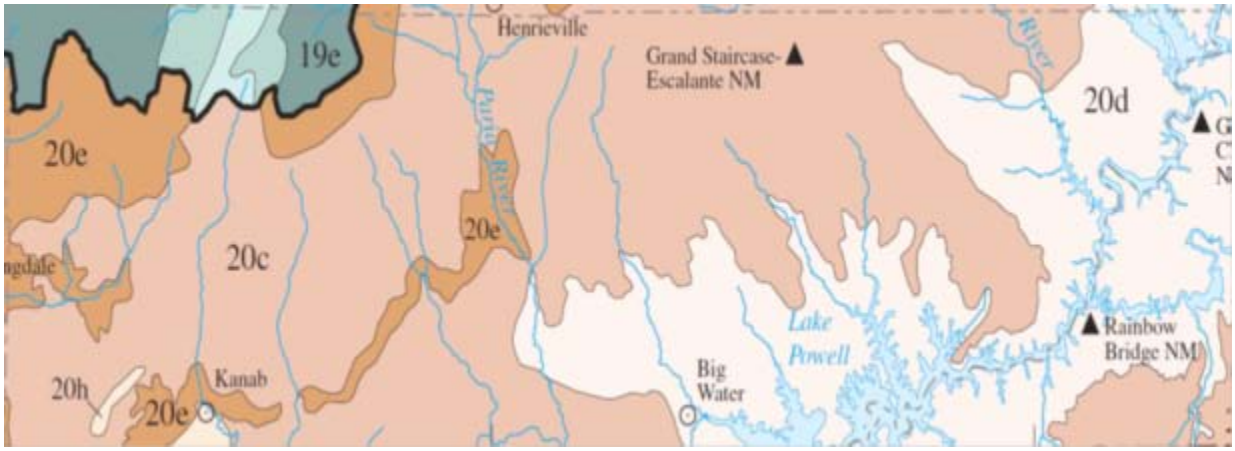


Figure 1. Level IV Ecoregions of Kane County

The Semiarid Benchlands and Canyonlands Ecoregion of Kane County occupy over 50 percent of the county's land area. Broad grass, shrub, and woodland covered benches and mesas characterize these areas. Slickrock and fin bedrock exposures are common along rims, escarpments, and on steep slopes. Low escarpments separate remnant mesa tops and narrow canyons from surrounding benches. Fine sand soils support warm season grasses, winterfat, Mormon-tea, fourwing saltbush, and sagebrush. Pinyon and juniper occur on shallow, stony soils but are expanding due to fire suppression and erosion. The principal uses of these lands are grazing and recreation in addition to wildlife habitat. The Arid Canyonlands Ecoregion is located on the inner gorge of the Colorado River and its major tributaries.

This ecoregion occupies about 25 percent of the county. In general, this region is bound by nearly vertical canyon walls that separate it from the adjacent higher benchlands of the Semi-arid Benchlands and Canyonlands Ecoregion. Exposed bedrock is common. Blackbrush, shadscale, and the drought tolerant grasses galleta and Indian rice grass are common plants. As in the case of the Semi-arid Benchlands and Canyonlands Ecoregion the principal uses of the Arid Canyonlands Ecoregion are grazing, recreation, and wildlife habitat.

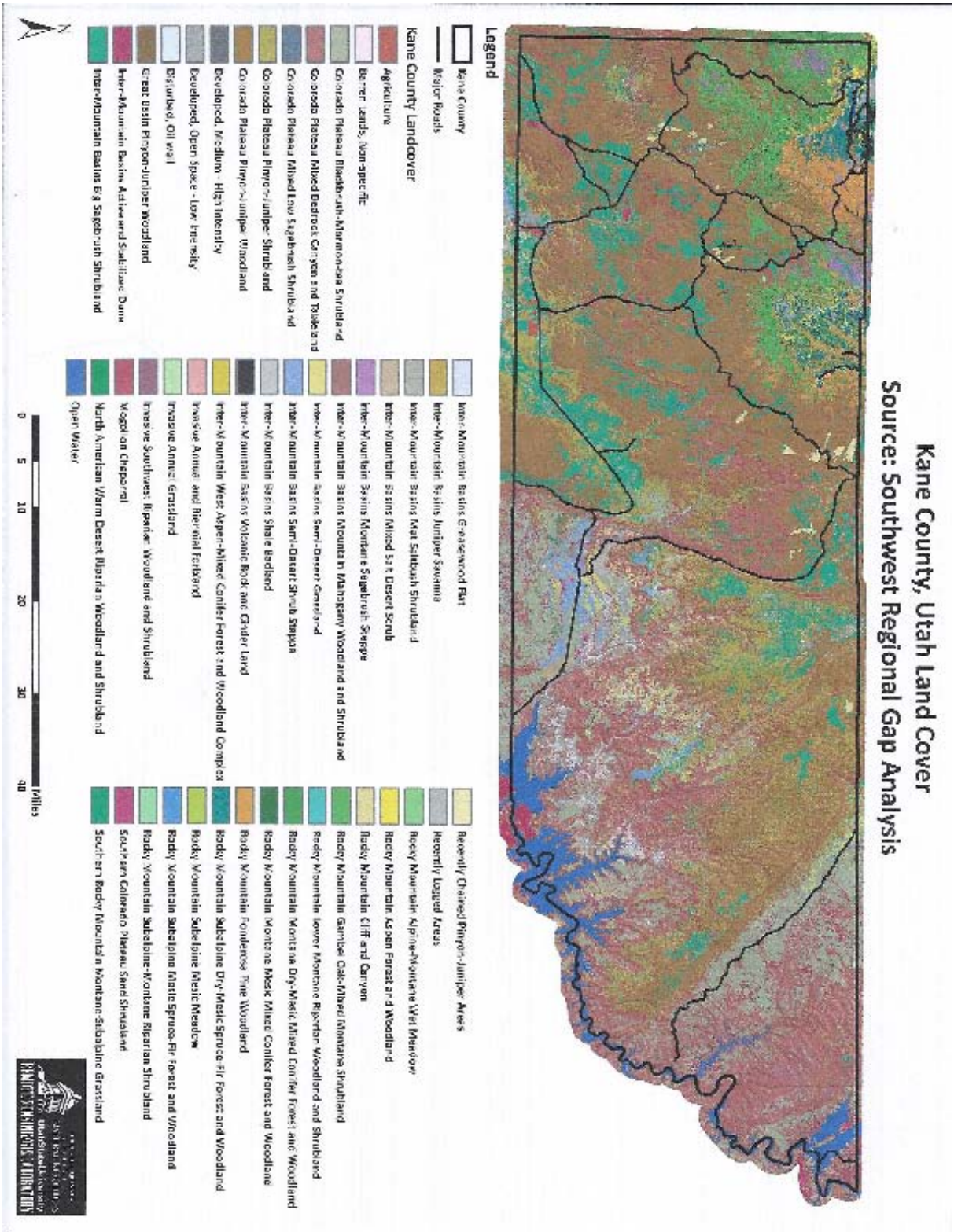
The Escarpments Ecoregion is characterized by deeply dissected, cliff-bench complexes that rise above the Semi-arid Benchlands and Canyonlands Ecoregion. Vegetation ranges from Douglas-fir forests on steep, north-facing slopes to desert and semi-desert grassland or shrubland on the lower drier sites. Pinyon/juniper woodland often dominates escarpments and benches that have shallow soils. The principal land uses here are for wildlife habitat and recreation.

The Sand Deserts Ecoregion is composed of nearly level landscapes covered with a mantle of sandy aeolian deposits, sand dunes, and exposed sandstone bedrock. These lands support grazing and provide some irrigated fields for hay and grain production.

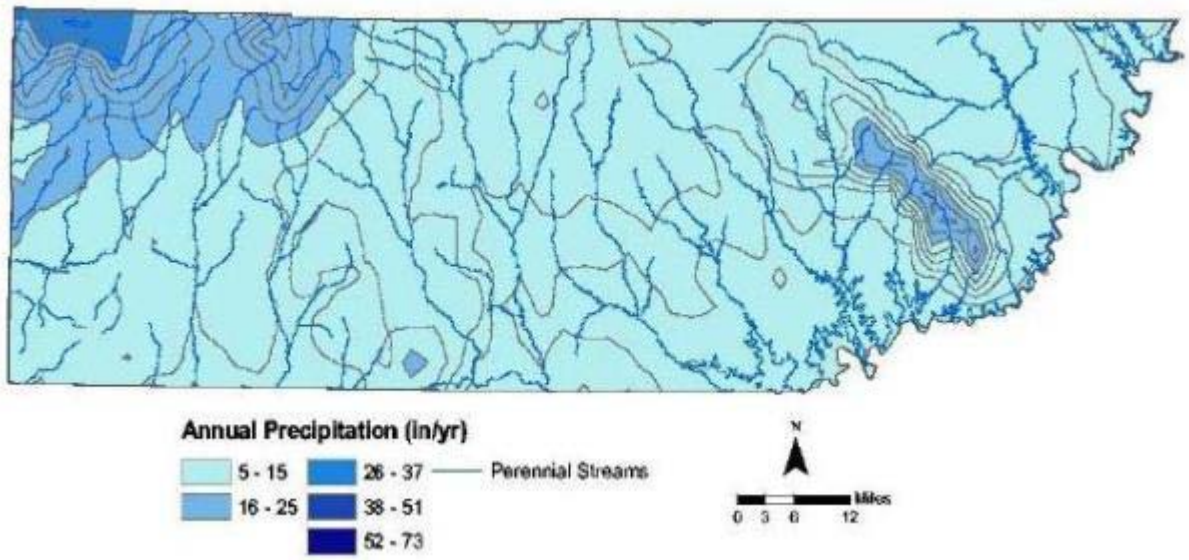
More detailed vegetation patterns are presented below which presents 46 land cover classes. These are finer scale, real time subdivisions of the ecoregions at the time the data was collected.

Soil type distribution follow, in general, other patterns presented for vegetation and precipitation with bands that flow from west especially northwest eastward across the county. The most common soil types are mollisols, entisols, aridsols, rock outcrops, and rock outcrop-badland. Mollisols are characterized by thick, dark, relatively fertile surface soils which have been formed under grassland vegetation or in forested zones where grasses are an important component of the understory. Entisols are young soils without discernible horizons except some darkening of the surface. They occur on areas that have been impacted by water flow such as alluvial terraces and fans, valley bottoms and floodplains. Aridisols occur in areas of relatively low annual precipitation, less than 14 inches, sometimes much less. They occur on lower terraces and fan slopes and in desert valleys and are often characterized by long, dry summers. *(Lowery et al. 2006; Hutchings and Murphy 1981; Omernik 1995; Richardson et al. 1981, Ashcroft et al. 1992)*

Appendix 1. From Lowery et al. 2007



Kane County, Utah Precipitation



Source: Kane County, Utah Resource Assessment August 2005

8. Introduction to Microbiotic Crusts

Understanding the role of microbiotic crusts in total resource management is an ongoing challenge. Areas in the United States where crusts are a prominent feature of the landscape include the Great Basin, Colorado Plateau, Sonoran Desert, and the lower Columbia Basin. Crusts are also found in agricultural areas, native prairies, and sandy soils in Glacier Bay, Alaska.

Outside the United States, crusts have been studied in the Antarctic, Australia, China, and Israel, among other locations. In fact, microbiotic crusts have been found on all continents and in most habitats, leaving few areas crust free.

Microbiotic crusts are formed by living organisms and their by-products, creating a surface crust of soil particles bound together by organic materials. Above ground crust thickness can reach up to 10 cm. The general appearance of the crusts in terms of color, surface topography, and surficial coverage varies. Mature crusts of the Great Basin and Colorado Plateau are usually darker than the surrounding soil. This color is due in part to the density of the organisms and to the often dark color of the cyanobacteria, lichens, and mosses. The presence or absence of a crust is partly determined by soil texture and conductivity, pH, moisture, and possibly temperature. Crust coverage varies greatly, from less than 10 percent to nearly 100 percent.

(i) Functions

Crusts contribute to a number of functions in the environment. Because they are concentrated in the top 1-4 mm of soil, they primarily affect processes that occur at the land surface or soil-air interface. These include soil stability and erosion, atmospheric N-fixation, nutrient contributions to plants, soil plant-water relations, infiltration, seedling germination, and plant growth.

The land where crusts occur is used for a wide range of purposes—from grazing and recreation to military uses, and in some places, crops. Ultimately, land managers want to know how the functions of crusts change under different practices. Where the functions of crusts are impaired or eliminated because of land use practices, and are essential to the health of the ecosystem, land managers need guidelines to adapt their practices to protect or restore the functions of crusts. *(July 1997, United States Department of Agriculture, Natural Resources Conservation Service, Soil Quality Institute, Grazing Lands Technology Institute, Roxanna Johnston)*

(ii) Cyanobacteria and Cyanolichens

Abstract: In both field and greenhouse studies, cyanobacteria and cyanolichens of cold-temperate deserts often enhance an essential element uptake in associated herbs. That effect is often associated with better seedling establishment and larger seedlings. The following are possible mechanisms for these effects: (1) the microbiota concentrate essential elements in available forms in soil surface layers; (2) the microbial surface covers are usually darker colored than the soil itself and produce warmer soils during cool seasons when soil water is most available; (3) the gelatinous sheaths of several cyanobaterial genera common on alkaline deserts contain chelating compounds; and (4) conditions that favor persistent microbial growths on soil surfaces also favor maintenance of larger populations of microorganisms that form mycorrhizal and/or rhizosheath associations with seed plants. **There is evidence that associated animals may be nutritionally benefited by the enhanced mineral content of forage plants growing in well-developed loped Cyanobacteria crusts.** *(Great Basin Naturalist 53(1): 59-72; "Cyanobacteria and Cyanolichens, Can they enhance availability of essential minerals for higher plants?" Kimball T. Harper and Rosemary L. Pendleton)*

(iii) Microphytic and Non-microphytic Soil Seedbeds

a. Implications

A voluminous amount of literature documents the importance of soil surface microflora in a plethora of ecological processes. Our research further documents that well-expressed microphytic surfaces occupied by lichens and mosses, through the capture of aeolian dust, create a significantly finer-textured soil seedbed compared to adjacent seedbeds not occupied by lichens and mosses. Given the relatively short time-frame (Bedell Flat exclosures < 40 years; Dogskins exclosures < 20 years) to produce these differences in seedbed particle size distribution,

microphytic crusts likely play an important role in cycling of aeolian dust on rangelands and concomitantly on nutrient levels and the physical nature of soil seedbeds.

Microphytic Crust and Disturbance – Ecological Implications of Livestock Herbivory in the West: page 125; Mosses and foliose lichens appear to be more susceptible to livestock trampling than crustose lichens and microscopic forms. Moderate mechanical disturbance may stimulate these crustose lichens and microscopic forms which are more important in N-fixation.
(J. Range Manage; 54:194–196 March 2001; Technical Note: Physical and chemical comparisons between microphytic and non-microphytic soil seedbeds, Robert R. Blank, Fay L. Allen, and James A. Young; West 1990, Johansen 1993, Eldridge and Greene 1994; Williams et al. 1995, Leys and Eldridge 1998)

9. Fire Effects on Cryptobiotic Soil Crusts (In the Grand Staircase–Escalante National Monument)

The Crawford Bench fire (Figure 1) occurred sometime in the early 1950s and burned approximately 200 ha. Preceding the fire, the area had a mixed composition of Utah juniper, pinyon pine, and Gambel oak (Quercus gambellii), which are still present in adjacent unburned areas. Livestock is grazed on the site during winter months. Recreational and other activities are limited due to restricted access and interspersed privately owned land.

The fire at Five Mile Mountain occurred in 1989, 10 years prior to our sampling, and it burned approximately 300 ha (Figure 1). The area is dominated by Utah juniper mixed with patches of big sagebrush and cliffrose. Soils are from limestone parent materials and are described as sandy loam (Chapman 1997). Slopes within the burn area are generally < 2°, with a maximum of 5°. Land use on Five Mile Mountain includes *livestock grazing during winter months*, firewood cutting, and minimal recreational use.

Approximately 150 ha burned on Buckskin Mountain in 1997 (Figure 1). The pre-burn vegetation at the site is mostly Utah juniper, big sagebrush, and cliffrose. Three months after the fire, resource managers seeded the burn site with native annual and perennial seeds. Seeding was conducted using a rangeland drill and dribbler pulled by a bulldozer. Additionally, 100 cliffrose seedlings were planted in areas inaccessible to the drill. Land use on Buckskin Mountain includes *winter livestock grazing*, firewood cutting, and minimal recreational use.

Buckskin Fire (1998): There was a second fire at Buckskin Mountain in 1998, only a few miles east of the 1997 burn. This fire burned an area of about 300 ha, including 150 ha that had burned in 1996 (not included in this study). Sampling was conducted only in areas that burned in 1998, excluding the 1996 burn. The site description for the 1998 fire is similar to the 1997 Buckskin fire; however, this fire received no post-burn seeding treatments.

(i) Methods

Field sampling four to six pairs of multi-scale vegetation plots were established randomly at each burn site and at nearby unburned sites, except for Crawford Bench, which was limited to two sets of paired plots because of restricted access. Paired plots consisted of one Modified-Whittaker sample plot within the disturbed area and one control sample plot outside the burn perimeter. Each plot consisted of ten 1 sq m subplots, two 10 sq m subplots, and a 100 sq m subplot nested within a 20 x 50 m plot *(Stohlgren et al. 1995)*. In each of the 1 sq m subplots, we recorded percent cover of cryptobiotic crust by developmental stages and bare ground. Within each of the two 10 sq m subplots, the 100 sq m subplot, and the 1000 sq m plot, we recorded presence of cryptobiotic crusts by development.

(ii) Discussion

Our analyses suggest that percent cover of young and old crusts substantially decreases after fire, and the area of bare ground increases (Figure 2). *Three years following a fire, bare ground decreases as the recovery of young crusts begins to accelerate, and by 10 years, the percent cover is equal to adjacent unburned areas*. Fifty years after the Crawford Bench fire, young crust cover remains higher in the burn site than in the unburned control site. Due to the lack of data between the 10 and 50 year-old-burns, it is difficult to determine whether these levels are continuing to increase, beginning to decrease, or have stabilized.
(Proceedings USGS 5th Biennial Conf, Paul Evangelista, Debra Guenther, Thomas J. Stohlgren, and S. Stewart)

10. Vegetation Response to Fire & Post-burn Seeding Treatments

Abstract: We compared three naturally ignited burns with unburned sites in the Grand Staircase–Escalante National Monument. Each burn site was restored with native and nonnative seed mixes, restored with native seeds only, or regenerated naturally. In general, burned sites had significantly lower native species richness (1.8 vs. 2.9 species), native species cover (11% vs. 22.5%), and soil crust cover (4.1% vs. 15%) than unburned sites. Most burned plots, seeded or not, had significantly higher average nonnative species richness and cover and lower average native species richness and cover than unburned sites. Regression tree analyses suggest site variation was equally important to rehabilitation results as seeding treatments. Low native species richness and cover, high soil C, and low cover of biological soil crusts may facilitate increased nonnative species richness and cover. Our study also found that unburned sites in the region had equally high cover of nonnative species compared with the rest of the Monument. Cheatgrass (*Bromus tectorum)* dominated both burned and unburned sites. Despite the invasion of cheatgrass, unburned sites still maintain higher native species richness; however, the high cover of cheatgrass may increase fire frequency.
(Western North American Naturalist 64(3), © 2004, pp. 293–305; Paul Evangelista, Thomas J. Stohlgren, Debra Guenther, and Sean Stewart)

Section Five
Statement on Desired Future Management Setting

Federal and State land management planning processes will include Kane County as an active, on-going partner and will coordinate with us to be consistent with county goals and policies. The county will insist that the uses of State Institutional Trust Lands conform to county land policies and regulations.

There is a recognition that living in close proximity to a variety of lands held in the public trust has myriad benefits to those who live in or visit Kane County. Federal and state lands provide opportunities for commerce and sustainability with community watersheds, livestock grazing, logging, firewood gathering, mining, mineral exploration and development. In addition, outdoor recreation such as water sports, hiking, horseback riding, photography, hunting, all terrain vehicles/off-highway vehicles (ATV/OHV) and four-wheel drive vehicles support tourism and visitor use.

It is the responsibility of the Kane County Commission to facilitate a land use pattern which allows private unincorporated land owners to make and attain reasonable use of their lands within the constraints presented by the land itself, as well as traditional and recreational uses, customs, culture and available public services. Convenient access to public lands is of vital importance in maintaining and growing sustainable communities and economies in the county. Each of these land uses presents different challenges and opportunities to residents and county officials.

Kane County is recommending coordination management planning that involves input from local residents and all stake holders pertaining to public land use, thereby working with the needs of local and federal planners to best manage multiple-use, multiple-function zones. It has been recommended by members of the local Resource Steering Committee, Randall Violet, professor at Southern Utah University, and Kevin Heaton, Garfield and Kane County Agricultural Extension Agent, that we use this management arrangement to have a workable ongoing effort to use livestock grazing (and other uses) as a tool to enhance the Grand Staircase-Escalante National Monument to the fullest extent possible. As shown on page (35) "The Collaboration to Protect Wildlife," Kane County believes entities and citizens can coordinate their efforts to accomplish what is impossible for a single agency or individual to do.

Federal land managers have recognized that to be most effective, federal lands planning must include state and local governments as full coordinating partners in the public lands planning process. Congressional policy requires that federal planners coordinate with state and local governments, and that federal plans are consistent with plans of adjacent jurisdictions within the constraints of federal law. Formal and informal relationships between county, state, and federal partners, based on mutual respect and understanding, will ultimately result in more cohesive and successful efforts to achieve common interests and objectives.

The Kane County Commission intends to remain a proactive coordinating partner in all public lands planning processes that impact the county's land base, culture and economy. All attempts to lock down public lands and prohibit access to these lands will be resisted by Kane County by educating the public and partnering with entities that share its vision and values.

Given these basic premises, the Kane County Commission will be an active coordinating partner with other governments to foster a sustainable, broad-based economy which allows traditional economic uses to remain vibrant, while fostering new economic activities and protecting important scenic, cultural and social qualities. Federal land management planning processes will include Kane County as an active, coordinating, on-going partner, consistent with federal mandates involving coordination and will be consistent with county goals and policies, such as: the Kane County Land Use Ordinance; Kane County General Plan; the Kane County Resource Management Plan; and any other plans involving the coordination process where not unreasonably constrained by federal rules or law.

Section Six
Planning Guidelines and Policy Statements

The policy statements contained herein are an outgrowth of planning efforts by Kane County in planning and managing public and private lands in the county, and the basic responsibility of the commission to care for the welfare of its residents in the county.

A. Access & Transportation

Transportation is critically important to Kane County. The county believes that proper access to public lands is essential, and is an inherent right of every citizen. It is the county's position that no access should be closed except in situations of duplication, danger to the public, or serious threat to the resource, and then only with input and consultation with the county. The county further believes that no closure should occur on any of its RS2477 rights-of-way assertions without express consent of the county commission.

The county supports general public access through private lands as historically provided and allowed. The county will continue to work with individual land owners as necessary to maintain these traditional thoroughfares while also protecting private rights. It is vitally important that all existing public rights-of-way, including both RS2477 (roads) as well as prescriptive rights across private lands, be maintained.

B. Customs and Culture

Residents of Kane County highly value the quality of life the customs and culture of the county provides. Many residents have traditionally earned their livelihoods from activities associated with the county's customs and culture. While the economy of the county is not as dependent on agricultural activities as it once was, many residents continue to rely on these or similar activities either as a primary or a secondary income source.

The livestock industry is still a major income source for Kane County as a whole, but it has suffered significantly by the reduction of grazing permits over the last several years. County residents and visiting tourists greatly prize the outdoor recreation opportunities detailed in the previous section. These activities are a way of life in Kane County, having sprung up from a traditional western lifestyle heavily dependent on the land as a natural resource to provide sustenance and enjoyment. At its core, the county is a place where its residents enjoy a rural environment and closeness to nature. These activities have been kept alive as they are passed from generation to generation. Parents, children, and grandchildren enjoy the outdoors together as a family unit. Access to public lands in the county for multiple uses is a prized privilege, even a right, inherent in residency, which is the foundation of the lifestyle that has kept families here for generations. In recent years, it has become the main attraction for new residents seeking a rural, family centered way of life.

Kane County's quality of life and economy is, and will continue to be, dependent upon these activities. Since the county is directly dependent upon all its natural resources, management decisions affecting public land directly impacts and potentially changes the county's customs and culture. Therefore, a critical tie exists between the use of private, federal, and state natural resources and the continuance of our way of life. It is imperative that the county, stakeholders, and informed representatives review and coordinate with one another when dealing with natural resource issues *as they occur*, to assure public land management decisions do not negatively impact the county's customs and culture.

The historical, cultural and educational benefits of livestock grazing in the Escalante Region Multiple Use/Multiple Functions Grazing Zone are important to Kane County and its residents. The loss of our rich historical culture, which brings visitors to Kane County and keeps residents living here, would cause irreparable harm to the economy and detract from the richness of our culture and heritage. Kane County families have grazed livestock and used the land for multiple generations; a loss of a portion or all of their grazing rights would impact family economics and dynamics which cannot be replaced once lost.

Kane County recognizes the impact and value of livestock grazing and that the use of public lands provides a benefit for all residents, tourists, and future generations.

The establishment of the Escalante Region Multiple Use/Multiple Functions Grazing Zone is intended to protect Kane County's most valuable assets: families, livelihoods, culture and history, (which are unique to the area).

Kane County is sustained by a population whose livelihoods have maintained the vast openness and natural beauty of the land treasured by visitors. All sources of economic support must be maintained at their highest possible level in order to sustain the economic stability of the county. To ensure this, the Kane County Board of Commissioners and the Land Use Authority have dedicated themselves to a coordinated land use planning effort, which can hold federal management agencies to standards set by Congress regarding continuation of multiple uses of federal lands.

Kane County has depended on the livestock grazing industry throughout its history to provide economic stability to the county; therefore, livestock grazing must be protected to ensure the health, welfare and safety of its citizens.

The American legend of the *Cowboy* is found throughout the Escalante Region Multiple Use/Multiple Functions Grazing Zone and is part of the culture and history of Kane County's "Western Legends." This cultural icon brings the tourism and movie industries to the area, and helps fuel the local economy. With livestock grazing being pushed out of the county by federal policies, this cultural icon, which is so identifiable with the persona of Kane County, becomes downgraded. Continuing current public land management practices diminishes opportunities for viable livestock grazing and threatens the custom, culture, heritage, value and economy incorporated in the Escalante Region Multiple Use/Multiple Functions Grazing Zone.

Kane County must oppose any change in land use that does not evaluate, mitigate, and minimize impacts to customs and culture and the economic future of the county. Federal and state agencies should always consider the social, cultural, and economic needs of the county when developing plans and making recommendations that affect its customs and culture. The county recommends federal and state agencies enhance opportunities for responsible use of public lands which benefit the customs and culture, and economic base of the county. Federal and state agencies should always notify the county of any actions or regulations which may impact its customs and culture.

C. Federal and State Resource Management Planning

It is Kane County's policy to coordinate with public land management agencies in the planning and management processes. The county's participation and responsibilities will be guaranteed by, and contingent upon, a formal coordination agreement. Any formal county coordination agreement shall be contingent upon the county's full involvement at the earliest stage of the proposed process. The county would like to see increased coordination among the county, the Bureau of Land Management, U.S. Forest Service, Utah Department of Natural Resources, National Park Service and other land management agencies. It is the county's belief that all land use decisions must be based on valid science, sound principles of consensus building, and coordination of local interests. The county's objectives in this regard are further discussed in the goals and objectives section of this plan.

The position of Kane County is that weight given to public comment and opinion should be directly proportional to the geographic and economic impact of the decision. The county policy is to provide clear and timely comments, and encourage its residents to do the same.

It is the preference of Kane County that managing agencies coordinate with the county on all planning at the earliest possible time. The county has limited personnel to dedicate to public land planning. Nevertheless, the county will make every effort to coordinate planning documents and achieve consistency. Kane County requests full coordination by all federal land managers to use Kane County's Land Use Ordinance, Resource Management Plan, and General Plan, and any other plans which comply with federal law.

Glen Canyon National Recreation Area differs from National Park unit management. The NRA is to foster recreation use. This implies the need to allow access into NRA lands.

It is the policy of Kane County that federal and state land management agencies:

1. Establish effective government-to-government relationships with Kane County;
2. Identify a county relations liaison to serve as the first point of contact with the county commission and also the person who will generally initiate agency contact with the county;

3. Implement federal land management programs and activities consistent with the county's ordinances, and respect the county's rights in fulfilling the federal government's legally mandated coordination responsibility;
4. Manage federal lands and resources in coordination with the county;
5. Work to reduce or remove legal or administrative program impediments that inhibit the agency's and the county's capacity to work directly and effectively with each other;
6. Consult with the county on matters that may affect the public's rights and interests;
7. Promptly notify the county at the earliest opportunity of proposed policy, plans, projects or actions that may affect the public's rights or interests in order to provide the county an opportunity for meaningful dialogue on potential implications and effects;
8. Develop, in consultation and collaboration with the county, agreements and statements of relationships that help clarify the county's rights and interests, and set forth procedures and protocols for consultation, including the points of contact. Involve designated county representatives, including staff, in the development of proposed policies, plans, projects, or actions, where appropriate;
9. Involve the county early in the planning process, and in the preparation of in-depth socio-economic information;
10. Fully consider recommendations by the county to address county concerns on proposed decisions;
11. Inform the county as to how its information and recommendations were considered in public land management decisions, including explanations, particularly in the event that county input was not adopted or incorporated;
12. Document the process and actions taken to consult with the county, the results of those actions, and how the public land manager's final decision was communicated to the county. This consultation review and monitoring process shall involve the county officials and representatives; and
13. Conduct annual planning meetings for specific projects and other multiple-use interests in affected areas that include participation by livestock permittees, affected adjacent land owners, and county representatives.

D. Grazing Management

Livestock grazing on federal and state lands in the county shall continue, at levels consistent with the custom and culture, and proper stewardship of the resource. The continued viability of livestock operations within the county shall be achieved by management of land and forage resources, by proper optimization of animal unit months (AUMs) for livestock (in forage resources), in accordance with supportable science and the multiple-use provisions of federal and state law.

Federal land management agencies will not adjust AUMs on public lands, without demonstrated scientifically based justification and full consultation between the permittee and the administering agency. Federal management agencies will not permit the relinquishment, transfer, or retirement of livestock grazing AUMs in favor of conservation, wildlife, or other uses besides livestock grazing.

Federal and state land managers will promote public respect for private structures, corrals, fences, water development, etc., on federal land in an effort to reduce vandalism, educate land users, and promote multiple-use concepts.

AUMs should not be placed in a suspended use category unless there is a demonstrated rationale and scientific determination that the condition of the rangeland allotment or district in question will not sustain the AUMs proposed to be placed in suspended use. Any grazing AUMs that are placed in a suspended use category must be returned to active use when range conditions improve. State-of-the-art monitoring data should be the basis for grazing management decisions on BLM and Forest Service grazing allotments.

In an effort to gather more information on the needs of local ranchers using the Grand Staircase-Escalante National Monument, the Kane County Resource Steering Committee sent out surveys focusing on the needs and economics of livestock grazing. Below is a list of concerns/suggestions local ranchers identified (also see Appendix F-Revenue Models & Appendix G-Implan Models for specific percentages:

- Kane County's policy will be to oppose reductions in local AUM's, and oppose shortening seasons of use; ranchers should be allowed to improve their allotments;
- Allow re-seeding;
- Routine maintenance needs to be allowed in a timely manner to protect the allotments and grazing uses;
- Kane County will support the full use of active AUMs on all allotments; and
- Kane County will work to eliminate mismanagement, which causes loss of AUMs (i.e. no reseeding or maintenance to water facilities, access roads or fencing).

Mismanagement causes harmful effects to the environment, which adversely affects grazing when maintenance is not allowed in a timely matter. Improvements to allotments need to happen, or be allowed, as found in § 6220 of the BLM standards.

Range mismanagement caused by failure to use best science and modern technologies is an unacceptable practice in Kane County. Restricting the use of current science and proven methods is damaging to range health and proper livestock usage.

Kane County requires current and future science, and proven methods, to be used to enhance the rangelands in the county. The use of current science and methods should be given priority in range development and livestock management and are considered *Best Practices*. The following is a list of current science and proven methods for developing and maintaining range land health, which are acceptable to Kane County as *Best Practices*. The GSENM Management Plan must be revised to reflect the following requirements:

1. Aerial application of spike or herbicides.
2. Chemical applications for brush control. (Example: When blade mowing for rabbit

brush.)
3. Chaining for new re-seeds or improvements of existing re-seeds.
4. Bull hog treatments for control of pinyon or juniper encroachments.
5. Cutting of cedar posts or jiggers for the improvement or maintenance of infrastructures on allotments.
6. Gathering of firewood or cutting for fuel.
7. Use of mechanical equipment for the control of erosion or (maintenance) of administrative roads.
8. Extend water lines for better distribution of livestock. (Example: Riparian areas fenced where possible, and water head boxes constructed for moving of water away from existing area.)
9. Flexibility in grazing dates on allotments.

Additional *Best Practices* that Kane County would like to see on the Monument, which are used in other BLM managed lands, include:

1. Renewal of existing seedings and development of newly seeded areas.
2. Flexibility with regards to the turning in and removal of cattle on allotments. (Manage for conditions rather than dates.)
3. Don't let threats of lawsuits from special interest groups stop staff from asking or pursuing new development or improvements.
4. Expand and allow new water developments, such as wells, extensions of water lines and catchments.
5. Use applied science in the development of new and existing improvements.
6. Ability to use aerial application for the control of brush in seedings. (This is the least invasive way)
7. Use of fire in controlled burns for brush, pinyon and juniper control. This is used extensively in other government agencies.
8. Support local economies by expanding local production of agricultural products.
9. Opening up the 16 (currently) closed allotments. These need to have infrastructure maintained by the BLM. Fences and water developments need to be up, running, and ready for use when drought and wildfire destroy present allotments.
10. Permittees be allowed to use tractors and four-wheelers in dry washes to maintain and repair fences, waterlines and other infrastructures.

Bottom line: Kane County asserts and adopts as its policy that these *Best Practices* increase bio-diversity on the Monument and are good for all species of life, including humans.

Ranchers attended scoping meetings and received handouts informing them of the BLM's intentions to create a new grazing management plan on the Monument. A few of the excerpts are listed below for information. In considering changes to the current grazing management practices on the GSENM, Kane County agrees with the BLM in recognizing grandfathered uses such as grazing and mineral uses, even if those uses may impair the wilderness study areas' (WSA) suitability for wilderness. These pre-existing uses are allowed to continue but are restricted to the

same manner and degree that was occurring on October 21, 1976, the date that FLPMA was enacted.

Livestock Grazing along Suitable Wild and Scenic Rivers: Livestock currently graze along many of the suitable segments and should be managed to protect identified river values. Existing structures may be maintained and any new facilities to facilitate livestock management should be unobtrusive so as to maintain the values for which the segment was found suitable. [BLM handout/scoping meeting]

Livestock Grazing in GCNRA: When the Glen Canyon area was designated as a national recreation area in 1972, the enabling legislation authorized livestock grazing. [BLM Handout]

GSENM's Objects & Values: Ranching and livestock management remain at the core of the traditional uses of this region's public lands, and have created a cultural landscape rich in tangible objects such as trails, inscriptions, ghost towns, rock houses, and cowboy line-camps and intangible forces, which have shaped essential values of hard work, self-reliance, strong ties to the land, and strong ties to family. [BLM handout]

The BLM livestock Grazing Plan Amendment EIS strives to find a decision that will enable sustained use of the land through improved land health and science-based grazing management. [BLM Handout]

Planning Criteria and Planning Issues National Conservation Lands: The BLM and the National Park Service will coordinate and communicate with State, local, and tribal governments to ensure that the BLM and the NPS consider provisions of pertinent plans, seek to resolve inconsistencies between State, local, and Tribal plans, and provide ample opportunities for State, local, and Tribal governments to comment on the development of amendments. [BLM Handout]

E. Kane County Grazing Management Guidelines

(Categories E.-M. by Lamar Smith, Associate Professor Emeritus, University of Arizona, *Rangeland Monitoring*)

Kane County's Resource Management Plan (KCRMP) documents that range livestock production is an integral part of the county's history, custom, culture, and economy. Rangelands included in the Grand Staircase–Escalante National Monument (GSENM) make up a substantial part of the range resources of the county. Reduction or elimination of grazing on these lands would cripple the livestock industry and have severe consequences for the people and economy of the county. Therefore, it is the position of the county, as documented in the KCRMP that livestock grazing continue on GSENM at levels consistent with the sustainability of the resource and the ranching industry.

F. Adaptive Management

The GSENM Management Plan (1999) establishes that one of the basic precepts of the Monument includes the *"unparalleled opportunity"* to research *"increasing our understanding of the interactions between humans and their environment; improving land management practices; and achieving a properly functioning, healthy and biologically diverse landscape."* This management plan also describes the adaptive management approach to be used in managing the GSENM. The approach involves a four-step process of planning, implementation, monitoring and evaluation. These are sound concepts and provide a good basis for achieving the objectives for which the GSENM was established while continuing the historic uses of the Monument protected by the Proclamation. Unfortunately, the management plan also continues numerous blanket restrictions (WSAs) on land use and management practices that may or may not provide a basis for achieving management objectives in the most environmentally effective and economic way. Restrictions of use of machinery, aerial application of herbicides, cutting of fence posts, seeding of non-native species, vehicle access to range improvements, etc. should be considered on a case by case basis rather than imposed as general rules.

Land management based on the concepts from the 1999 management plan should allow us to consider which combination of practices could be applied to achieve specific objectives on a particular piece of land. This approach would allow the costs and benefits (both ecological and economic) of various practices to be considered for specific situations, and would encourage experimentation and innovation. This is the basis for the adaptive management approach to vegetation and resource management.

G. Trend Monitoring

Monitoring of range trends (changes in soil and vegetation) is essential in the adaptive management process. Changes in plant species (frequency, density, composition, production, etc) or soil surface conditions (litter, bare ground, gravel cover, etc) can provide an indication of how the range is responding to management and/or weather conditions. Monitoring methods must provide data that is repeatable and objective in order to establish valid sampling. Monitoring is usually done on key areas or designated monitoring areas, which are indicative of trends over a larger area. This helps eliminate observer bias or sampling errors.

On the GSENM, BLM has used two different techniques for monitoring. The first is the use of *trend plots*, which are 3x3 or 5x5 foot frames placed in selected locations and marked with angle iron so they can be relocated. Cover (percent of ground covered) and density (number of plants per unit area) was determined in these plots. In some cases, a line intercept transect was also run starting from the square plot. Close-up and general view photographs were also made. These plots were generally established in the 1960s and have been re-measured and/or re-photographed several times since then. Some of them have been re-photographed fairly recently.

Trend plots furnish quantitative data on species cover and density in the plots. However, the size of the plots is inadequate to provide a good representation of changes in plant community at the location. To get a reliable estimate of changes in the plant community would require a number of these plots at each location. Therefore, the data from the plots is not very useful.

Photographs provide a better basis for analyzing trends than plot data. Close-up photos may provide some information about soil surface conditions, at least in the plot. General view photos show the general aspect of the vegetation in the vicinity of the plot. While these photos do not provide quantitative data on species composition or cover, they may furnish a basis for evaluating changes in the plant community such as increase in shrub cover. They can also help determine when major changes in the plant community occurred.

Photos provide a qualitative historical record of vegetation at selected locations on all or most of the allotments on the GSENM. They should be re-photographed periodically and any changes that can be noted documented. Changes should be interpreted considering the ecological site on which the plots are located. *Quantitative recording of vegetation information in the 3x3 foot or 5x5 foot plots should be discontinued.*

BLM has recently (last 10-15 years) changed its trend monitoring procedures to use frequency and point estimates of ground cover. This method provides quantitative data that can be used to determine changes over time. Frequency is the percentage of a sample of quadrats of a certain size in which a plant species occurs. The frequency of a plant species is related both to the number and distribution of plants of that species. Frequency is related to the size of quadrat used, thus the same quadrat size must be used in repeated sampling. Usually 100-200 quadrats are used at each sample location. Ground cover is measured by recording “hits” on plant bases, litter, rock and/or gravel, and, in some cases, biological crusts. Usually 400-500 points are recorded at each location. The frequency transects may be located at the same place as the trend plots or in new locations as required.

Frequency does not provide information on species composition on a weight or cover basis, or about plant production. If such information is required, additional measurements must be used. The value of frequency is that it requires little training, provides repeatable data, and requires less field time compared to methods that require more training and expertise.

The use of frequency and ground cover (along with photographs) should be continued to monitor key areas on grazing allotments at intervals of 3-5 years. Permittees and other interested parties should be invited to participate in gathering and interpreting these data. Frequency (or other monitoring data) can only be used to establish whether a change has occurred or not; it cannot establish the cause of observed changes. Identifying the probable cause of observed changes (or lack of change) is an integral part of the evaluation portion of the adaptive management process. Without this it is not possible to make informed decisions about what changes in management, if any, are indicated.

H. Assessment of Rangeland Health and Proper Functioning Condition

The 1996 Range Reform regulations adopted by BLM required that all grazing allotments be evaluated according to *"Standards and Guidelines for Rangeland Health"* (S&Gs). *Standards* are attributes of the rangeland and *Guidelines* are management practices to be applied. The BLM of Utah developed S&Gs for the State with cooperation from the Utah Resource Advisory Council (RAC).

There are four Utah Standards which can be summarized as follows:

Standard 1 – Upland soil productivity and protection is maintained by adequate vegetation and surface cover.
Standard 2 – Riparian areas (if any) are in proper functioning condition (PFC).
Standard 3 – Desirable composition and structure of vegetation for the site are present.
Standard 4 – Utah standards of water quality are met.

Regulations require that each of the standards be evaluated, with due consideration of ecological site potential, to establish whether standards are being met, or if significant progress toward meeting the standard is being achieved. If the standard is not met, or if significant progress is not being made toward meeting it, then the cause must be determined. If the cause is determined to be *current* livestock grazing management, then a change in grazing must be made to correct the problem, (i.e. improved distribution, change in season of use, change in stocking rate, etc.).

Assessment of these standards is not monitoring; it does not involve measuring change over time and it is not intended to be used for monitoring. It is a one-point-in-time qualitative conclusion based on professional judgment and site-specific reference materials. The assessment of both upland rangeland health and riparian PFC should only be done by locally experienced professionals, preferably by an interdisciplinary team, and it should be based on documented reference materials specific to the ecological sites or riparian types under consideration.

Assessing whether the standard is met is the first step. Determining whether there is progress toward meeting the standard cannot be necessarily identified at one point in time. This determination should be based on an examination of trend data as described above. If such data are lacking or inconclusive, then monitoring should be initiated or continued to establish the trend. Identifying the cause for failure to meet the standard or to make progress toward meeting it also involves judgment and consideration of other data or evidence. Examples would be analysis of precipitation data, comparison with similar situations in other areas, and local knowledge of the area.

Standards 1 and 3 are generally evaluated on uplands with the aid of a check sheet and reference sheets specific to each ecological site. This process is described in the Rangeland Health Technical Reference 1734-6 and BLM Manual 4180 and Handbook 4180-1. Standard 2 is evaluated in a similar fashion with PFC check sheets and instructions for either lotic (flowing

water) or lentic (ponds or springs) situations as described in Interagency Technical References 1737-15 and 1737-16.

Standard 4 is different in several respects from the other three. First, it is use–based, where the other three standards relate to ecosystem function irrespective of uses. The State of Utah establishes water quality standards for designated uses (drinking water, full body contact, cold water fisheries, livestock water, etc). These do not have any necessary relation to the *health* of the upland watershed or the hydrology of the riparian system. Second, the chemical, biological, or sediment content of the water may be related to the natural sources of the water, rather than to land uses. For example, the kind of rock or soil through which the water passes may affect the presence of dissolved minerals or suspended sediments in the water. Without some baseline information on specific streams achievable, water quality cannot be determined. Third, water quality may vary significantly in time and space. For example, the concentration of minerals, biological organisms and sediment may vary by season, within years or among years due to volume of flow.

The water quality standard was included because the federal regulations require it. Determining whether this standard is being met involves very different methods and time frames, and it is dependent on the existence of adequate baseline standards that may or may not exist specific to the water body being considered.

Finally, the assessment of range health is usually done at selected locations on an allotment. These may be representative areas or critical areas identified by the assessment team. Rarely, if ever, does it involve assessment of every acre of any allotment. Therefore, if some areas on an allotment are found to not meet standards, it *should not* be reported that the entire allotment does not meet standards. After all, every allotment or other area of land may have areas that do not meet standards of rangeland health, e.g. roads, campgrounds, parking lots, corrals, etc. Therefore reporting on the progress of range health evaluation should be done on the basis of the number of allotments assessed and corrective action taken, not on the number of allotments (or acres) that did or did not meet standards.

I. Utilization

Utilization is the percentage of the current year's production of forage plants that has been removed by grazing. It is a useful tool in range management. *Proper use* is a term used to indicate a level of grazing that is compatible with the sustained productivity of key forage plants or the range as a whole. Research done by clipping and grazing studies has shown that average utilization of about 35-50% will allow adequate growth and reproduction of most range grasses, although these are only guidelines which depend on other factors such as the frequency of grazing, the season of grazing and other factors.

Utilization, as defined above, cannot be measured unless the full year's production is known. It can only be measured after the end of the growing season, which is usually in the fall. Measuring use during the growing season is not utilization since the current growth is not

complete. Use-measurement during the growing season should be called *seasonal use* to distinguish it from true utilization. Utilization guidelines for proper use cannot be applied to seasonal utilization.

Utilization can be used for several purposes in range management. Mapping the amount of utilization on an allotment (use pattern mapping) is very useful in identifying where grazing distribution needs to be improved by fencing, water development, or changes in season of use. Measuring utilization at trend monitoring locations can help to identify when grazing is responsible for observed trends in vegetation cover or composition. Monitoring utilization in key areas can help establish whether reductions in stocking are needed or increases in stocking may be feasible. In making these interpretations, it is important to recognize that measurements of utilization include not only the degree of use by livestock but also by wildlife, insects, and losses due to weather. In some cases, these other sources of use may be a substantial part of the total utilization.

Utilization guidelines are often misused by setting standards that are too strict. Such utilization guidelines should not be used as a *trigger* to move livestock when grazing is done during the growing season, because the guidelines do not refer to seasonal utilization. Utilization guidelines from grazing studies are developed based on average utilization over a period of years; not a target to be met every year.

Stubble height is another way of approaching the intensity of grazing use. Stubble height is the average height of forage plants remaining after grazing. Unlike utilization, it can be measured at any time of the year. However, guidelines on stubble height should also recognize that it will vary from year to year. Stubble height guidelines are sometimes used as indicators of cover for certain wildlife species (e.g. nesting birds) or for sediment trapping in riparian systems. If that is the purpose, stubble height measurements should not be confined to forage plants preferred by livestock.

When recommendations for the use of “utilization” are incorporated into range management plans the following guidelines should be followed:

1. Utilization is not a management objective; it is a tool for helping guide management to achieve vegetation/soil objectives.
2. Recommendations of proper use should only be based on utilization observed after the growing season – it cannot be applied to seasonal utilization.
3. Utilization, or seasonal utilization, guidelines should not be used as *rigid triggers* for the movement or removal of livestock.
4. Recommendations for measuring utilization or stubble height should always specify how it is to be measured or observed, the species to be measured, the location to be measured, and the time of year it is to be measured. If that is not done, the data can be easily misused or misinterpreted.

J. Flexibility in grazing management plans

A part of the grazing management plan should describe how pastures in the allotment will be used. In some cases, a grazing system is recommended, such as a deferred rotation or best pasture system. To be effective and workable grazing management plans must incorporate flexibility to adapt to weather and other conditions as they occur, rather than rigid requirements of number and movement dates.

Grazing management plans in semiarid rangelands like those of the GSENM must consider and accommodate a large number of factors. Among them are:

1. Kinds and growth patterns of forage plants in different pastures and their needs for growth and reproduction which may dictate season of use and/or need for periodic deferment of grazing.
2. Nutritional and other needs of different classes of stock (dry cows, lactating cows, yearlings, etc).
3. Availability and reliability of water sources in each pasture.
4. Livestock management needs such as breeding, weaning, replacement heifers, shipping, etc.
5. Topographic factors and natural movement routes of livestock; in rough (and primitive) country it is not always feasible to alter movement patterns between certain pastures.
6. Considerations imposed by other land uses or values such as recreation, hunting, wildlife needs, endangered species, etc.

Based on the factors listed above, a general plan can be developed that provides guidelines for deciding when and where livestock will be grazed during a series of years. However, to be successful, this can only be a general plan. The weather (amount and timing of precipitation, and the temperature patterns in spring and fall) can have dramatic effects on the amount and kind of forage available in each pasture from year to year. It also has an effect on the availability and distribution of water. Precipitation can vary markedly within an allotment in any given year. Therefore, it is imperative that grazing management plans provide the flexibility to alter plans as the grazing year progresses to account for the weather (and other unpredictable events such as wildfire, floods, etc).

The grazing management plan should provide guidelines, but the permittee must have the flexibility to stay in some pastures longer or to move quicker than planned to accommodate the weather and other factors. To make this work, the permittee should keep good records of numbers and dates when each pasture was stocked, and notes on conditions when the pasture was grazed. Before the next grazing year, the permittee and range specialist should agree on a plan for the coming year based on those records and any other monitoring data collected. For example, if a pasture is grazed heavier or earlier than planned in one year, it could be grazed lighter or deferred the next. The grazing management plan should therefore be a framework

laying out guidelines for making grazing management decisions, not for setting an inflexible schedule.

K. Range Improvements and Vegetation Management

Range improvements include: fences, water developments, trails, roads, cattle guards, corrals and other facilities designed to allow good grazing management. These improvements allow control of the timing, intensity and distribution of grazing by livestock, and give the ability to keep livestock where they are supposed to be. Good improvements are essential to effective grazing management, which not only improves livestock performance but allows grazing to be done in ways that minimize conflicts with other land uses and values. Permittees and the BLM usually share the costs of new improvements and permittees generally perform most of the maintenance of improvements.

Restrictions that make the construction or maintenance of existing and new improvements more expensive (for the BLM and permittees) can cause delays, and therefore, resource management objectives may not be realized. Guidelines for construction or maintenance must include avoiding unnecessary resource damages, but still be realistic. It should balance the (possible) short term damages with the long term benefits that will occur as a result of the improvements.

Some areas of the GSENM have experienced vegetation changes over the years, especially with the invasion of sagebrush and juniper into areas that formerly supported more grasses and other herbaceous plants. These invasions have often caused near-closed canopy situations that support very little herbaceous understory. This condition creates less livestock forage and reduced wildlife habitat value, along with increased soil erosion. Whatever the causes of such changes, it is apparent that livestock grazing management alone, or complete elimination of livestock grazing, *will not cause the process to be reversed or prevent it from becoming worse.* If the goals for landscape diversity and health stated in the GSENM management plan are to be achieved, some vegetation treatments and seeding(s) will be required. Such vegetation treatments will directly benefit forage for livestock and help make sustainable ranching possible, but more importantly they will benefit wildlife, soil stability, diversity of plant communities and life forms on a landscape level (and ultimately, the visual quality of the landscape). Blanket and arbitrary rules limit the effective and economical application of these treatments.

Brush treatments and reseeding should be implemented on selected sites where the potential for success is favorable. The most effective and economical treatments, such as controlled burning, should be used on a case by case basis. This includes the use of non-native species for reseeding when they offer the best chance of success. The long term benefits outweigh the (possible) short term damages. It must be recognized that in most cases these treatments will have to be maintained at intervals to prevent re-invasion of shrubs to undesirable levels.

L. Closed Allotments and Grassbanks

Grazing allotments on GSENM should not be closed or converted to *grassbanks* when they are voluntarily released by permittees for whatever reason. Any allotment that becomes vacant should be offered to other permittees unless there are compelling and documented reasons for leaving the allotment vacant. Whoever obtains a grazing permit should be required to run a reasonable number of livestock on it, unless there are reasonable and documented resource concerns or personal issues that require a temporary reduction. Livestock grazing is an important use of BLM land, including the GSENM, established by law (Proclamation) and policy. A decision to reduce or eliminate livestock grazing on an allotment should only be made when resource conditions or un-resolvable conflicts with other uses dictate.

Because decisions to convert active grazing allotments to non-use or grassbanks have impacts beyond the BLM and the permittee, they should be made only when other affected interests, including county government, are involved.

Grassbanks are vacant allotments or pastures available to existing permittees when additional forage is needed because drought, wildfire and other events have caused a temporary shortage. On the surface this seems like a good idea. But in practice it seldom works and it is really just another way to reduce overall stocking rates. Experience has shown that, when needed, grassbanks are usually not usable because of their location, making it impractical to move livestock to them. In addition, fences, water developments, corrals and other facilities become unusable due to lack of maintenance. Each allotment needs a responsible person (permittee) who has the incentive to keep up improvements for proper management.

Every allotment should be managed so that drought conditions, except perhaps some very extreme conditions, can be managed without undue resource damage or economic disaster for the permittee. In the case of extreme and prolonged drought, it is likely that all allotments will be equally affected therefore a few grassbanks will not make much difference. In the case where only a few pastures or allotments are involved (as in a fire) it should be possible to locate some additional short term grazing that could be made available by mutual agreement with other permittees.

M. Coordinated Resource Management Plans

Many ranches in the GSENM are comprised of several land ownerships or lease arrangements. For example, they may contain privately owned or leased land, BLM permits, forest permits, and/or State leases. Management decisions made for one type of land-ownership arrangement has consequences for the remainder of the ranch unit. Therefore, coordinated management plans that consider the entire ranch unit are preferable to piecemeal decisions. There are also entities other than land owners who may have legitimate interests in the management planning effort. For example, county governments have a stake in roads, public safety, tax revenues, and overall economic welfare of the county. State game and fish agencies have authority over wildlife management on all categories of land ownership. Conservation districts and other agencies such

as Natural Resource Conservation Service may also be involved. Coordinated plans that are agreed upon by all interested parties help to avoid future conflicts and unintended consequences. Therefore, the county supports the development of coordinated resource management plans for the GSENM.

N. Land Acquisition

Kane County supports efforts to sell, exchange, or consolidate state and federal lands within the county if doing so improves manageability of these lands, benefits county residents, supports the county economic base, or addresses the problem of checkerboard ownership. Specifically, the county will work to identify and consolidate areas and resources that promote economic growth, allow additional or improved resource development, protect watersheds, reduce access problems, and/or improve management. The county, through the county commission, will actively participate in all exchange or consolidation discussions.

If it will benefit the county economically, the commission may look favorably upon the exchange of state trust lands to other areas of the state where it might be beneficial both to the county and to the trust land administration (SITLA).

The county supports any increase in private land holdings, and cannot support any net loss of private land for any purposes. The county believes that it is appropriate to transfer certain lands to private ownership from federal ownership, through sale or exchange, if such a transaction will benefit the county's economic base. If private to public land transactions occur, the county will work with the public land managers to assure that an equivalent acreage and value of public lands are made available for transfer to private ownership.

Federal land management agencies need to continue to make suitable lands available for disposal under the Recreation and Public Purposes Act (R&PP) or Special Use Authorizations, and follow the requirements of the land use plan approved by Congress for the disposal of certain BLM lands in the county. Some additional criteria for land disposal shall include the following:

1. Federal lands shall be available for disposal when such disposal meets the public objective of community expansion or economic development, or when the disposal would serve the public interest.
2. The design and disposal of all federal land disposals, including land adjustments and exchanges, shall be carried out to the benefit of the citizens of the county in an expeditious manner.
3. There shall be no net loss of private lands in the county. Federal land management agencies shall not acquire any private land or access rights in private lands in the county without first ensuring that, at a minimum, parity in land ownership is maintained, and private property interests are protected and enhanced.
4. Federally managed lands that are difficult to manage (are found suitable for non-federal use and development or lie in isolated tracts) shall be identified for disposal.

5. The county shall be notified of, consulted with, and otherwise involved in all federal and state land adjustments in the county. County concurrence shall be required prior to such adjustments.
6. All existing utility corridors must be maintained and used to support additional capability for electric transmission and flow of oil and gas throughout the state and region. New corridors may need to be designated in areas where renewable energy projects or communications technology developments come on line. Such corridors are critical in supporting state and national security and economic objectives.

O. Law Enforcement

Kane County and the State of Utah have primary jurisdiction for law enforcement throughout the county. All federal law enforcement activities will be fully coordinated through the county with the County Sheriff's Office. The elected Sheriff is the chief law enforcement officer in Kane County, holding all law enforcement responsibilities laid out in the United States Constitution and Title 17 of the Utah State Code. The elected County Sheriff has the authority to deputize police officers and/or citizens of the county as he or she deems necessary.

The county will maximize the use of a cooperative law enforcement program, to improve protection of persons and their property when visiting federal and state lands, and to utilize the opportunity to cooperate with land management agencies in carrying out their specific responsibilities related to land management.

It is the county policy to provide protection to the public and their property through coordination with other law enforcement agencies. Any law enforcement agency operating within the jurisdiction of the Kane County Sheriff shall coordinate with the Sheriff prior to undertaking law enforcement operations. Law enforcement officers shall operate under the limitations set forth by the Utah State Legislature and enabling legislation of their respective agency as set forth by the Congress of the United States.

Federal agencies shall maintain proprietary jurisdiction throughout federally managed lands within Kane County, and shall coordinate with the elected County Sheriff concerning criminal matters. Federal and state land management agencies will make available sites for strategic location of communication towers to aid in law enforcement activities.

P. Minerals

As part of any planning effort on the public land, a county-wide review of all potential sand and/or gravel sites should be identified in order to be able to project the ability of the county to secure these sites for use in the future growth and development.

Federal and state agencies shall analyze and consider all fiscal and economic impacts to the minerals industry, the county, and other local governments, and to the residents of the county

from any proposed land management changes or natural-resource related plans. Planning shall consider up-to-date mineral potential reports.

Q. Multiple-Use/Sustained-Yield

Kane County supports multiple-use, sustained-yield management of federal and state lands, and will coordinate with the various management agencies to maintain appropriate balance among all users and uses. Maintaining multiple-use management practices on federal and state lands is a high priority for the county. Maintaining adequate public access to federal and state lands and accompanying natural resources is also a high priority.

The county acknowledges that the terms multiple-use and sustained-yield may be interpreted in different ways. For purposes of this plan, the county defines sustained-yield as the management of resources in a manner that will support a consistent level of use on a year-to-year basis.

The county defines multiple-use as the consumptive and non-consumptive uses historically and traditionally allowed to occur on federal and state lands within the county. These uses include, but are not limited to: livestock grazing, hunting, fishing, mining, mineral exploration and extraction, recreation, wildlife habitat management, telecommunications, water resource use, protection and development of timber/woodland products, utility corridors, county transportation, and circulation roads and corridors.

The county asserts that the above uses, as well as many others, are compatible in most management situations. True multiple-use management creates opportunities for the land to be used for many purposes simultaneously. The county is not intending to define multiple-uses for federal and state resources, but will support and participate in efforts to identify appropriate uses, and locations for those uses. Kane County Land Use Ordinance, Chapter 27, Escalante Region Multiple Use/Multiple Functions Grazing Zone has established a zone consistent with Utah State Code dealing with Functional/Multiple-Uses for local coordination processes.

R. Recreation

Activities which traditionally define recreation and tourism in Kane County include, but are not limited to, big game hunting, trapping, fishing, off-highway vehicle use, mountain biking, hiking, camping, sight-seeing, boating, etc. A majority of these activities occur on public lands. Visitors to these areas directly impact the county by drawing on county-provided infrastructure such as, law enforcement, emergency medical, search and rescue, waste disposal services, and general commercial services. Many of the store owners, restaurants, hotels and motels, and other commercial interests depend on recreation and tourism for their livelihoods. Much of the recreational activity in the county is found in its unincorporated areas, outside of the organized recreation facilities found in many of the cities and towns. These recreational activities are accessed using public lands, and are a tremendous economic asset to the county. It is the county's position that federal and state land managers should do everything possible to enhance recreational opportunities on public lands and that such management should be compatible with

principles of multiple-use, and sustained-yield. Any management decisions which restrict recreational activities or access to recreational areas shall be done in consultation with the county and shall be based on valid scientific information.

S. Socio-Economic Considerations

It is the position of Kane County to support only those public land plans and decisions that result in a sustainable net benefit to the county's local economy. The county's coordination agreement should include provisions for a quantitative estimate of the economic effects of all proposed management decisions. These estimates should be generated in consultation with the county. Further, it is the policy of the county that all decisions regarding land use management must take into account the history, culture, and customs of the county as defined by the activities and values that residents of the county, in the past, present, and future, depend upon for well being and subsistence. Customs and culture are defined as the activities and decisions that make the county what it is and has historically been. The county will oppose any activities and plans that adversely impact the customs and culture of Kane County. (See Section 3, Summary of Economic Impact of Livestock Grazing on GSENM)

Kane County supports efforts to maintain or improve the overall economic base through the judicious use and enjoyment of federal and state lands. The county policy is that economic diversity and long-term stability are beneficial to the welfare of county residents. Any proposed change in land use must evaluate, mitigate, and minimize impacts to customs and culture and the economic stability of the county. The prioritizing of any one multiple-use should only occur after the impacts to other multiple-uses are fully quantified and mitigated. Any proposal to close federal lands to a particular use must be reviewed with the county after public hearings and meetings with county officials.

T. Special Land Designations

Kane County is opposed to additional land being designated as wilderness, over and above original BLM and Forest Service recommendations.

More than 1.2 million acres of Kane County (49%) has been designated as Grand Staircase-Escalante National Monument. Another 930,000 acres (35%) of Kane County is located in National Park units. When National Forest, Bureau of Land Management, and Bureau of Reclamation lands are added together, more than 87 percent of the land base in Kane County is federally controlled. Designation of more than 30 WSAs, Areas of Critical Environmental Concern, Critical Habitat, and other special designations erases multiple- use/sustained-yield management from much of the federal land base in Kane County.

Kane County will work closely with public land managers in developing plans that meet the requirements of public lands management acts and statutes, and are consistent with Kane County's General and Resource Management Plans. Though Kane County does not support

special land designations, it understands there needs to be close cooperation between the county and public land managers. The county looks forward to this type of coordination.

Kane County is aware of proposals by different interest groups wanting to implement additional special land designations in order to achieve their specific land-use goals. The county is concerned that many of these proposals do not consider the economic impacts to the county, communities, and agencies that special use designations impact. In addition, the WSA designation proposals made by wilderness groups have not included input from local government, communities, or residents of the county. These proposals have had no public process outside the members of the particular groups involved. The county and its residents should have an equal voice in determining the validity of such proposals.

All special designations should be made to compliment, rather than conflict with the concept of multiple-uses of public lands. These areas should also be in harmony with the customs and culture that have been identified in the county. More attention must be made as to how the designations can be made to harmonize with all other aspects of county planning.

The same concerns that exist relative to the management of BLM lands equally apply to forest lands in the county. The county wishes to create a relationship with the Forest Service establishing "coordination-status" as it works with the Forest Service to update county and forest land plans. A high level of coordination must exist between Kane County, BLM and the Forest Service when amending or updating BLM and Forest Service land management plans.

U. Vegetation

Kane County supports efforts to conduct plant surveys to validate existing data and add new plant inventory data. Recovery planning efforts for sensitive, threatened, and endangered plant species shall evaluate, mitigate, and support the county's customs and culture and economic viability. The county supports locally driven efforts to identify desired plant communities that do not compromise the customs and culture and economy of the county.

Kane County opposes designation of critical habitat (areas) in the county when the species is not native to or does not exist in the proposed critical habitat area. Threatened and endangered species should not be introduced into locations where such species are not present. Federal and state land management agencies shall participate in coordination efforts with federal, state, county and private land managers to enhance cooperative weed management in the county. Early detection and control of noxious weed and insect infestations are essential to the public health, welfare and economy of the citizens of the county. Neither the county, nor the public land managers can be successful in controlling noxious weeds without joint coordination. It is also important to the county that the public land managers control pests on the public lands in order to protect the forest land and other areas where pests become a problem. Mosquito control on federal and state lands should be permitted in order to reduce the risk of transmission of West Nile Virus and other diseases that pose a threat to the health of humans, livestock and wildlife.

The private use of timber products from federal and state lands in the county for posts, poles, wood cutting (to provide fuel for those in the county needing fuel for winter heating), and Christmas trees, etc., shall be continued as an allowable use. A sustainable wood products industry on federal and state lands is an important aspect of economic diversity. Fire, timber harvesting, and treatment programs are to be managed in a way to promote the forest health, reduce disease and insect infestation, and prevent waste of forest products while providing opportunities for local residents or small businesses.

Decisions and conclusions for forestry management should be consistent with the following:

1. Avoid management scenarios that result in a static forest condition.
2. Do not restrict management actions to a particular size or age of wood material.
3. Concentrate activities on current conditions as compared with desired conditions.
4. Develop an aggressive time table for management implementation.
5. Use a systematic diagnostic approach to anticipate forest health programs.
6. Work with and not against nature.
7. Accurately account for forest health costs and use a long-term risk analysis.
8. Prepare the forest for inevitable periods of drought and encourage research into climate/forest health relationship and aforementioned forest management scenarios.

V. Visual Resource Management

Kane County recognizes that different levels of scenic values on federal lands require different levels of management. While management of an area with high scenic value might be focused on preserving the existing character of the landscape, management of an area with little scenic value might allow for major modifications to the landscape. Federal land management agencies shall conduct assessments of visual impacts in determining how an area should be managed with the goal of protecting the visual resource while not burdening authorized land uses and maintaining economic stability.

Federal and state land management agencies shall recognize the importance of communication sites, electric transmission lines, and transportation corridors to the security, health and welfare of the county's residents when considering visual resource management objectives.

W. Water Resources

Water is the life blood of Kane County. Water quality and availability has historically determined the level, type, and location of existing growth. This pattern would continue into the future except for the fact that new distribution systems have made water more available throughout the county. The county encourages and supports the efficient management and use of its water resources. The county also supports the development, adoption, and implementation of water collection, storage, and distribution, as well as the development of conservation plans by municipalities, the water conservancy district, and private water companies. The county also

encourages continued cooperation among all water managers and users as water management decisions are made.

Kane County will be involved with state and federal managers in the development of all plans for monitoring of air and water quality. Findings must be coordinated with the county. The county supports management practices that protect vital watersheds. The county also supports management policies and practices which allow for the future expansion and development of water distribution and storage facilities. The future of the county is completely dependent on available water. The county not only needs a county-wide distribution system to assist any area in time of need, but a redundant supply to avoid simply running out of water at some future date. Any plan or practice whose aim or goal is to thwart the county's ability to access and develop water resources is strongly opposed.

X. Wild Land Fire

Fire management strategies shall consider fire fighter and public safety and protection of human life, property and communities. There shall be a high level of coordination between agencies and fire fighter organizations in the county. Federal agencies will incorporate local fire department plans and policies into fire suppression and control plans.

Y. Wildlife Management

Wildlife management issues on public lands have the potential to impact the county substantially. Wildlife management not only impacts public land use and access, but it can affect land uses which lead to restrictions and even *takings*. Recreational factors, such as hunting and fishing, are a vital part of the county's economic base. Recovery plans for sensitive, threatened and endangered species must include evaluation, mitigation, and support of the county's customs and culture, and economic viability. Wildlife management plans shall reduce predation of sensitive species, increase hunting and fishing opportunities (within appropriate carrying capacities), decrease game damage conflicts, and balance wildlife numbers with other factions, representing the customs and culture and multiple-use values of the county.

The county supports responsible wildlife habitat preservation, development, and management. However, Kane County opposes designation of critical habitat areas in the county when the species is not native to or does not exist in the proposed critical habitat area. Threatened and endangered species should not be introduced into locations where such species are not present.

It is Kane County's policy that federal agencies fully quantify and cause mitigation measures to be adopted that would effectively lessen the impact to wildlife populations while carrying out animal damage management activities. Public land managers shall:

1. Allow currently recognized methods of predator control, including aerial gunning of predators, as viable options for predator control on public lands in the county.

2. Conduct non-predator animal damage management such as controlling small mammal populations, and necessary environmental analysis and disclosure on public lands.
3. Coordinate with other federal and state agencies to improve effectiveness of control program activities conducted on federal and state lands.
4. Use an integrated approach to the management and prevention of animal damage programs. Consider a full range of methods, including physical barriers, repellents, habitat manipulation, biological controls, improvement of soil fertility, pesticides, hunting and trapping. Use licensed hunting, fishing, and trapping as a control technique where practicable.
5. Evaluate the effect of agency actions on trends in hunting and, where appropriate, address declining trends. Implement actions that expand and enhance hunting opportunities for the public.
6. Consider the economic impact hunting has on the county when implementing agency actions.
7. Manage wildlife habitats on public lands in a manner that expands and enhances hunting opportunities.
8. Work collaboratively with state governments to manage and conserve game species and their habitats in a manner that respects private property rights and state management authority over wildlife resources.

Section Seven
County Goals, Strategies and Actions

Federal land management planning processes will include Kane County as an active, on-going coordinating partner and will be consistent with county goals and policies when not constrained by federal law. The county will insist that State Institutional and Trust Lands (SITLA) uses conform to county land use policies and regulations.

A. Introduction

Historically, federal and state trust lands management has taken place with little regard to Kane County land use plans. County officials have asked to become a coordinating agency in developing federal land management plans. The County Commission has asserted federal land managers to coordinate with local government in their planning processes.

B. Findings

1. The historic cooperative efforts of the Western livestock industry, local governments, federal land management agencies and State land management agencies have resulted in notable progress in sustainability of rangeland productivity. Bureau of Land Management (BLM) records show a 100% increase in good condition rangeland and a 50% reduction of poor condition rangeland in the past 50 years.

2. As a result of significant management effort and cooperation, populations of big game and wildlife are increasing throughout the county. Continuation of these cooperative efforts is in the best interest of the rangelands, and the economic activity and wildlife dependent upon them.

3. As new knowledge of riparian area management has been available and applied, significant changes have occurred in riparian areas that benefit wildlife as well as livestock grazing and recreational use. The latest available technology must be used to support innovative application to continue the improvement in riparian habitat.

4. In order to promote the economic, cultural, and social well-being of Kane County and our rural communities, grazing preferences must continue to be adequately safeguarded.

5. Maintaining the economic viability of Kane County livestock industry is essential for maintaining the open space and habitat for big game, wildlife and fish. The alternative is to sell off land for developments that would preclude big game, wildlife and fish.

6. Incentives for increased public input into management planning for public lands and in private investment in rangeland development will support continued cooperative management efforts.

7. In spite of statutory requirements, federal land use plans have not been developed in full coordination with local county government.

8. Maintaining the economic viability of Kane County minerals and energy industry is essential for maintaining workforce and economies along with tax base.

C. Purposes

1. Promote healthy sustainable rangeland supporting a viable livestock industry upon which Kane County, our small communities and our citizens depend for their custom, culture, economic viability, and social stability.

2. Providing for orderly multiple-use/multiple functions and development of rangelands to facilitate recreational uses, wildlife, mineral extraction, wood product supply and rights-of- way.

3. Provide for sustainable productive watersheds for a continued supply of waters for Kane County's irrigated agriculture sector which is dependent on both stream flows and water storage.

4. Provide for the protection of all property rights and interests related to water, livestock grazing, rights-of-way, mineral extraction, and use of State land leases.

5. Provide for statutory requirements for coordination and consistency between federal land use plans and Kane County Land Use Plans for federal and state Lands.

6. Assure that both state and federal statutes are followed in the administration of the public lands in Kane County.

D. Goal Statements

1. Air Quality

Kane County will take an active role in air quality management processes, especially in how federal and state agencies employ prescribed burning to manage vegetation. A

primary purpose of county involvement with air quality management is to prevent significant deterioration of the excellent air quality enjoyed by county residents and visitors.

Background: The Federal Clean Air Act and State of Utah regulations establish standards and provide guidance to management agencies regarding parameters affecting air quality. Smoke management is one element (both prevention of significant deterioration [PSD] and total suspended particulate [TSP]) of several elements in the National Ambient Air Quality Standards established in the Clean Air Act (1967) and amendments to the Act (1972, 1977 & 1990).

Strategies: Strengthen Kane County's participation in amending and implementing Utah State Implementation Plan (SIP) provisions that affect Kane County. Maximize Kane County's involvement in Color Country Interagency Fire Center planning and implementation activities.

Actions: Contact Utah State Division of Air Quality staff to request an annual briefing before the County Commission and Resource Development Committee regarding how Kane County can most effectively participate in air quality and smoke management processes.

At the annual briefing by Utah Division of Air Quality, request an evaluation by state staff regarding when and how to implement the following provision in the Utah Code, which allows for the creation of a cooperative agreement to implement air pollution prevention plans and operations in Kane County:

19-2-122. "Cooperative agreements between political subdivisions and department.
(1) Any political subdivision of the state may enter into and perform with other political subdivisions of the state or with the department contracts and agreements as they find proper for establishing, planning, operating, and financing air pollution programs.
(2) The agreements may provide for an agency to:
(a) Supervise and operate an air pollution program;
(b) Prescribe, subject to the approval of the board, the agency's powers and duties; and
(c) Fix the compensation of the agency's members and employees."

Assure that the Kane County Fire Marshal communicates to the County Commission all state and interagency authorizations for burning events allowable under air quality standards, including projected amounts of particulates and smoke management objectives.

Request the annual briefing from state air quality staff and Color Country Interagency Fire Center include a review of *Best Practices* for managing smoke from prescribed burns, such as smoke avoidance, dilution and emission reduction and limiting unnecessary emissions from existing and new, point and nonpoint sources.

Kane County will participate in annual Regional Fire Management Updates where Color Country Interagency Fire Center representatives describe plans for prescribed burns and results of restoration activities on recent burns.

Establish quarterly meetings with the Grand Staircase-Escalante National Monument Manager, the BLM Kanab Field Office Manager, the Cedar City District Ranger, and National Park Service managers to coordinate management activities, including the backlog of prescribed burns and applications and requests for additional prescribed burns.

2. Areas of Critical Environmental Concern

The BLM is on Notice that Kane County insists on coordination in the evaluation, planning, and designation activities for Areas of Critical Environmental Concern (ACEC) established by the BLM. Kane County insists that BLM ACEC do not become surrogates for wilderness areas without Congressional authorization.

Background: The Federal Land Policy & Management Act (FLPMA), Section 201 (a) requires the BLM to prepare and maintain on a continuing basis an inventory of BLM administered lands, their resources and other values giving priority to areas of critical environmental concern. *See* 43 U.S.C. §1711. The Act further requires that the inventory must be kept current in order to reflect changes in conditions and to identify new and emerging resource and other values. The Act also mandates that neither the preparation nor maintenance of the inventory or the identification of Areas of Critical Environmental Concern (ACEC) shall in and of itself change management or use of the lands.

FLPMA also requires the BLM to coordinate the land use inventory, as well as planning and management activities for land uses with other federal departments and agencies of the state and local governments within which the land lies. *See* 43 U.S.C. §1711.

FLPMA also requires the BLM give priority in the planning process to designation and protection of ACEC. *See* 43 U.S.C. §1712. Such areas are defined as areas where special management attention is required to protect and prevent damage to important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. The inventory and planning process mandated by FLPMA was re-emphasized in the Public Rangelands Improvement Act.

The National Environmental Policy Act (NEPA) requires the BLM to use a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences in planning and decision making *"which may have an impact on man's environment"* (42 U.S.C. §4332). NEPA further requires the BLM decision making process give appropriate consideration to presently un-quantified environmental amenities and values, and to economic and technical considerations. The Act also requires an Environmental Impact Statement (EIS) prepared in accordance with 42 U.S.C. §4332 prior to any major federal action significantly affecting the quality of the human environment.

BLM completed the Kanab Field Office Resource Management Plan (RMP) in 2008. The RMP designated one ACEC, Cottonwood Canyon (3,800 acres), for the purpose of protecting the

Fredonia, Arizona culinary water supply. Grand Staircase Escalante National Monument did not designate any ACEC during the development of its management plan. ACEC nominations can come at any time, from any source. BLM normally holds such nominations until RMP revisions are considered.

Strategy: Monitor BLM planning initiatives by making a formal request for coordinating agency status for any ACEC evaluation and analysis. Additionally, Kane County shall insist on coordination related to any inventory of public lands and their resources and other values, including, but not limited to ACEC.

Actions: Confirm that any ACEC nomination evaluated by BLM describes the important uniqueness (one of a kind), historic, cultural or scenic value, the fish and wildlife resource, or other natural systems or processes of any proposed ACEC, and describe and document the damage which will occur to such value unless special management attention is given to the area, or describe and document the natural hazards of the area which will endanger life or safety unless special management attention is given.

Assure that BLM ACEC analysis describes and documents special management attention which is necessary to protect a proposed ACEC from imminent damage to the statutory unique (one of a kind), relevance and importance values, or to protect life and safety from natural hazards, and quantifies the manner in which such special management attention is expected to provide the needed protection.

The following standards will be the basis for agency evaluation of any draft ACEC management plan:

> The Draft Plan employs a systematic interdisciplinary approach in order to achieve integrated consideration of physical, biological, economic, and other scientific data.
>
> The Draft Plan uses and observes the principles of multiple-use and sustained-yield set forth in Federal statutory law.
>
> The Draft Plan considers present and potential uses of the land and the impacts of special management on private in-holdings, adjacent private lands and state-leased lands.
>
> The Draft Plan considers the relative scarcity of the values involved and the availability of alternative means and sites for realization of those values.
>
> The Draft Plan weighs long-term benefits to the public against short-term benefits of the existing or proposed action regarding ACEC status.

The Kane County Resource Development Committee will meet bi-monthly, or as needed otherwise, with federal land management agencies, state and local government planning agencies, affected land owners, and interested public users to review data regarding existing and

proposed ACECs.

3. Cultural Resources

Kane County will invite federal and state land management agencies to consult and coordinate with the county when considering ground disturbance activities to ensure protection of cultural resources. The county will request that federal and state agencies establish and maintain agreements with Kane County regarding the management of any historic, archeological, paleontological, or other cultural resource within the boundaries of the county.

Background: FLPMA directs that BLM administered lands be managed so as to protect archeological values. The Antiquities Act of 1906 and the Archeological Resources Protection Act of 1979 require protection of paleontological resources and require permits for excavation or appropriation of such resources.

NEPA directs preservation of important natural aspects of national heritage. The National Historic Preservation Act of 1966 describes federal agencies responsibility to preserve prehistoric and historic cultural resources.

Strategy: Kane County will establish a formal consultation relationship with federal and state land management agencies that gives Kane County similar standing to Native American tribes as agencies develop and implement cultural resource protection strategies.

Actions: Kane County Commissioners will request formal coordination agreements with the National Park Service, Bureau of Land Management and the U.S. Forest Service regarding cultural resource management activities patterned after similar agreements already in place with Native American tribes.

Kane County will consult with federal agencies regarding the protection of those portions of the Spanish Trail and associated cultural resource sites on federal lands within Kane County.

Kane County will coordinate with interested groups and agencies to nominate appropriate site/areas to the national register of historic places in accordance with the policies and procedures outlined in NEPA.

Consultation agreements between Kane County and federal land management agencies will include provisions that require agencies to document and make available to the county all legally accessible data that details conditions found at specific cultural and paleontological sites.

The Kane County Resource Development Committee will meet bi-monthly, or as needed otherwise, with federal land management agencies, state and local government planning agencies, affected land owners, and interested public users to review data regarding cultural resource sites.

4. Federal Resource Management Planning

Kane County will insist that the county become a cooperating agency in all federal land management planning processes that affect lands within the county. Kane County insists that federal agencies coordinate with Kane County for consistency with Kane County's plans, policies, and land use ordinances. The county will also expect formal consultation status in all federal land management planning activities.

Background: Counties may use duly adopted plans, programs or policies to directly influence federal natural resource and land planning efforts by informing the federal agencies of the plans and their provisions. As part of these plans, counties may want to make known their interpretation of the criteria the federal planning agencies must consider as land and resource management plans are developed. This could, for example, be used to define, among other things, the desired future conditions for the county's economy, lifestyle, or recreational needs of the citizens, and the necessary use of the federal natural resources to achieve these desired future conditions.

Strategy: Kane County will request formal status as a consulting entity for all federal land management planning processes affecting lands inside the boundaries of the county, as well as cooperating agency status. Kane County insists that federal agencies coordinate with Kane County for consistency with Kane County's plans, policies, and land use ordinances.

Actions: The following land management schemes and actions have been reviewed by Kane County Commissioners, Land Use Authority and County Resource Development Committee and found to be inconsistent with the county's land use plans and policies:

Designation of *"Integral Vistas"* that by definition expand federal land management controls across state and private lands by holding states responsible to incorporate such controls as part of air quality implementation plans.

Establishment of *Class I "Attainment Areas"* that expand Class I air quality standards outside of National Park Units.

Developing or proposing *"Buffer Zones"* that attempt to impose federal land management prescriptions on adjacent state or private lands.

Designating *"Critical Habitat"* without involvement and concurrence of county officials.

Employing *"Visual Resource Management"* provisions intended to constrain uses of adjacent state or private lands.

Any other form of federal land management that intentionally or unintentionally affects the ability of state or private land owners to pursue otherwise lawful activities under state and local land use authorities.

Key scenic areas where tourist and local resident access is essential are identified and included on the General Plan Map.

All federal land management agencies in Kane County should include a full assessment of the social and economic impacts of management actions as part of the NEPA analysis.

In coordination with federal agencies and state and local government planning agencies, and in cooperation with interested members of the public, Visual Resource Management classifications shall be re-evaluated every 10 years.

Kane County will coordinate in land management planning processes to assure that approved ATV/OHV roads and trails systems reflect demands of users, while recognizing that cross-country travel, except under special circumstances will not be an acceptable land use practice.

5. Grazing Management

Kane County insists that state and federal land management agencies coordinate for consistency with county plans regarding landscape, vegetation maintenance, and improvements which support restoration of suspended animal unit months (AUM's), allocation of continuously available temporary non-renewable use as active preference, and will support continued use and/or increased use of acreage designated.

Background: The Taylor Grazing Act mandates stabilization of the livestock industry by providing for the orderly use, improvement, and development of the range in a manner which adequately safeguards vested grazing and water rights, and in a manner that will not impair the value of the grazing unit of the permittee when such unit is pledged as debt security by the permittee.

The Public Rangeland Improvement Act (PRIA) provides that BLM administered lands be managed in accordance with the Taylor Grazing Act. PRIA further provides that the range should be made *"as productive as feasible"* in accordance with the Congressional objective of preventing *"economic disruption and harm to the western livestock industry"*. PRIA mandates improvement of the rangelands in order to expand forage resources and increase the resulting benefits to livestock and wildlife production.

FLPMA directs that BLM administered lands be managed in a manner which *"recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands"*. NEPA requires consideration of all environmental actions on the culture, heritage and custom of local government (16 U.S.C. sec. 4331 (a) (4). Current active preference and continuously available supplemental use is considered the established allowable use for livestock grazing.

Strategy: Kane County will actively participate in federal and state processes governing grazing on public lands by becoming a coordinating agency in grazing management planning processes and partnering with grazing permit holders in responding to any alterations in grazing systems,

numbers, or actions.

Actions: Formally support rangeland improvement programs by submitting comments regarding proposed activities, including but not limited to: water developments, rangeland restoration, juniper/shrub control, and weed control to achieve forage and livestock grazing as well as other multiple-use resource goals. Kane County insists that federal agencies coordinate with Kane County's plans, policies, and land use ordinances in relation to any grazing activities.

Work with the state of Utah, local conservation districts, the Kane County Water Conservancy District, and private land owners to identify and develop off-stream water sources where such opportunities exist, in all allotment-pastures with sensitive riparian areas and in all allotments where improved livestock distribution will result from such development.

Support private land owner and conservation districts to identify and implement all possible livestock distribution, forage production enhancement, and weed control programs before accepting changes in livestock use levels.

Do not support the initiation of reductions in stocking levels until monitoring data demonstrates that grazing management supported by range improvements and specialized grazing systems are not supporting basic soils, vegetation and watershed goals.

Insist that grazing management actions and strategies fully consider impact on property rights of in-holders, adjacent private land owners and state land-lessees; as well as the potential impacts of such actions on grazing animal production.

Support private landowners who can document monitoring history, actual use or authorization of *temporary non-renewable use* demonstrates that supplemental use is continuously available, and can or should be used to improve or protect rangelands (e.g. reduction of fuel loads to prevent recurring wildfire) to initiate a process to allocate such use to permittees as active grazing preference.

Nonrenewable grazing permits or leases may be issued on an annual basis to qualified applicants when forage is temporarily available, provided this use is consistent with multiple-use objectives and does not interfere with existing livestock operations on the public lands. The authorized officer shall consult, cooperate and coordinate with affected permittees or lessees, the State having lands or responsible for managing resources within the area, and the interested public prior to the issuance of nonrenewable grazing permits and leases.

Encourage the authorization of supplemental forage during years when climatic conditions result in such availability.

Encourage livestock operators to document the amount of livestock use through review of actual use, authorized active use, suspended use and temporary nonrenewable use and provide the information to the county Resource Development Committee.

Encourage livestock operators to document all rangeland and livestock management improvement programs as to acres affected by vegetation manipulation, water development, specialized grazing systems and weed control and provide the information to the county Resource Development Committee.

Encourage livestock operators to document grazing use in each allotment through use pattern mapping and provide the information to the county Resource Development Committee.

Encourage livestock operators to document the direction of rangeland trend and serial class acreage changes that support changes in the amount of use being authorized or denied and provide the information to the county Resource Development Committee.

Encourage livestock operators to document all decisions or agreements resulting in changes in active preference and approvals or denial of applications for supplemental use, and provide the information to the county Resource Development Committee.

Request information regarding monitoring data, trend studies and serial class rangeland studies from federal land management agencies in order to establish the amount of authorized use that can be sustained and to determine the degree to which, data supported requests for increases in active preference or applications for supplemental use are approved and authorized.

The Kane County Resource Development Committee will use the information provided to determine the degree to which vegetation manipulation projects, range improvement practices, specialized grazing systems, and weed control projects are being implemented.

6. Land Acquisition

Utilize, to the greatest extent possible agricultural use, mining entry, land exchange, and land sale for disposal of all public lands, which by virtue of their size or location render them difficult and expensive to manage and do not serve a significant public need or where disposal will serve important public objectives. Authorize as needed the use of those lands not currently authorized, for rights-of-way, leases and permits. There will be *"No Net Increase of Acreage"* of federal lands in Kane County.

Background: FLPMA provides for effective use of BLM administered lands by providing continuity of uses for roads, power, water, and other utilities. FLPMA mandates multiple-use of BLM administered lands, provides for continuing inventory and classification reviews of the BLM administered land, authorizes the director to acquire lands when necessary to provide more efficient management through consolidation, and authorizes disposal of certain BLM administered lands.

Lands currently under the jurisdiction of other agencies or lands currently withdrawn need a management plan to assure multiple-use development when that existing withdrawal is revoked. The BLM is required to comply with federal, state and local government laws relating to

hazardous materials.

Strategy: Kane County will identify parcels of public lands needed for community development purposes, and partner with other agencies and appropriate organizations to facilitate necessary authorizations for use of public lands to accommodate legitimate rights of way, leases or other permits.

Actions: Kane County will identify parcels of public lands needed for community development purposes, including the development of an inventory of public lands which should be disposed of in the public good and made available for further application for agricultural or locatable and leasable mineral purposes.

Kane County will continue to partner with appropriate public entities to facilitate the use of federal lands for recreation and public purposes pursuant to the Recreation and Public Purposes Act of 1926, *as amended*, to include access roads and parking areas in locations receiving tourist visitation.

Any acquisition of or easements across private lands by a federal land management agency will be reviewed by the Kane County Commission. The concerns of the commission will be addressed in the NEPA documentation prepared for such acquisition.

Identify and give priority consideration to requests for exchanges or purchases from private land owners with fenced federal range, isolated tracts, or irregular boundary lines.

Seek legal administrative access only through purchase or exchange where significant administrative need exists, construct new roads around private lands where easement acquisition is not feasible, and consider significant public access needs in all land tenure adjustment transactions.

Insist that federal land management actions for lands that have been returned to federal management through revocation of withdrawals will occur in accordance with existing land use plans for adjacent land.

Document access needs, procedures and methods utilized to achieve such access.

Determine annually the degree of progress in achieving disposal of lands classified for priority disposal.

Evaluate the degree to which access needs are being met.

Pursue increased public access opportunities in both motorized and non-motorized settings through the acquisition of rights-of-way or easements, both public and private.

7. Minerals Development

Facilitate environmentally responsible exploration and development of mineral resources in Kane County.

Background: The Mineral Leasing Act of 1920, *as amended*, and the Mining and Mineral Policy Act of 1970 declare that it is the continuing policy of the federal government to foster and encourage private enterprise in the development of domestic mineral resources. The 1872 Mining Law along with the Mining and Mineral Policy Act of 1970 declare that it is the continuing policy of the United States to foster and encourage private enterprise in the development of domestic mineral resources.

FLPMA reiterates that the Mining and Minerals Policy Act of 1970 is to be implemented, and directs that BLM administered lands are to be managed in a manner which recognizes the nation's need for domestic sources of minerals and other resources. The National Materials and Minerals Policy, Research and Development Act of 1980 restates the need to implement the 1970 Act and requires the Secretary of the Interior to improve the quality of minerals data in land-use decision making.

Strategy: In coordination with federal agencies, state and local government planning agencies and with interested members of the public, evaluate, classify and inventory the potential for coal, locatable or leasable mineral, oil, gas, geothermal, and material mineral exploration or development in Kane County to insure that lands shall remain open and available.

Actions: Develop an evaluation program which relies upon and uses all available data retrieval and interpretation methods, including, but not limited to: reviewing existing data, geochemical and geophysical testing, geological mapping and sampling, and, where appropriate, drill-testing.

Provide for mineral material needs through negotiated sales, free use permits and community pits.

Determine the degree to which mineral exploration and development are occurring compared to needs and potential for the county.

Determine whether the time required to obtain necessary permits and approvals is excessive.

8. Multiple-Use/Sustained-Yield

Continue to insist that federal land management plans which regulate public lands in Kane County promote the multiple-use/sustained-yield concept of public lands use, including multiple recreation uses, high quality recreational opportunities and experiences at developed and undeveloped recreation sites, allowing historic uses and access, and maintaining existing amenities, including providing new recreation sites for the public's enjoyment. Recognize that multiple recreation uses are mandated by the multiple-use

concepts and that adequate outdoor recreation resources must be provided on BLM administered lands and waterways.

Background: FLPMA declares it to be the policy of the United States that BLM administered lands be managed on the basis of multiple-use in a manner which provides for outdoor recreation and human occupancy and use, while at the same time protecting scenic, ecological, environmental, water, and archaeological values. The Act also mandates outdoor recreation to be considered one of the principle uses in the multiple-use concept for BLM administered lands.

In 1963, Congress enacted the Outdoor Recreation Coordination Act, declaring it *"desirable that all American people of present and future generations be assured adequate outdoor recreation resources"*. See 16 U.S.C. § 460L. The Secretary of Interior was authorized to prepare and maintain *"a continuing inventory and evaluation of outdoor recreation needs and resources"*. 16 U.S.C. § 460L (1). This Act also requires consideration of the management plans of federal agencies, states, and the political subdivisions of states, and required the BLM to cooperate with states, political subdivisions of states and private interests with respect to outdoor recreation. 16 U.S.C. § 460L(l) (c)(d).

The Intermodal Surface Transportation Efficiency Act, 16 U.S.C. § 1302, National Recreational Trails Fund, 26 U.S.C. § 9511, and National Trails System Act, 16 U.S.C. § 1241, provide for *"the preservation, development and funding of roads and trails for recreation use…"* These statutes mandate that trails for multiple recreation uses be made available for a diversity of motorized and non-motorized uses. Multiple recreation uses must also be provided for the elderly, physically challenged and very young in order to provide diversity of recreation opportunities. *See e.g.*, 42 U.S.C. §12182.

All areas historically accessed by off-highway recreational vehicles, mechanized vehicles, horses and boats should continue to be available for their historical uses. These historically accessed areas include roads, trails, sand washes, and waterways identified to the Kane County Clerk as Revised Statute 2477 rights-of-way.

Strategy: In compliance with applicable local, state and federal laws, identify specific areas for additional trailhead facilities for both motorized and non-motorized access, development and/or maintenance of roads, trails, and waterways for both motorized and non-motorized access, restoration of those areas formerly available for historical recreational uses, e.g. motorized and equestrian access for recreational and competitive events, hunting and boating.

Actions: Provide for continued multiple recreation uses in special and extensive recreation management areas, including those areas where state, federal and/or private funds and materials were or are considered to be used to provide for recreational facilities.

Provide for adequate outdoor recreation resources by revising the designated areas to decrease or eliminate limitations and restrictions where the review and evaluation shows that the limitations and restrictions are no longer appropriate and necessary.

Assist appropriate entities to establish designated equestrian, foot, and off-highway vehicle trail systems and waterways for compatible recreation, commercial, and other multiple-uses so that such uses can continue unabated.

Invite federal and state land managers to provide an annual update on the maintenance of existing facilities at developed recreational sites and proposed upgrades, reconstruction and/or added recreation facilities, when needs are indicated by monitoring data, at currently undeveloped sites. The report will describe methods of minimizing or mitigating documented use conflicts or damage and define the manner in which each method is expected to accomplish minimization or mitigation.

The Kane County Resource Development Committee will review and analyze data relating to the demand for recreation use, the impact of the various recreation uses on land values, and any actual conflict or damage caused by each of the multiple recreation uses.

In coordination with federal, state and local planning agencies, the Kane County Resource Development Committee will review data to determine whether temporary climatic conditions, wildlife activities, or range conditions which may require temporary or seasonal restrictions or limitations on historic and present recreation uses, and review data to determine the earliest point at which temporary restrictions or limitations can be removed.

Invite federal and state land managers to review management actions taken specifically to meet requirements of the ADA and records of use and requests for use from ADA eligible individuals.

Document all user conflicts reported to Kane County and or federal land management agencies.

Meet annually with interested hunters, fishermen and other recreation users and review the data regarding recreation demands, outdoor recreation resources, and multiple recreation uses and their impact.

Coordinate with federal, state and local government planning agencies to annually review and analyze recreational inventory, classification and designation information to validate the relevance and importance criteria, the impact on land values and on recreation uses, historic and present.

Analyze data on recreational uses in areas with special-use designations or which are under study for such designation to identify any adverse impacts.

9. Special Designations/Wilderness Management

Seek immediate congressional designation action on all Wilderness Study Area (WSA) recommendations in Kane County to release these areas for multiple-use management and in the interim prevent, minimize or mitigate impairment or degradation of such areas to the extent that congressional actions are not pre-empted.

Background: FLPMA directs the Secretary of the Interior to review BLM administered lands and recommend those found to meet wilderness characteristics. Between submission of the Secretary's recommendations and final congressional action, the Act provides that the lands be managed in such manner so as not to impair their wilderness characteristics, *"subject, however, to the continuation of existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on October 21, 1976"*. The Act directs prevention of *"unnecessary or undue degradation of the lands and their resources"* and implementation of environmental protection. Enabling legislation will identify specific management direction for each wilderness area or specify that these lands be placed under multiple-use management.

FLPMA declares as a policy of the United States that BLM administered lands will be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource and archaeological values, that will provide food and habitat for fish and wildlife and domestic animals, that will provide for outdoor recreation and human occupancy and use, and, where appropriate, will preserve and protect certain BLM administered lands in their natural condition.

Strategy: Kane County will continue to insist that BLM WSAs and Forest Service Inventoried Road-less Areas (IRAs) receive congressional designation as wilderness areas, or be released for multiple-use management.

Actions: Kane County will develop a comprehensive recommendation to Congress seeking immediate release of all WSA's and IRAs to multiple-use management.

Upon congressional release, Kane County will formally request that BLM and Forest Service management plans and policies for the affected areas be amended to be consistent with non-wilderness full multiple-use concepts mandated by FLPMA and Public Rangelands Improvement Act. The county will document the implementation of multiple-use management on lands released through congressional action.

Track the development of congressional recommendations and congressional action on wilderness areas, and Wild and Scenic River recommendations.

10. Vegetation Management

Maintain or improve conifer tree health, vegetation diversity, wildlife and watershed values through active management of conifer forests in Kane County and prevent encroachment of pinyon-juniper into these communities.

Background: The Public Rangelands Improvement Act directs that the condition of the federally administered rangelands be improved so they become as productive as feasible for all rangeland values. FLPMA mandates that BLM administered lands be managed in a manner that will protect

the quality of ecological and other resource values and provide food and habitat for fish, wildlife and domestic animals, and recognizes the nation's need for domestic sources of minerals, food, timber, and fiber from BLM administered lands.

Strategy: Kane County will actively monitor vegetation management planning and implementation.

Actions: Invite National Park Service, Forest Service, and BLM land managers to present an annual report to the Kane County Resource Development Committee detailing proposed vegetation management activities for the upcoming 12 months, as well as the status of vegetation management activities undertaken in the past 12 months.

The annual report will also include an evaluation of monitoring documentation to determine the degree to which coniferous forests are continuing to be affected by insect damage and displaced by pinyon/juniper.

11. Water Management

Kane County will cooperate with the State of Utah to achieve the provisions of the State of Utah water quality plan, while complying with Utah constitutional and statutory law as to vested water rights and control of in-stream flow. The county will support efforts to maintain or improve riparian areas and aquatic habitat that represents a range of variability for functioning condition.

Background: Article XVII of Utah Constitution recognized and confirmed the existence of rights to water use in Utah. The nature of water rights as rights of realty, the process by which such rights are acquired, and protection of such vested rights are outlined in Utah Code, Title 73. Utah Code guarantees the right to water livestock from in-stream flow and addresses water quality issues through designation of beneficial uses, specific water quality standards to meet beneficial uses, and the processes to follow in achieving the standards where they are deficient. *See* Utah Code, Title 73, Chapter 3, and Title 19, Chapter 5.

Federal land management agencies must comply with Utah Water Quality Act including the processes set forth for achieving water quality standards. Utah Code §§ 19-5-105 and -105.5 outline all rules for regulating water quality must be consistent with the federal Clean Water Act.

Strategy: Kane County will be an active participant in state and federal water quality planning and implementation actions that affect waters within the county.

Actions: Invite federal and state land management agencies to present an annual report on *Best Management Practices* (BMP's) used to protect water quality across Kane County.

Encourage federal land management agencies to standardize forms and procedures for all monitoring data related to riparian and aquatic, habitat, condition and trend.

The Kane County Resource Development Committee will participate in the development of management plans for multiple-uses in high erosion hazard watersheds, or watersheds where accelerated erosion is occurring, which assures that planning documents and/or other agreements which affect multiple-uses reflect Kane County priorities.

Kane County will invite the Utah Department of Wildlife Resources to present an annual report regarding in-stream flow impact on fish and wildlife habitat, aquatic life, recreation, aesthetic beauty and water quality in light of Utah Code which prohibits impairment, diminution, control or divestiture of *"existing or vested water rights"*.

Kane County will invite the Kane County Water Conservancy District to present an annual report regarding the status of development and maintenance of water conveyance systems.

Kane County will invite federal land management representatives to annually report progress in the development of Allotment Management Plans including site specific BMPs that impact water development.

12. Wildlife Management

Maintain, improve or mitigate wildlife habitat in order to sustain viable and harvestable populations of big game and upland game species as well as wetland/riparian habitat for waterfowl, fur bearers and a diversity of other game and non-game species.

Background: FLPMA provides that it is the policy of the United States that BLM administered lands be managed in a manner that will protect the quality of multiple resources, provide food and habitat for fish, wildlife and domestic animals, and provide for outdoor recreation and human occupancy and use. The Public Rangeland Improvement Act directs improvement of rangeland conditions and provides for rangeland improvements which include habitat for wildlife. The authority for management of wildlife rests solely with the State of Utah. *See* U.S. Constitution, Article IV, Section 3, Clause 1, and 10th Amendment; *see also*, Utah Enabling Act, Section 1.

Strategy: Kane County will be an active partner in the development of wildlife management plans and activities for lands within the county.

Actions: Kane County will consult with the Utah Division of Wildlife Resources, all affected land owners, lessees and permittees in the development of specific wildlife population targets, harvest guidelines, depredation mitigation and guidelines for future site specific management plans affecting upland, water fowl and big game habitat. Such plans will include provisions to document incidents of wildlife depredation and the extent of game animal harvest in designated management areas of both land and wildlife management agencies. The county will encourage accelerated planning, approval and completion of additional water developments, rangeland treatment projects and prescribed burns with objectives for enhancement of big game and other wildlife habitat.

Kane County will insist that land management agencies provide all necessary maintenance of exclusion fences not specifically placed for improved management of livestock.

The Kane County Resource Development Committee will invite private land owners to regularly report instances of wildlife poaching and related concerns regarding wildlife habitat on private land. The county will formally request participation in the development and establishment of population targets and management guidelines for upland game, water fowl, and big game species.

Kane County will request annual reports from land management agencies regarding monitoring activities undertaken on range improvement projects, rights-of-ways, woodcuts, mining activities, mineral leases and material sales contracts, and multiple recreation uses, to document habitat improvement or disturbance.

Kane County will continue to oppose any listing of a threatened or endangered species which does not include an analysis of the impacts to the county's economic base.

Section Eight
Monitoring

Progress toward the desired resource management setting will be measured by working towards, and ultimately achieving, the goals and objectives set forth in the Kane County Resource Management Plan. Regular progress reports will be made to the County Commission by the Land Use Authority, Resource Development Committee, and public land managers regarding the achievement of these objectives. Recommendations and updates shall be made to the plan on a regular basis by the Land Use Authority to the County Commission.

A. Partnerships

Progress regarding planning and development changes on state and public lands will be made by continued close relationships with public land managers in a coordination effort with the county.

B. Local Economic Impact

Economic changes which could affect the economic well-being of county residents will always be of primary importance to county officials. Much of Kane County's employment is linked to the use of public lands; any policy changes or management decisions which may impact the county's customs and culture, or affect its overall economic well-being, must be addressed as soon as the county becomes aware of these changes.

C. Public Involvement

The county should keep the public informed as much as possible in understanding public land policy. The county should take into account feedback from the public in evaluating public land issues and in determining the county's policy and position.

D. Bi-Monthly County Resource Development Committee Meetings

Actions identified in Sections Six and Seven, will require regular meetings to which appropriate agency representatives are invited to discuss pertinent topics for resource management. Members of the Resource Development Committee will organize bi-monthly meetings, or meet more or less as may be necessary, to monitor progress regarding planning and development changes on state and public lands. The Resource Development Committee will coordinate with federal, state and local government planning agencies on the date, time, and location of the meetings, as well as facilitating the topics on each agenda.

Appendix A

State of Utah Resource Management Plan for Federal Lands

[*See* Utah Code, Title 63J, Chapter 8, as amended]

63J-8-101. Title.

This chapter is known as "State of Utah Resource Management Plan for Federal Lands."

Enacted by Chapter 49, 2011 General Session

63J-8-102. Definitions.

As used in this chapter:

(1) "ACEC" means an area of critical environmental concern as defined in 43 U.S.C. Sec. 1702.

(2) "AUM" means animal unit months, a unit of grazing forage.

(3) "BLM" means the United States Bureau of Land Management.

(4) "BLM recommended wilderness" means a wilderness study area recommended for wilderness designation in the final report of the president of the United States to the United States Congress in 1993.

(5) "Federal land use designation" means one or a combination of the following congressional or federal actions included in proposed congressional land use legislation:

(a) designation of wilderness within the National Wilderness Preservation System;

(b) designation of a national conservation area;

(c) designation of a watercourse within the National Wild and Scenic River System;

(d) designation of an ACEC;

(e) designation of a national monument in accordance with the Antiquities Act of 1906, 16 U.S.C. Sec. 431 et seq. or by Congress;

(f) designation of a national park within the National Park System;

(g) designation of a national recreational area; or

(h) any other designation, classification, categorization, reservation, withdrawal, or similar action that has the purpose or effect of eliminating, restricting, or reducing energy and mineral development, motorized travel, grazing, active vegetation management, or any other traditional multiple use on public land.

(6) "FLPMA" means the Federal Land Policy and Management Act of 1976, 43 U.S.C. Sec. 1701 et seq.

(7) "Forest Service" means the United States Forest Service within the United States Department of Agriculture.

(8) "Green River Energy Zone" means the lands described as follows in Subsections (8)(a) and (b), as more fully illustrated in the maps prepared by the Carbon County and Emery County GIS Departments in February 2013, each entitled "2013 Green River Energy Zone":

(a) BLM and Forest Service lands in Carbon County that are situated in the following townships: Township 12S Range 6E, Township 12S Range 7E, Township 12S Range 8E, Township 12S Range 9E, Township 12S Range 10E, Township 12S Range 11E, Township 12S Range 12E, Township 12S Range 13E, Township 12S Range 14E, Township 12S Range 15E,

Township 12S Range 16E, Township 12S Range 17E, Township 12S Range 18E, Township 13S Range 6E, Township 13S Range 8E, Township 13S Range 9E, Township 13S Range 10E, Township 13S Range 11E, Township 13S Range 12E, Township 13S Range 13E, Township 13S Range 14E, Township 13S Range 15E, Township 13S Range 16E, Township 13S Range 17E, Township 14S Range 6E, Township 14S Range 8E, Township 14S Range 9E, Township 14S Range 11E, Township 14S Range 12E, Township 14S Range 13E, Township 14S Range 14E, Township 14S Range 15E, Township 14S Range 16E, Township 14S Range 17E, Township 15S Range 7E, Township 15S Range 8E, Township 15S Range 9E, Township 15S Range 10E, Township 15S Range 11E, Township 15S Range 12E, Township 15S Range 13E, Township 15S Range 14E, Township 15S Range 15E, and Township 15S Range 16E; and

(b) BLM and Forest Service lands in Emery County, excluding any areas that are or may be designated as wilderness, national conservation areas, or wild or scenic rivers, that are situated in the following townships and represented in the Emery County Public Land Management Act DRAFT Map prepared by Emery County and available at emerycounty.com/publiclands/LANDS-USE-15.pdf: Township 13S Range 6E, Township 14S Range 6E, Township 14S Range 7E, Township 15S Range 6E, Township 15S Range 7E, Township 16S Range 6E, Township 16S Range 7E, Township 16S Range 8E, Township 16S Range 9E, Township 16S Range 10E, Township 16S Range 11E, Township 16S Range 12E, Township 16S Range 13E, Township 16S Range 14E, Township 16S Range 15E, Township 17S Range 6E, Township 17S Range 7E, Township 17S Range 8E, Township 17S Range 9E, Township 17S Range 10E, Township 17S Range 11E, Township 17S Range 12E, Township 17S Range 13E, Township 17S Range 14E, Township 17S Range 15E, Township 18S Range 6E, Township 18S Range 7E, Township 18S Range 8E, Township 18S Range 9E, Township 18S Range 10E, Township 18S Range 11E, Township 18S Range 12E, Township 18S Range 13E, Township 18S Range 14E, Township 18S Range 15E, Township 19S Range 6E, Township 19S Range 7E, Township 19S Range 8E, Township 19S Range 9E, Township 19S Range 10E, Township 19S Range 11E, Township 19S Range 12E, Township 19S Range 13E, Township 19S Range 14E, Township 19S Range 15E, Township 20S Range 6E, Township 20S Range 7E, Township 20S Range 8E, Township 20S Range 9E, Township 20S Range 10E, Township 20S Range 11E, Township 20S Range 12E, Township 20S Range 13E, Township 20S Range 14E, Township 20S Range 15E, Township 20S Range 16E, Township 21S Range 6E, Township 21S Range 7E, Township 21S Range 8E, Township 21S Range 9E, Township 21S Range 14E, Township 21S Range 15E, Township 21S Range 16E, Township 22S Range 6E, Township 22S Range 7E, Township 22S Range 8E, Township 22S Range 9E, Township 22S Range 14E, Township 22S Range 15E, Township 22S Range 16E, Township 23S Range 6E, Township 23S Range 7E, Township 23S Range 8E, Township 23S Range 9E, Township 23S Range 13E, Township 23S Range 14E, Township 23S Range 15E, Township 23S Range 16E, Township 24S Range 6E, Township 24S Range 7E, Township 24S Range 8E, Township 24S Range 12E, Township 24S Range 13E, Township 24S Range 14E, Township 24S Range 15E, Township 24S Range 16E, Township 24S Range 17E, Township 25S Range 6E, Township 25S Range 7E, Township 25S Range 8E, Township 25S Range 11E, Township 25S Range 12E, Township 25S Range 13E, Township 25S Range 14E, Township 25S Range 15E, Township 25S Range 16E, Township 25S Range 17E, Township 26S Range 6E, Township 26S Range 7E, Township 26S Range 8E, Township 26S Range 9E, Township 26S Range 10E, Township 26S Range 11E,

Township 26S Range 12E, Township 26S Range 13E, Township 26S Range 14E, Township 26S Range 15E, Township 26S Range 16E, and Township 26S Range 17E.

(9) "Multiple use" means proper stewardship of the subject lands pursuant to Section 103(c) of FLPMA, 43 U.S.C. Sec. 1702(c).

(10) "National conservation area" means an area designated by Congress and managed by the BLM.

(11) "National wild and scenic river" means a watercourse:

(a) identified in a BLM or Forest Service planning process; or

(b) designated as part of the National Wild and Scenic River System.

(12) "National Wild and Scenic River System" means the National Wild and Scenic River System established in 16 U.S.C. Sec. 1271 et seq.

(13) "Office" means the Public Lands Policy Coordinating Office created in Section 63J-4-602.

(14) "OHV" means off-highway vehicle as defined in Section 41-22-2.

(15) "Proposed congressional land use legislation" means a draft or a working document of congressional legislation prepared by a person that includes a federal land use designation.

(16) "RARE II" means the second United States Forest Service Roadless Area Review and Evaluation report of 1984.

(17) "R.S. 2477 right-of-way" means a right-of-way established in accordance with 43 U.S.C. Sec. 932 repealed by FLPMA 1976.

(18) "Settlement Agreement" means the written agreement between the state and the Department of the Interior in 2003 (revised in 2005) that resolved the case of State of Utah v. Gale Norton, Secretary of Interior (United States District Court, D. Utah, Case No. 2:96cv0870).

(19) "SITLA" means the School and Institutional Trust Lands Administration as created in Section 53C-1-201.

(20) (a) "Subject lands" means the following non-WSA BLM lands:

(i) in Beaver County:

(A) Mountain Home Range South, Jackson Wash, The Toad, North Wah Wah Mountains, Central Wah Wah Mountains, and San Francisco Mountains according to the region map entitled "Great Basin Central" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(B) White Rock Range, South Wah Wah Mountains, and Granite Peak according to the region map entitled "Great Basin South" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(ii) in Box Elder County: Little Goose Creek, Grouse Creek Mountains North, Grouse Creek Mountains South, Bald Eagle Mountain, Central Pilot Range, Pilot Peak, Crater Island West, Crater Island East, Newfoundland Mountains, and Grassy Mountains North according to the region map entitled "Great Basin North" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(iii) in Carbon County: Desbrough Canyon and Turtle Canyon according to the region map entitled "Book Cliffs" linked in the webpage entitled "Citizen's Proposal for Wilderness in

Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(iv) in Daggett County: Goslin Mountain, Home Mountain, Red Creek Badlands, O-wi-yu-kuts, Lower Flaming Gorge, Crouse Canyon, and Diamond Breaks according to the region map entitled "Dinosaur" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(v) in Duchesne County: Desbrough Canyon according to the region map entitled "Book Cliffs" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(vi) in Emery County:

(A) San Rafael River and Sweetwater Reef, according to the region map entitled "Canyonlands Basin" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(B) Flat Tops according to the region map entitled "Glen Canyon," which is available by clicking the link entitled "Dirty Devil" at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(C) Price River, Lost Spring Wash, Eagle Canyon, Upper Muddy Creek, Molen Reef, Rock Canyon, Mussentuchit Badland, and Muddy Creek, according to the region map entitled "San Rafael Swell" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(vii) in Garfield County:

(A) Pole Canyon, according to the region map entitled "Great Basin South" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(B) Dirty Devil, Fiddler Butte, Little Rockies, Cane Spring Desert, and Cane Spring Desert Adjacents, according to the region map entitled "Glen Canyon," which is available by clicking the link entitled "Dirty Devil" at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(C) Lampstand, Wide Hollow, Steep Creek, Brinkerhof Flats, Little Valley Canyon, Death Hollow, Studhorse Peaks, Box Canyon, Heaps Canyon, North Escalante Canyon, Colt Mesa, East of Bryce, Slopes of Canaan Peak, Horse Spring Canyon, Muley Twist Flank, Pioneer Mesa, Slopes of Bryce, Blue Hills, Mud Springs Canyon, Carcass Canyon, Willis Creek North, Kodachrome Basin, and Kodachrome Headlands, according to the region map entitled "Grand Staircase Escalante" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(D) Notom Bench, Mount Ellen, Bull Mountain, Dogwater Creek, Ragged Mountain, Mount Pennell, Mount Hillers, Bullfrog Creek, and Long Canyon, according to the region map entitled "Henry Mountains" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(viii) in Iron County: Needle Mountains, Steamboat Mountain, Broken Ridge, Paradise Mountains, Crook Canyon, Hamlin, North Peaks, Mount Escalante, and Antelope Ridge, according to the region map entitled "Great Basin South" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(ix) in Juab County: Deep Creek Mountains, Essex Canyon, Kern Mountains, Wild Horse Pass, Disappointment Hills, Granite Mountain, Middle Mountains, Tule Valley, Fish Springs Ridge, Thomas Range, Drum Mountains, Dugway Mountains, Keg Mountains West, Keg Mountains East, Lion Peak, and Rockwell Little Sahara, according to the region map entitled "Great Basin Central" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(x) in Kane County:

(A) Willis Creek North, Willis Creek, Kodachrome Badlands, Mud Springs Canyon, Carcass Canyon, Scorpion, Bryce Boot, Paria-Hackberry Canyons, Fiftymile Canyon, Hurricane Wash, Upper Kanab Creek, Timber Mountain, Nephi Point, Paradise Canyon, Wahweap Burning Hills, Fiftymile Bench, Forty Mile Gulch, Sooner Bench 1, 2, & 3, Rock Cove, Warm Bench, Andalex Not, Vermillion Cliffs, Ladder Canyon, The Cockscomb, Nipple Bench, Moquith Mountain, Bunting Point, Glass Eye Canyon, and Pine Hollow, according to the region map entitled "Grand Staircase Escalante" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(B) Orderville Canyon, Jolley Gulch, and Parunuweap Canyon, according to the region map entitled "Zion/Mohave" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(xi) in Millard County: Kern Mountains, Wild Horse Pass, Disappointment Hills, Granite Mountain, Middle Mountains, Tule Valley, Swasey Mountain, Little Drum Mountains North, Little Drum Mountains South, Drum Mountains, Snake Valley, Coyote Knoll, Howell Peak, Tule Valley South, Ledger Canyon, Chalk Knolls, Orr Ridge, Notch View, Bullgrass Knoll, Notch Peak, Barn Hills, Cricket Mountains, Burbank Pass, Middle Burbank Hills, King Top, Barn Hills, Red Tops, Middle Burbank Hills, Juniper, Painted Rock Mountain, Black Hills, Tunnel Springs, Red Canyon, Sand Ridge, Little Sage Valley, Cat Canyon, Headlight Mountain, Black Hills, Mountain Range Home North, Tweedy Wash, North Wah Wah Mountains, Jackson Wash, and San Francisco Mountains, according to the region map entitled "Great Basin Central" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(xii) in Piute County: Kingston Ridge, Rocky Ford, and Phonolite Hill, according to the region map entitled "Great Basin South" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(xiii) in San Juan County:

(A) Horseshoe Point, Deadhorse Cliffs, Gooseneck, Demon's Playground, Hatch Canyon, Lockhart Basin, Indian Creek, Hart's Point, Butler Wash, Bridger Jack Mesa, and Shay Mountain, according to the region map entitled "Canyonlands Basin" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(B) Dark Canyon, Copper Point, Fortknocker Canyon, White Canyon, The Needle, Red Rock Plateau, Upper Red Canyon, and Tuwa Canyon, according to the region map entitled "Glen Canyon," which is available by clicking the link entitled "Dirty Devil" at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(C) Hunters Canyon, Behind the Rocks, Mill Creek, and Coyote Wash, according to the region map entitled "Moab/La Sal" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(D) Hammond Canyon, Allen Canyon, Mancos Jim Butte, Arch Canyon, Monument Canyon, Tin Cup Mesa, Cross Canyon, Nokai Dome, Grand Gulch, Fish and Owl Creek Canyons, Comb Ridge, Road Canyon, The Tabernacle, Lime Creek, San Juan River, and Valley of the Gods, according to the region map entitled "San Juan" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(xiv) in Sevier County: Rock Canyon, Mussentuchit Badland, Limestone Cliffs, and Jones' Bench, according to the region map entitled "San Rafael Swell" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(xv) in Tooele County:

(A) Silver Island Mountains, Crater Island East, Grassy Mountains North, Grassy Mountains South, Stansbury Island, Cedar Mountains North, Cedar Mountains Central, Cedar Mountains South, North Stansbury Mountains, Oquirrh Mountains, and Big Hollow, according to the region map entitled "Great Basin North" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011, excluding the areas that Congress designated as wilderness under the National Defense Authorization Act for Fiscal Year 2006; and

(B) Ochre Mountain, Deep Creek Mountains, Dugway Mountains, Indian Peaks, and Lion Peak, according to the region map entitled "Great Basin Central" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at

http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(xvi) in Uintah County:

(A) White River, Lower Bitter Creek, Sunday School Canyon, Dragon Canyon, Wolf Point, Winter Ridge, Seep Canyon, Bitter Creek, Hideout Canyon, Sweetwater Canyon, and Hell's Hole, according to the region map entitled "Book Cliffs" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(B) Lower Flaming Gorge, Crouse Canyon Stone Bridge Draw, Diamond Mountain, Wild Mountain, Split Mountain Benches, Vivas Cake Hill, Split Mountain Benches South, Beach Draw, Stuntz Draw, Moonshine Draw, Bourdette Draw, and Bull Canyon, according to the region map entitled "Dinosaur" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(xvii) in Washington County: Couger Canyon, Docs Pass, Slaughter Creek, Butcher Knife Canyon, Square Top, Scarecrow Creek, Beaver Dam Wash, Beaver Dam Mountains North, Beaver Dam Mountains South, Joshua Tree, Beaver Dam Wilderness Expansion, Red Mountain, Cottonwood Canyon, Taylor Canyon, LaVerkin Creek, Beartrap Canyon, Deep Creek, Black Ridge, Red Butte, Kolob Creek, Goose Creek, Dry Creek, Zion National Park Adjacents, Crater Hill, The Watchman, and Canaan Mountain, according to the region map entitled "Zion/Mohave" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011, excluding the areas that Congress designated as wilderness and conservation areas under the Omnibus Public Lands Management Act of 2009; and

(xviii) in Wayne County:

(A) Sweetwater Reef, Upper Horseshoe Canyon, and Labyrinth Canyon, according to the region map entitled "Canyonlands Basin" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(B) Flat Tops and Dirty Devil, according to the region map entitled "Glen Canyon," which is available by clicking the link entitled "Dirty Devil" at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(C) Fremont Gorge, Pleasant Creek Bench, Notom Bench, Mount Ellen, and Bull Mountain, according to the region map entitled "Henry Mountains" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(D) Capital Reef Adjacents, Muddy Creek, Wild Horse Mesa, North Blue Flats, Red Desert, and Factory Butte, according to the region map entitled "San Rafael Swell" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011.

(b) "Subject lands" also includes all BLM and Forest Service lands in the state that are not Wilderness Area or Wilderness Study Areas;

(c) "Subject lands" does not include the following lands that are the subject of consideration for a possible federal lands bill and should be managed according to the 2008 Price BLM Field Office Resource Management Plan until a federal lands bill provides otherwise:

(i) Turtle Canyon and Desolation Canyon according to the region map entitled "Book Cliffs" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;

(ii) Labyrinth Canyon, Duma Point, and Horseshoe Point, according to the region map entitled "Canyonlands Basin" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011; and

(iii) Devil's Canyon, Sid's Mountain, Mexican Mountain, San Rafael Reef, Hondu Country, Cedar Mountain, and Wild Horse, according to the region map entitled "San Rafael Swell" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at http://protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011.

(21) "Uintah Basin Energy Zone" means BLM and Forest Service lands situated in the following townships in Daggett, Duchesne, and Uintah counties, as more fully illustrated in the map prepared by the Uintah County GIS Department in February 2012 entitled "Uintah Basin Utah Energy Zone":

(a) in Daggett County, Township 3N Range 17 E, Township 3N Range 18E, Township 3N Range 19E, Township 3N Range 20E, Township 3N Range 22E, Township 3N Range 23E, Township 3N Range 24E, Township 3N Range 25E, Township 2N Range 17E, Township 2N Range 18E, Township 2N Range 19E, Township 2N Range 20E, Township 2N Range 21E, and Township 2S Range 25E;

(b) in Duchesne County, Township 3N Range 4W, Township 3N Range 3W, Township 3N Range 2W, Township 3N Range 1W, Township 2N Range 6W, Township 2N Range 5W, Township 2N Range 4W, Township 2N Range 3W, Township 2N Range 1W, Township 1N Range 9W, Township 1N Range 8W, Township 1N Range 7W, Township 1N Range 6W, Township 1S Range 9W, Township 1S Range 8W, Township 4S Range 9W, Township 4S Range 3W, Township 4S Range 2W, Township 4S Range 1W, Township 8S Range 15E, Township 8S Range 16E, Township 8S Range 17E, Township 5S Range 9W, Township 5S Range 3W, Township 9S Range 15E, Township 9S Range 16E, Township 9S Range 17E, Township 6S Range 9W, Township 6S Range 8W, Township 6S Range 7W, Township 6S Range 6W, Township 6S Range 5W, Township 6S Range 3W, Township 10S Range 15E, Township 10S Range 16E, Township 10S Range 17E, Township 7S Range 9W, Township 7S Range 8W, Township 7S Range 7W, Township 7S Range 6W, Township 7S Range 5W, Township 7S Range 4W, Township 10S Range 11E, Township 10S Range 12E, Township 10S Range 13E, Township 10S Range 14E, Township 10S Range 15E, Township 10S Range 16E, Township 10S Range 17E, Township 11S Range 10E, Township 11S Range 11E, Township 11S Range 12E, Township 11S Range 13E, Township 11S Range 14E, Township 11S Range 15E, Township 11S Range 16E, and Township 11S Range 17E; and

(c) in Uintah County: Township 2S Range 18E, Township 2S Range 19E, Township 2S Range 20E, Township 2S Range 21E, Township 2S Range 22E, Township 2S Range 23E,

Township 2S Range 24E, Township 2N Range 1W, Township 2N Range 1E, Township 2N Range 2E, Township 3S Range 18E, Township 3S Range 19E, Township 3S Range 20E, Township 3S Range 21E, Township 3S Range 22E, Township 3S Range 23E, Township 3S Range 24E, Township 4S Range 19E, Township 4S Range 20E, Township 4S Range 21E, Township 4S Range 22E, Township 4S Range 23E, Township 4S Range 24E, Township 4S Range 25E, Township 5S Range 19E, Township 5S Range 20E, Township 5S Range 21E, Township 5S Range 22E, Township 5S Range 23E, Township 5S Range 24E, Township 5S Range 25E, Township 6S Range 19E, Township 6S Range 20E, Township 6S Range 21E, Township 6S Range 22E, Township 6S Range 23E, Township 6S Range 24E, Township 6S Range 25E, Township 7S Range 19E, Township 7S Range 20E, Township 7S Range 21E, Township 7S Range 22E, Township 7S Range 23E, Township 7S Range 24E, Township 7S Range 25E, Township 8S Range 17E, Township 8S Range 18E, Township 8S Range 19E, Township 8S Range 20E, Township 8S Range 21E, Township 8S Range 22E, Township 8S Range 23E, Township 8S Range 24E, Township 8S Range 25E, Township 9S Range 17E, Township 9S Range 18E, Township 9S Range 19E, Township 9S Range 20E, Township 9S Range 21E, Township 9S Range 22E, Township 9S Range 23E, Township 9S Range 24E, Township 9S Range 25E, Township 10S Range 17E, Township 10S Range 18E, Township 10S Range 19E, Township 10S Range 20E, Township 10S Range 21E, Township 10S Range 22E, Township 10S Range 23E, Township 10S Range 24E, Township 10S Range 25E, Township 11S Range 17E, Township 11S Range 18E, Township 11S Range 19E, Township 11S Range 20E, Township 11S Range 21E, Township 11S Range 22E, Township 11S Range 23E, Township 11S Range 24E, Township 11S Range 25E, Township 12S Range 20E, Township 12S Range 21E, Township 12S Range 22E, Township 12S Range 23E, Township 12S Range 24E, Township 12S Range 25E, Township 13S Range 20E, Township 13S Range 21E, Township 13S Range 22E, Township 13S Range 23E, Township 13S Range 24E, Township 13S Range 25E, Township 13S Range 26 E, Township 14S Range 21E, Township 14S Range 22E, Township 14S Range 23E, Township 14S Range 24E, Township 14S Range 25E, and Township 14S Range 26E.

(22) "Wilderness" is as defined in 16 U.S.C. Sec. 1131.

(23) "Wilderness area" means those BLM and Forest Service lands added to the National Wilderness Preservation System by an act of Congress.

(24) "Wilderness Preservation System" means the Wilderness Preservation System established in 16 U.S.C. Sec. 1131 et seq.

(25) "WSA" and "Wilderness Study Area" mean the BLM lands in Utah that were identified as having the necessary wilderness character and were classified as wilderness study areas during the BLM wilderness review conducted between 1976 and 1993 by authority of 43 U.S.C. Sec. 1782 and labeled as Wilderness Study Areas within the final report of the President of the United States to the United States Congress in 1993.

Amended by Chapter 321, 2014 General Session

63J-8-103. State participation in managing public lands.

In view of the requirement in FLPMA, 43 U.S.C. Sec. 1712, that BLM must work through a planning process that is coordinated with other federal, state, and local planning efforts before making decisions about the present and future uses of public lands, the requirement in

FLPMA, 43 U.S.C. Sec. 1714 that BLM may not withdraw or otherwise designate BLM lands for specific purposes without congressional approval, and the requirement in the Forest Service Multiple-Use Sustained Yield Act of 1960, 16 U.S.C. Sec. 528, that lands within the national forests be managed according to the principles of multiple use, and in view of the right which FLPMA, the National Environmental Policy Act, 42 U.S.C. Sec. 4321 et seq. and the Federal Advisory Committee Act, 5 U.S.C. Appendix 2, give to state and local governments to participate in all BLM and Forest Service efforts to plan for the responsible use of BLM and Forest Service lands and the requirement that BLM and the Forest Service coordinate planning efforts with those of state and local government, the state adopts the following policy for the management of the subject lands:

(1) Pursuant to the proper allocation of governmental authority between the several states and the federal government, the implementation of congressional acts concerning the subject lands must recognize the concurrent jurisdiction of the states and accord full recognition to state interpretation of congressional acts, as reflected in state law, plans, programs, and policies, insofar as the interpretation does not violate the Supremacy Clause, U.S. Constitution, Article VI, Clause 2.

(2) Differences of opinion between the state's plans and policies on use of the subject lands and any proposed decision concerning the subject lands pursuant to federal planning or other federal decision making processes should be mutually resolved between the authorized federal official, including federal officials from other federal agencies advising the authorized federal official in any capacity, and the governor of Utah.

(3) The subject lands managed by the BLM are to be managed to the basic standard of the prevention of undue and unnecessary degradation of the lands, as required by FLPMA. A more restrictive management standard should not apply except through duly adopted statutory or regulatory processes wherein each specific area is evaluated pursuant to the provisions of the BLM's planning process and those of the National Environmental Policy Act.

(4) The subject lands should not be segregated into separate geographical areas for management that resembles the management of wilderness, wilderness study areas, wildlands, lands with wilderness characteristics, or the like.

(5) The BLM and the Forest Service should make plans for the use of the subject lands and resources subject to their management pursuant to statutorily authorized processes, with due regard for the provisions of the National Environmental Policy Act, by:

(a) recognizing that the duly adopted Resource Management Plan or Forest Service equivalent is the fundamental planning document, which may be revised or amended from time to time;

(b) avoiding and eliminating any form of guidance or policy that has the effect of prescreening, segregating, or imposing any form of management requirements upon any of the subject lands and resources prior to any of the planning processes subject to Subsection (5)(a); and

(c) avoiding and eliminating all forms of planning that parallel or duplicate the planning processes subject to Subsection (5)(a).

Enacted by Chapter 49, 2011 General Session

63J-8-104. State land use planning and management program.

(1) The BLM and Forest Service land use plans should produce planning documents consistent with state and local land use plans to the maximum extent consistent with federal law and FLPMA's purposes, by incorporating the state's land use planning and management program for the subject lands that is as follows:

(a) preserve traditional multiple use and sustained yield management on the subject lands to:

(i) achieve and maintain in perpetuity a high-level annual or regular periodic output of agricultural, mineral, and various other resources from the subject lands;

(ii) support valid existing transportation, mineral, and grazing privileges in the subject lands at the highest reasonably sustainable levels;

(iii) produce and maintain the desired vegetation for watersheds, timber, food, fiber, livestock forage, wildlife forage, and minerals that are necessary to meet present needs and future economic growth and community expansion in each county where the subject lands are situated without permanent impairment of the productivity of the land;

(iv) meet the recreational needs and the personal and business-related transportation needs of the citizens of each county where the subject lands are situated by providing access throughout each such county;

(v) meet the needs of wildlife, provided that the respective forage needs of wildlife and livestock are balanced according to the provisions of Subsection 63J-4-401(6)(m);

(vi) protect against adverse effects to historic properties, as defined by 36 C.F.R. Sec. 800;

(vii) meet the needs of community economic growth and development;

(viii) provide for the protection of existing water rights and the reasonable development of additional water rights; and

(ix) provide for reasonable and responsible development of electrical transmission and energy pipeline infrastructure on the subject lands;

(b) (i) do not designate, establish, manage, or treat any of the subject lands as an area with management prescriptions that parallel, duplicate, or resemble the management prescriptions established for wilderness areas or wilderness study areas, including the non-impairment standard applicable to WSAs or anything that parallels, duplicates, or resembles that non-impairment standard; and

(ii) recognize, follow, and apply the agreement between the state and the Department of the Interior in the settlement agreement;

(c) call upon the BLM to revoke and revise BLM Manuals H 6301, H 6302, and H 6303, issued on or about February 25, 2011, in light of the settlement agreement and the following principles of this state plan:

(i) BLM lacks congressional authority to manage subject lands, other than WSAs, as if they are or may become wilderness;

(ii) BLM lacks authority to designate geographic areas as lands with wilderness characteristics or designate management prescriptions for such areas other than to use specific geographic-based tools and prescriptions expressly identified in FLPMA;

(iii) BLM lacks authority to manage the subject lands in any manner other than to prevent unnecessary or undue degradation, unless the BLM uses geographic tools expressly

identified in FLPMA and does so pursuant to a duly adopted provision of a resource management plan adopted under FLPMA, 43 U.S.C. Sec. 1712;

(iv) BLM inventories for the presence of wilderness characteristics must be closely coordinated with inventories for those characteristics conducted by state and local governments, and should reflect a consensus among those governmental agencies about the existence of wilderness characteristics, as follows:

(A) any inventory of wilderness characteristics should reflect all of the criteria identified in the Wilderness Act of 1964, including:

(I) a size of 5,000 acres or more, containing no visible roads; and

(II) the presence of naturalness, the opportunity for primitive and unconfined recreation, and the opportunity for solitude;

(B) geographic areas found to contain the presence of naturalness must appear pristine to the average viewer, and not contain any of the implements, artifacts, or effects of human presence, including:

(I) visible roads, whether maintained or not; and

(II) human-made features such as vehicle bridges, fire breaks, fisheries, enhancement facilities, fire rings, historic mining and other properties, including tailings piles, commercial radio and communication repeater sites, fencing, spring developments, linear disturbances, stock ponds, visible drill pads, pipeline and transmission line rights-of-way, and other similar features;

(C) factors, such as the following, though not necessarily conclusive, should weigh against a determination that a land area has the presence of naturalness:

(I) the area is or once was the subject of mining and drilling activities;

(II) mineral and hard rock mining leases exist in the area; and

(III) the area is in a grazing district with active grazing allotments and visible range improvements;

(D) geographic areas found to contain the presence of solitude should convey the sense of solitude within the entire geographic area identified, otherwise boundary adjustments should be performed in accordance with Subsection (1)(c)(iv)(F);

(E) geographic areas found to contain the presence of an opportunity for primitive and unconfined recreation must find these features within the entire area and provide analysis about the effect of the number of visitors to the geographic area upon the presence of primitive or unconfined recreation, otherwise boundary adjustments should be performed in accordance with Subsection (1)(c)(iv)(F);

(F) in addition to the actions required by the review for roads pursuant to the definitions of roads contained in BLM Manual H 6301, or any similar authority, the BLM should, pursuant to its authority to inventory, identify and list all roads or routes identified as part of a local or state governmental transportation system, and consider those routes or roads as qualifying as roads within the definition of the Wilderness Act of 1964; and

(G) BLM should adjust the boundaries for a geographic area to exclude areas that do not meet the criteria of lacking roads, lacking solitude, and lacking primitive and unconfined recreation and the boundaries should be redrawn to reflect an area that clearly meets the criteria above, and which does not employ minor adjustments to simply exclude small areas with human intrusions, specifically:

(I) the boundaries of a proposed geographic area containing lands with wilderness characteristics should not be drawn around roads, rights-of-way, and intrusions; and

(II) lands located between individual human impacts that do not meet the requirements for lands with wilderness characteristics should be excluded;

(v) BLM should consider the responses of the Department of the Interior under cover of the letter dated May 20, 2009, clearly stating that BLM does not have the authority to apply the non-impairment management standard to the subject lands, or to manage the subject lands in any manner to preserve their suitability for designation as wilderness, when considering the proper management principles for areas that meet the full definition of lands with wilderness characteristics; and

(vi) even if the BLM were to properly inventory an area for the presence of wilderness characteristics, the BLM still lacks authority to make or alter project level decisions to automatically avoid impairment of any wilderness characteristics without express congressional authority to do so;

(d) achieve and maintain at the highest reasonably sustainable levels a continuing yield of energy, hard rock, and nuclear resources in those subject lands with economically recoverable amounts of such resources as follows:

(i) the development of the solid, fluid, and gaseous mineral resources in portions of the subject lands is an important part of the state's economy and the economies of the respective counties, and should be recognized that it is technically feasible to access mineral and energy resources in portions of the subject lands while preserving or, as necessary, restoring nonmineral and non-energy resources;

(ii) all available, recoverable solid, fluid, gaseous, and nuclear mineral resources in the subject lands should be seriously considered for contribution or potential contribution to the state's economy and the economies of the respective counties;

(iii) those portions of the subject lands shown to have reasonable mineral, energy, and nuclear potential should be open to leasing, drilling, and other access with reasonable stipulations and conditions, including mitigation, reclamation, and bonding measures where necessary, that will protect the lands against unnecessary and undue damage to other significant resource values;

(iv) federal oil and gas existing lease conditions and restrictions should not be modified, waived, or removed unless the lease conditions or restrictions are no longer necessary or effective;

(v) any prior existing lease restrictions in the subject lands that are no longer necessary or effective should be modified, waived, or removed;

(vi) restrictions against surface occupancy should be eliminated, modified, or waived, where reasonable;

(vii) in the case of surface occupancy restrictions that cannot be reasonably eliminated, modified, or waived, directional drilling should be considered where the mineral and energy resources beneath the area can be reached employing available directional drilling technology;

(viii) applications for permission to drill in the subject lands that meet standard qualifications, including reasonable and effective mitigation and reclamation requirements, should be expeditiously processed and granted; and

(ix) any moratorium that may exist against the issuance of qualified mining patents and oil and gas leases in the subject lands, and any barriers that may exist against developing unpatented mining claims and filing for new claims, should be carefully evaluated for removal;

(e) achieve and maintain livestock grazing in the subject lands at the highest reasonably sustainable levels by adhering to the policies, goals, and management practices set forth in Subsection 63J-4-401(6)(m);

(f) manage the watershed in the subject lands to achieve and maintain water resources at the highest reasonably sustainable levels as follows:

(i) adhere to the policies, goals, and management practices set forth in Subsection 63J-4-401(6)(m);

(ii) deter unauthorized cross-country OHV use in the subject lands by establishing a reasonable system of roads and trails in the subject lands for the use of an OHV, as closing the subject lands to all OHV use will only spur increased and unauthorized use; and

(iii) keep open any road or trail in the subject lands that historically has been open to OHV use, as identified on respective county road maps;

(g) achieve and maintain traditional access to outdoor recreational opportunities available in the subject lands as follows:

(i) hunting, trapping, fishing, hiking, family and group parties, family and group campouts and campfires, rock hounding, OHV travel, geological exploring, pioneering, recreational vehicle parking, or just touring in personal vehicles are activities that are important to the traditions, customs, and character of the state and individual counties where the subject lands are located and should continue;

(ii) wildlife hunting, trapping, and fishing should continue at levels determined by the Wildlife Board and the Division of Wildlife Resources and traditional levels of group camping, group day use, and other traditional forms of outdoor recreation, both motorized and non-motorized, should continue; and

(iii) the broad spectrum of outdoor recreational activities available on the subject lands should be available to citizens for whom a primitive, non-motorized, outdoor experience is not preferred, affordable, or physically achievable;

(h) (i) keep open to motorized travel, any road in the subject lands that is part of the respective counties' duly adopted transportation plan;

(ii) provide that R.S. 2477 rights-of-way should be recognized by the BLM;

(iii) provide that a county road may be temporarily closed or permanently abandoned only by statutorily authorized action of the county or state;

(iv) provide that the BLM and the Forest Service must recognize and not unduly interfere with a county's ability to maintain and repair roads and, where reasonably necessary, make improvements to the roads; and

(v) recognize that additional roads and trails may be needed in the subject lands from time to time to facilitate reasonable access to a broad range of resources and opportunities throughout the subject lands, including livestock operations and improvements, solid, fluid, and gaseous mineral operations, recreational opportunities and operations, search and rescue needs, other public safety needs, access to public lands for people with disabilities and the elderly, and access to Utah school and institutional trust lands for the accomplishment of the purposes of those lands;

(i) manage the subject lands so as to protect prehistoric rock art, three dimensional structures, and other artifacts and sites recognized as culturally important and significant by the state historic preservation officer or each respective county by imposing reasonable and effective stipulations and conditions reached by agreement between the federal agency and the state authorized officer pursuant to the authority granted by the National Historic Preservation Act, 16 U.S.C. Sec. 470 et seq.;

(j) manage the subject lands so as to not interfere with the property rights of private landowners as follows:

(i) the state recognizes that there are parcels of private fee land throughout the subject lands;

(ii) land management policies and standards in the subject lands should not interfere with the property rights of any private landowner to enjoy and engage in uses and activities on an individual's private property consistent with controlling county zoning and land use laws; and

(iii) a private landowner or a guest or client of a private landowner should not be denied the right of motorized access to the private landowner's property consistent with past uses of the private property;

(k) manage the subject lands in a manner that supports the fiduciary agreement made between the state and the federal government concerning the school and institutional trust lands, as managed according to state law, by:

(i) formally recognizing, by duly authorized federal proclamation, the duty of the federal government to support the purposes of the school and institutional trust lands owned by the state and administered by SITLA in trust for the benefit of public schools and other institutions as mandated in the Utah Constitution and the Utah Enabling Act of 1894, 28 Stat. 107;

(ii) actively seeking to support SITLA's fiduciary responsibility to manage the school trust lands to optimize revenue by making the school trust lands available for sale and private development and for other multiple and consumptive use activities such as mineral development, grazing, recreation, timber, and agriculture;

(iii) not interfering with SITLA's ability to carry out its fiduciary responsibilities by the creation of geographical areas burdened with management restrictions that prohibit or discourage the optimization of revenue, without just compensation;

(iv) recognizing SITLA's right of economic access to the school trust lands to enable SITLA to put those sections to use in its fiduciary responsibilities;

(v) recognizing any management plan enacted by SITLA pursuant to Section 53C-2-201; and

(vi) acting responsibly as the owner of land parcels with potential for exchange for state land parcels by:

(A) moving forward with the process for identifying federal land parcels suitable and desirable for exchange for state land parcels;

(B) removing barriers to the exchange of federal land parcels for state land parcels;

(C) expediting the procedures and processes necessary to execute the exchange of federal land parcels for state land parcels; and

(D) lobbying and supporting in good faith any congressional legislation to enact and finalize the exchange of federal land parcels for state land parcels;

(l) oppose the designation of BLM lands as areas of critical environmental concern (ACEC), as the BLM lands are generally not compatible with the state's plan and policy for managing the subject lands, but special cases may exist where such a designation is appropriate if compliance with FLPMA, 43 U.S.C. Sec. 1702(a) is clearly demonstrated and where the proposed designation and protection:

(i) is limited to the geographic size to the minimum necessary to meet the standards required by Section 63J-4-401;

(ii) is necessary to protect not just a temporary change in ground conditions or visual resources that can be reclaimed or reversed naturally, but is clearly shown as necessary to protect against visible damage on the ground that will persist on a time scale beyond that which would effectively disqualify the land for a later inventory of wilderness characteristics;

(iii) will not be applied in a geographic area already protected by other protective designations available pursuant to law; and

(iv) is not a substitute for the nonimpairment management requirements of wilderness study areas; and

(m) recognize that a BLM visual resource management class I or II rating is generally not compatible with the state's plan and policy for managing the subject lands, but special cases may exist where such a rating is appropriate if jointly considered and created by state, local, and federal authorities as part of an economic development plan for a region of the state, with due regard for school trust lands and private lands within the area.

(2) All BLM and Forest Service decision documents should be accompanied with an analysis of the social and economic impact of the decision. Such analysis should:

(a) consider all facets of the decision in light of valuation techniques for the potential costs and benefits of the decision;

(b) clarify whether the costs and benefits employ monetized or nonmonetized techniques;

(c) compare the accuracy, completeness, and viability of monetized and nonmonetized valuation techniques used as part of the analysis, including all caveats on use of the techniques; and

(d) compare the valuation techniques employed in the analysis to the federal standards for valuation employed by the U.S. Department of Justice in court actions.

Amended by Chapter 328, 2014 General Session

63J-8-105. Maps available for public review.

A printed copy of the maps referenced in Subsections 63J-8-102(8), (20), and (21) shall be available for inspection by the public at the offices of the Utah Association of Counties.

Amended by Chapter 321, 2014 General Session

63J-8-105.1. State of Utah Transportation Plan for the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest.

(1) (a) The state of Utah designates this state of Utah transportation plan for the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest.

(b) The plan was established pursuant to:

(i) the requirement in the United States Forest Service's Multiple-Use Sustained-Yield Act of 1960, 16 U.S.C. Sec. 528, that lands within the national forests be managed according to the principles of multiple use; and

(ii) the right which FLPMA, the National Environmental Policy Act, 42 U.S.C. Sec. 4321 et seq., and the Federal Advisory Committee Act, 5 U.S.C. Appendix 2, give to state and local governments to participate in all BLM and United States Forest Service efforts to plan for the responsible use of BLM and United States Forest Service lands and the requirement that BLM and the United States Forest Service coordinate planning efforts with those of state and local governments.

(c) This section is a statement of the state of Utah's policy and plan for a desired transportation system for the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest.

(d) This section does not mandate compliance with this policy by the United States Forest Service nor does it override or usurp the United States Forest Service's authority within this area.

(e) This section is a statement of state policy for use by the United States Forest Service and other interested stakeholders as required by federal law in making planning decisions and project management decisions within the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest.

(2) There is established and designated a state of Utah transportation plan for the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest in Garfield, Iron, Kane, and Wayne counties, Utah for the purpose of:

(a) preserving and protecting against threats to the longstanding transportation networks that have served the public for decades within these ranger districts;

(b) preserving and protecting against threats to the longstanding traditional recreation resource values that have served the public for decades within these ranger districts;

(c) preserving and protecting against threats to the longstanding public road access that is vital to the agricultural livestock and forest products industries within these ranger districts;

(d) preserving and protecting against threats to the significant history, culture, customs, and economic values in these ranger districts, and in the various communities situated near these ranger districts;

(e) preserving and protecting against threats to the civil rights of the disabled, the elderly, and the economically disadvantaged to have access to the great outdoor resource and values existing in these ranger districts;

(f) preserving and protecting against threats to road networks vital to restoring, reclaiming, preserving, protecting, enhancing, and developing the state's water resources on the watersheds existing within these ranger districts;

(g) protecting, preserving, and enhancing affected natural, historical, and cultural activities within these ranger districts from ongoing threats; and

(h) preserving and protecting the longstanding network of publicly accessible roads within these ranger districts, in order to protect:

(i) the health, safety, and welfare of citizens who live near these ranger districts, and persons who visit and recreate therein, from the threat of catastrophic fire and its resulting

problems of watershed and habitat destruction, erosion, silt load, and flooding, which can only be managed, prevented, combatted, and mitigated through a proper transportation network throughout these ranger districts;

(ii) hunter access to manage wildlife populations; and

(iii) forage conditions for livestock grazing and wildlife habitat.

(3) The state of Utah transportation plan for the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest consists of all roads shown in the map jointly prepared by the Garfield, Iron, Kane, and Wayne County GIS departments in February 2014, entitled "State of Utah Transportation Plan for Dixie National Forest," printed copies of which will be maintained by the Utah Association of Counties and made available to the public upon request.

(4) (a) (i) The map described in Subsection (3) also documents the move by Dixie National Forest to close and otherwise deny the public's longstanding access to many of the roads shown on the map in the Cedar City, Powell, Escalante, and Fremont ranger districts, by reason of the United States Forest Service's implementing a recent motorized travel plan for the Dixie National Forest.

(ii) These closures and other denials of public road access through the motorized travel plan of the Dixie National Forest constitute an ongoing direct threat to the resources and values referenced in Subsection (2).

(b) The state of Utah's transportation plan for these ranger districts conflicts with the United States Forest Service's recent motorized travel plan for the Dixie National Forest.

(c) The state of Utah's transportation plan for these ranger districts recognizes that all roads shown on the map referenced in Subsection (3) should be kept open to the public.

(5) The state finds that keeping open to the public all roads shown on the map referenced in Subsection (3) is necessary and vital to preserve and protect the values cited in Subsection (2).

(6) The state requests that the federal agencies that administer lands within the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest:

(a) fully cooperate and coordinate with the state of Utah and the respective counties in which these ranger districts lie, to develop, amend, and implement United States Forest Service land and resource management plans and transportation plans, and implement management decisions pursuant to those plans, that are consistent with the purposes, goals, and policies described in this section to the maximum extent allowed under federal law;

(b) enter into agreements regarding the maintenance, upkeep, and improvement of roads in these ranger districts;

(c) refrain from any planning decisions and management actions that will undermine, restrict, or diminish the goals, purposes, and policies as stated in this section; and

(d) refrain from implementing a policy that is contrary to the goals and purposes described within this section.

(7) (a) The state recognizes the importance of longstanding road networks in all national forests in the state but establishes this transportation plan to provide special protection and preservation against the identified threats found to exist in the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest.

(b) It is the intent of the state to designate additional forest transportation plans in future years as circumstances warrant their special protection and preservation.

(8) The state calls upon applicable federal, state, and local agencies to coordinate with each other and establish applicable intergovernmental standing commissions, with membership consisting of representatives from the United States government, the state of Utah, and local governments, to coordinate and achieve consistency in planning decisions and management actions consistent with the goals and policies of this section for the Cedar City, Powell, Escalante, and Fremont ranger districts of the Dixie National Forest.

Enacted by Chapter 361, 2014 General Session

63J-8-105.5. Uintah Basin Energy Zone established -- Findings -- Management and land use priorities.

(1) There is established the Uintah Basin Energy Zone in Daggett, Uintah, and Duchesne Counties for the purpose of maximizing efficient and responsible development of energy and mineral resources.

(2) The land area and boundaries of the Uintah Basin Energy Zone are described in Subsection 63J-8-102(21) and illustrated on the map described in Section 63J-8-105.

(3) The state finds that:

(a) the lands comprising the Uintah Basin Energy Zone contain abundant, world-class deposits of energy and mineral resources, including oil, natural gas, oil shale, oil sands, gilsonite, coal, phosphate, gold, uranium, and copper, as well as areas with high wind and solar energy potential; and

(b) the highest management priority for all lands within the Uintah Basin Energy Zone is responsible management and development of existing energy and mineral resources in order to provide long-term domestic energy and supplies for Utah and the United States.

(4) The state supports:

(a) efficient and responsible full development of all existing energy and mineral resources located within the Uintah Basin Energy Zone, including oil, oil shale, natural gas, oil sands, gilsonite, phosphate, gold, uranium, copper, solar, and wind resources; and

(b) a cooperative management approach among federal agencies, state, and local governments to achieve broadly supported management plans for the full development of all energy and mineral resources within the Uintah Basin Energy Zone.

(5) The state calls upon the federal agencies who administer lands within the Uintah Basin Energy Zone to:

(a) fully cooperate and coordinate with the state and with Daggett, Uintah, and Duchesne Counties to develop, amend, and implement land and resource management plans and to implement management decisions that are consistent with the purposes, goals, and policies described in this section to the maximum extent allowed under federal law;

(b) expedite the processing, granting, and streamlining of mineral and energy leases and applications to drill, extract, and otherwise develop all existing energy and mineral resources located within the Uintah Basin Energy Zone, including oil, natural gas, oil shale, oil sands, gilsonite, phosphate, gold, uranium, copper, solar, and wind resources;

(c) allow continued maintenance and increased development of roads, power lines, pipeline infrastructure, and other utilities necessary to achieve the goals, purposes, and policies described in this section;

(d) refrain from any planning decisions and management actions that will undermine, restrict, or diminish the goals, purposes, and policies for the Uintah Basin Energy Zone as stated in this section; and

(e) refrain from implementing a policy that is contrary to the goals and purposes described within this section.

(6) The state calls upon Congress to establish an intergovernmental standing commission among federal, state, and local governments to guide and control planning decisions and management actions in the Uintah Basin Energy Zone in order to achieve and maintain the goals, purposes, and policies described in this section.

(7) Notwithstanding the provisions of this section, the state's grazing and livestock policies and plans on land within the Uintah Basin Energy Zone shall continue to be governed by Sections 63J-4-401 and 63J-8-104.

Amended by Chapter 321, 2014 General Session

63J-8-105.7. Green River Energy Zone established -- Findings -- Management and land use priorities.

(1) There is established the Green River Energy Zone in Carbon and Emery Counties for the purpose of maximizing efficient and responsible development of energy and mineral resources.

(2) The land area and boundaries of the Green River Energy Zone are described in Subsection 63J-8-102(8) and illustrated on the maps described in Section 63J-8-105.

(3) The state finds that:

(a) the lands comprising the Green River Energy Zone contain abundant world-class deposits of energy and mineral resources, including oil, natural gas, oil shale, oil sands, gilsonite, coal, phosphate, gold, uranium, and copper, as well as areas with high wind and solar energy potential;

(b) for lands within the Carbon County portion of the Green River Energy Zone, the highest management priority is the responsible management, development, and extraction of existing energy and mineral resources in order to provide long-term domestic energy and supplies for Utah and the United States; and

(c) for lands within the Emery County portion of the Green River Energy Zone:

(i) the responsible management and development of existing energy and mineral resources in order to provide long-term domestic energy and supplies for Utah and the United States is a high management priority; and

(ii) the management priority described in Subsection (3)(c)(i) should be balanced with the following high management priorities:

(A) watershed health;

(B) water storage and water delivery systems;

(C) Emery County Heritage Sites;

(D) facilities and resources associated with the domestic livestock industry;

(E) wildlife and wildlife habitat; and

(F) recreation opportunities.

(4) The state supports:

(a) efficient and responsible full development of all existing energy and mineral resources located within the Green River Energy Zone, including oil, oil shale, natural gas, oil sands, gilsonite, coal, phosphate, gold, uranium, copper, solar, and wind resources; and

(b) a cooperative management approach by federal agencies, the state of Utah, and local governments to achieve broadly supported management plans for the full development of all energy and mineral resources within the Green River Energy Zone.

(5) The state requests that the federal agencies that administer lands within the Green River Energy Zone:

(a) fully cooperate and coordinate with the state of Utah and with Carbon and Emery Counties to develop, amend, and implement land and resource management plans and to implement management decisions that are consistent with the purposes, goals, and policies described in this section to the maximum extent allowed under federal law;

(b) expedite the processing, granting, and streamlining of mineral and energy leases and applications to drill, extract, and otherwise develop all existing energy and mineral resources located within the Green River Energy Zone, including oil, natural gas, oil shale, oil sands, gilsonite, coal, phosphate, gold, uranium, copper, solar, and wind resources;

(c) allow continued maintenance and increased development of roads, power lines, pipeline infrastructure, and other utilities necessary to achieve the goals, purposes, and policies described in this section;

(d) refrain from any planning decisions and management actions that will undermine, restrict, or diminish the goals, purposes, and policies for the Green River Energy Zone as stated in this section; and

(e) refrain from implementing a policy that is contrary to the goals and purposes within this section.

(6) The state calls upon Congress to establish an intergovernmental standing commission, with membership consisting of representatives from the United States government, the state of Utah, and local governments to guide and control planning and management actions in the Green River Energy Zone in order to achieve and maintain the goals, purposes, and policies described in this section.

(7) Notwithstanding the provisions of this section, the state's grazing and livestock policies and plans on land within the Green River Energy Zone shall continue to be governed by Sections 63J-4-401 and 63J-8-104.

Amended by Chapter 321, 2014 General Session

63J-8-105.8. Utah Grazing Agricultural Commodity Zones established -- Findings -- Management and land use priorities.

(1) There are established Utah Grazing Agricultural Commodity Zones in the counties of Beaver, Emery, Garfield, Kane, Piute, Iron, Sanpete, San Juan, Sevier, and Wayne for the purpose of:

(a) preserving and protecting the agricultural livestock industry from ongoing threats;

(b) preserving and protecting the history, culture, custom, and economic value of the agricultural livestock industry from ongoing threats; and

(c) maximizing efficient and responsible restoration, reclamation, preservation, enhancement, and development of forage and watering resources for grazing and wildlife, practices, and affected natural, historical, and cultural activities from ongoing threats.

(2) The titles, land area, and boundaries of the zones are as follows:

(a) "Escalante Region Grazing Zone," consisting of certain BLM and Forest Service land in the following townships in Garfield and Kane counties, as more fully illustrated in the map jointly prepared by the Garfield County and Kane County Geographic Information Systems departments entitled "Escalante Region Grazing Zone":

(i) in Garfield County, Township 32S Range 6E, Township 32S Range 7E, Township 33S Range 4E, Township 33S Range 5E, Township 33S Range 6E, Township 33S Range 7E, Township 33S Range 8E, Township 34S Range 2E, Township 34S Range 3E, Township 34S Range 4E, Township 34S Range 5E, Township 34S Range 6E, Township 34S Range 7E, Township 34S Range 8E, Township 35S Range 1E, Township 35S Range 2E, Township 35S Range 3E, Township 35S Range 4E, Township 35S Range 5E, Township 35S Range 6E, Township 35S Range 7E, Township 35S Range 8E, Township 36S Range 1W, Township 36S Range 2W, Township 36S Range 3W, Township 36S Range 1E, Township 36S Range 2E, Township 36S Range 3E, Township 36S Range 4E, Township 36S Range 5E, Township 36S Range 6E, Township 36S Range 7E, Township 36S Range 8E, Township 36S Range 9E, Township 37S Range 1W, Township 37S Range 2W, Township 37S Range 3W, Township 37S Range 4W, Township 37S Range 1E, Township 37S Range 2E, Township 37S Range 3E, Township 37S Range 4E, Township 37S Range 5E, Township 37S Range 6E, Township 37S Range 7E, Township 37S Range 8E, and Township 37S Range 9E; and

(ii) in Kane County, Township 38S Range 1W, Township 38S Range 2W, Township 38S Range 3W, Township 38S Range 4W, Township 38S Range 1E, Township 38S Range 2E, Township 38S Range 3E, Township 38S Range 4E, Township 38S Range 5E, Township 38S Range 6E, Township 38S Range 7E, Township 38S Range 8E, Township 38S Range 9E, Township 39S Range 1W, Township 39S Range 2W, Township 39S Range 3W, Township 39S Range 4W, Township 39S Range 4.5W, Township 39S Range 1E, Township 39S Range 2E, Township 39S Range 3E, Township 39S Range 4E, Township 39S Range 5E, Township 39S Range 6E, Township 39S Range 7E, Township 39S Range 8E, Township 39S Range 9E, Township 40S Range 1W, Township 40S Range 2W, Township 40S Range 3W, Township 40S Range 4W, Township 40S Range 4.5W, Township 40S Range 5W, Township 40S Range 1E, Township 40S Range 2E, Township 40S Range 3E, Township 40S Range 4E, Township 40S Range 5E, Township 40S Range 6E, Township 40S Range 7E, Township 40S Range 8E, Township 40S Range 9E, Township 40.5S Range 9E, Township 41S Range 1W, Township 41S Range 2W, Township 41S Range 3W, Township 41S Range 4W, Township 41S Range 4.5W, Township 41S Range 5W, Township 41S Range 1E, Township 41S Range 2E, Township 41S Range 3E, Township 41S Range 4E, Township 41S Range 5E, Township 41S Range 6E, Township 41S Range 7E, Township 41S Range 8E, Township 41S Range 9E, Township 42S Range 1W, Township 42S Range 2W, Township 42S Range 3W, Township 42S Range 4W, Township 42S Range 4.5W, Township 42S Range 5W, Township 42S Range 1E, Township 42S Range 2E, Township 42S Range 3E, Township 42S Range 4E, Township 42S Range 5E, Township 42S Range 6E, Township 42S Range 7E, Township 42S Range 8E, Township 42S Range 9E, Township 42.5S Range 6.5E, Township 42.5S Range 7E, Township 43S Range 1W,

Township 43S Range 2W, Township 43S Range 3W, Township 43S Range 4W, Township 43S Range 4.5W, Township 43S Range 5W, Township 43S Range 1E, Township 43S Range 2E, Township 43S Range 3E, Township 43S Range 4E, Township 43S Range 5E, Township 43S Range 6E, Township 44S Range 1W, Township 44S Range 2W, Township 44S Range 3W, Township 44S Range 4W, Township 44S Range 4.5W, Township 44S Range 5W, Township 44S Range 1E, Township 44S Range 2E, Township 44S Range 3E, Township 44S Range 4E, and Township 44S Range 5E;

(b) "Beaver County Southwest Desert Region Grazing Zone," consisting of BLM lands in the following townships in Beaver County, as more fully illustrated in the map prepared by the Beaver County Geographic Information Systems Departments entitled "Beaver County Southeast Desert Grazing Zone": Township 26S Range 11W, Township 27S Range 11W, Township 28S Range 11W, Township 29S Range 11W, Township 30S Range 11W, Township 26S Range 12W, Township 27S Range 12W, Township 28S Range 12W, Township 29S Range 12W, Township 30S Range 12W, Township 26S Range 13W, Township 27S Range 13W, Township 28S Range 13W, Township 29S Range 13W, Township 30S Range 13W, Township 26S Range 14W, Township 27S Range 14W, Township 28S Range 14W, Township 29S Range 14W, Township 30S Range 14W, Township 26S Range 15W, Township 27S Range 15W, Township 28S Range 15W, Township 29S Range 15W, Township 30S Range 15W, Township 26S Range 16W, Township 27S Range 16W, Township 28S Range 16W, Township 29S Range 16W, Township 30S Range 16W, Township 26S Range 17W, Township 27S Range 17W, Township 28S Range 17W, Township 29S Range 17W, Township 30S Range 17W, Township 26S Range 18W, Township 27S Range 18W, Township 28S Range 18W, Township 29S Range 18W, Township 30S Range 18W, Township 26S Range 19W, Township 27S Range 19W, Township 28S Range 19W, Township 29S Range 19W, Township 30S Range 19W, Township 26S Range 20W, Township 27S Range 20W, Township 28S Range 20W, Township 29S Range 20W, and Township 30S Range 20W;

(c) "Tushar Mountain Region Grazing Zone," consisting of certain BLM and Forest Service lands in the following townships in Beaver, Garfield, and Piute counties, as more fully illustrated in the map jointly prepared by the Beaver, Garfield, and Piute counties GIS departments in February 2014, entitled "Tushar Mountain Region Grazing Zone":

(i) in Beaver County, Township 28S Range 4W, Township 29S Range 4W, Township 27S Range 5W, Township 28S Range 5W, Township 29S Range 5W, Township 30S Range 5W, Township 26S Range 6W, Township 27S Range 6W, Township 28S Range 6W, Township 29S Range 6W, and Township 30S Range 6W;

(ii) in Piute County, Township 26S Range 6W, Township 27S Range 6W, Township 26S Range 5W, Township 27S Range 5W, Township 28S Range 5W, Township 29S Range 5W, Township 30S Range 5W, Township 26S Range 4.5W, Township 26S Range 4W, Township 27S Range 4W, Township 28S Range 4W, Township 29S Range 4W, Township 30S Range 4W; and

(iii) in Garfield County, Township 32S Range 5 1/2 W, Township 31S Range 5W, Township 32S Range 5W, Township 33S Range 5W, Township 32S Range 4 1/2W, Township 33S Range 4 1/2W, Township 31S Range 4W, and Township 31S Range 3W;

(d) "Last Chance Region Grazing Zone," consisting of BLM and Forest Service lands in the following townships in Sevier County, as more fully illustrated in the map prepared by the Sevier County GIS department in February 2014, entitled "Last Chance Region Grazing Zone":

Township 23S Range 5E, Township 24S Range 4E, Township 24S Range 5E, Township 25S Range 5E, Township 26S Range 5E;

(e) "Muddy Creek Region Grazing Zone," consisting of certain BLM lands in the following townships of Emery County, as more fully illustrated in the map prepared by the Emery County GIS department in February 2014, entitled "Muddy Creek Region Grazing Zone": Township 22S Range 7E, Township 23S Range 7E, Township 24S Range 7E, Township 25S Range 7E, Township 22S Range 8E, Township 23S Range 8E, Township 24S Range 8E, Township 25S Range 8E, Township 23S Range 9E, and Township 24S Range 9E;

(f) "McKay Flat Region Grazing Zone," consisting of certain BLM lands in the following townships of Emery County, as more fully illustrated in the map prepared by the Emery County GIS department in February 2014, entitled "McKay Flat Region Grazing Zone": Township 25S Range 9E, Township 26S Range 9E, Township 23S Range 10E, Township 24S Range 10E, Township 25S Range 10E, Township 24S Range 11E, and Township 25S Range 11E;

(g) "Sinbad Region Grazing Zone," consisting of certain BLM lands in the following townships of Emery County, as more fully illustrated in the map prepared by the Emery County GIS department in February 2014, entitled "Sinbad Region Grazing Zone": Township 20S Range 11E, Township 21S Range 11E, Township 21S Range 12E, Township 22S Range 12E, Township 23S Range 12E, Township 21S Range 13E, Township 22S Range 13E, and Township 23S Range 13E;

(h) "Robbers Roost Region Grazing Zone," consisting of certain BLM lands in the following townships of Emery County, as more fully illustrated in the map prepared by the Emery County GIS department in February 2014, entitled "Robbers Roost Region Grazing Zone": Township 25S Range 13E, Township 26S Range 13E, Township 25S Range 14E, Township 26S Range 14E, Township 25S Range 15E, and Township 26S Range 15E;

(i) "Western Iron County Region Grazing Zone," consisting of BLM and Forest Service lands in the following townships in Iron County, as more fully illustrated in the map jointly prepared by the Iron County GIS department in February 2014, entitled "Western Iron County Region Grazing Zone": Township 31S Range 7W, Township 31S Range 8W, Township 31S Range 9W, Township 31S Range 10W, Township 31S Range 11W, Township 31S Range 12W, Township 31S Range 13W, Township 31S Range 14W, Township 31S Range 15W, Township 31S Range 16W, Township 31S Range 17W, Township 31S Range 18W, Township 31S Range 19W, Township 31S Range 20W, Township 32S Range 8W, Township 32S Range 9W, Township 32S Range 10W, Township 32S Range 11W, Township 32S Range 12W, Township 32S Range 13W, Township 32S Range 14W, Township 32S Range 15W, Township 32S Range 16W, Township 32S Range 17W, Township 32S Range 18W, Township 32S Range 19W, Township 32S Range 20W, Township 33S Range 8W, Township 33S Range 9W, Township 33S Range 10W, Township 33S Range 11W, Township 33S Range 12W, Township 33S Range 13W, Township 33S Range 14W, Township 33S Range 15W, Township 33S Range 16W, Township 33S Range 17W, Township 33S Range 18W, Township 33S Range 19W, Township 33S Range 20W, Township 34S Range 9W, Township 34S Range 10W, Township 34S Range 11W, Township 34S Range 12W, Township 34S Range 13W, Township 34S Range 14W, Township 34S Range 15W, Township 34S Range 17W, Township 34S Range 18W, Township 34S Range 19W, Township 34S Range 20W, Township 35S Range 10W, Township 35S Range 12W,

Township 35S Range 13W, Township 35S Range 14W, Township 35S Range 15W, Township 35S Range 17W, Township 35S Range 18W, Township 35S Range 19W, Township 35S Range 20W, Township 36S Range 11W, Township 36S Range 12W, Township 36S Range 13W, Township 36S Range 14W, Township 36S Range 15W, Township 36S Range 17W, Township 36S Range 18W, Township 36S Range 19W, Township 36S Range 20W, Township 37S Range 12W, Township 37S Range 13W, Township 37S Range 14W, and Township 38S Range 12W;

(j) "Eastern Iron County Region Grazing Zone," consisting of certain BLM and Forest Service lands in the following townships in Iron County, as more fully illustrated in the map jointly prepared by the Iron County GIS department in February 2014, entitled "Eastern Iron County Region Grazing Zone": Township 31S Range 6W, Township 31S Range 7W, Township 32S Range 6W, Township 32S Range 7W, Township 33S Range 6W, Township 33S Range 7W, Township 33S Range 8W, Township 34S Range 7W, Township 34S Range 8W, Township 34S Range 9W, Township 35S Range 8W, Township 35S Range 9W, Township 35S Range 10W, Township 36S Range 8W, Township 36S Range 9W, Township 36S Range 10W, Township 36S Range 11W, Township 37S Range 8W, Township 37S Range 9W, Township 37S Range 11W, Township 37S Range 12W, Township 38S Range 11W, Township 38S Range 12W, Township 38S Range 10W, Township 38S Range 11W, and Township 38S Range 12W, excluding Zion National Park;

(k) "Panguitch Lake Region Grazing Zone," consisting of BLM and Forest Service lands in the following townships in Kane and Garfield counties, as more fully illustrated in the map prepared by the Kane County GIS department in February 2014, entitled "Panguitch Lake Region Grazing Zone":

(i) in Kane County, Township 38S Range 9W, Township 38S Range 8W, Township 38S Range 7W, Township 38S Range 6W, Township 39S Range 8W, and Township 39S Range 7W; and

(ii) in Garfield County, Township 35S Range 7W, Township 36S Range 7W, Township 34S Range 6W, Township 35S Range 6W, Township 36S Range 6W, Township 37S Range 6W, Township 34S Range 5W, Township 35S Range 5W, Township 36S Range 5W, and Township 37S Range 5W;

(l) "East Fork Region Grazing Zone," the land area of which consists of certain BLM and Forest Service lands situated in the following townships in Kane and Garfield counties, as more fully illustrated in the map jointly prepared by the Kane and Garfield counties GIS departments in February 2014, entitled "East Fork Region Grazing Zone":

(i) in Kane County, Township 38S Range 5W, Township 38S Range 4.5W, Township 39S Range 5W, and Township 39S Range 4.5W; and

(ii) in Garfield County, Township 34S Range 4 1/2W, Township 35S Range 4 1/2W, Township 36S Range 4 1/2W, Township 37S Range 4 1/2W, Township 33S Range 4W, Township 34S Range 4W, Township 35S Range 4W, Township 36S Range 4W, Township 37S Range 4W, Township 33S Range 3W, Township 34S Range 3W, Township 35S Range 3W, Township 36S Range 3W, Township 33S Range 2W, Township 34S Range 2W, and Township 35S Range 2W;

(m) "Sevier River Region Grazing Zone," consisting of certain BLM and Forest Service lands in the following townships in Piute County, as more fully illustrated in the map prepared

by the Piute GIS department in February 2014, entitled "Sevier River Region Grazing Zone": Township 27S Range 3W, Township 28S Range 3W, and Township 29S Range 3W;

(n) "Kingston Canyon Region Grazing Zone," the land area of which consists of certain BLM and Forest Service lands situated in the following townships in Piute and Garfield counties, as more fully illustrated in the map jointly prepared by the Piute and Garfield counties GIS departments in February 2014, entitled "Kingston Canyon Region Grazing Zone":

(i) in Piute County, Township 30S Range 3W, Township 30S Range 2.5W, and Township 30S Range 2W; and

(ii) in Garfield County, Township 32S Range 4W, Township 31S Range 3W, Township 32S Range 3W, Township 31S Range 2 1/2W, Township 31S Range 2W, Township 32S Range 2W, Township 31S Range 1W, and Township 32S Range 1W;

(o) "Monroe Mountain Region Grazing Zone," consisting of certain BLM and Forest Service lands in the following townships in Piute County, as more fully illustrated in the map prepared by the Piute County GIS department in February 2014, entitled "Monroe Mountain Region Grazing Zone": Township 26S Range 3W, Township 27S Range 2.5W, Township 28S Range 2.5W, Township 29S Range 2.5W, Township 26S Range 2W, Township 27S Range 2W, Township 28S Range 2W, Township 29S Range 2W, Township 26S Range 1W, and Township 27S Range 1W;

(p) "Parker Mountain Region Grazing Zone," consisting of certain BLM and Forest Service lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Parker Mountain Region Grazing Zone": Township 26S Range 2E, Township 27S Range 2E, Township 28S Range 2E, Township 29S Range 2E, and Township 30S Range 2E;

(q) "Boulder Mountain Region Grazing Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Wayne and Garfield counties, as more fully illustrated in the map jointly prepared by the Wayne and Garfield counties GIS departments in February 2014, entitled "Boulder Mountain Region Grazing Zone":

(i) in Wayne County, Township 30S Range 3E, Township 30S Range 4E, and Township 30S Range 5E; and

(ii) in Garfield County, Township 35S Range 3W, Township 33S Range 2W, Township 34S Range 2W, Township 35S Range 2W, Township 31S Range 1W, Township 32S Range 1W, Township 33S Range 1W, Township 34S Range 1W, Township 35S Range 1W, Township 31S Range 1E, Township 32S Range 1E, Township 33S Range 1E, Township 34S Range 1E, Township 31S Range 2E, Township 32S Range 2E, Township 33S Range 2E, Township 34S Range 2E, Township 31S Range 3E, Township 32S Range 3E, Township 33S Range 3E, Township 31S Range 4E, Township 32S Range 4E, Township 33S Range 4E, Township 30 1/2S Range 5E, Township 31S Range 5E, Township 32S Range 5E, and Township 31S Range 6E;

(r) "Thousand Lake Region Grazing Zone," consisting of certain Forest Service lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Thousand Lake Region Grazing Zone": Township 26S Range 4E, Township 27S Range 4E, Township 28S Range 4E;

(s) "Hartnet-Middle Desert Region Grazing Zone," consisting of certain BLM lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Hartnet-Middle Desert Region

Grazing Zone": Township 28S Range 7E, Township 27S Range 8E, and Township 28S Range 8E;

(t) "Sandy No. 1 Region Grazing Zone," consisting of certain BLM lands situated in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Sandy No. 1 Region Grazing Zone": Township 29S Range 8E, Township 30S Range 8E;

(u) "Blue Benches Region Grazing Zone," consisting of certain BLM lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Blue Benches Region Grazing Zone": Township 29S Range 9E, Township 29S Range 10E, and Township 30S Range 10E;

(v) "Wild Horse Region Grazing Zone," consisting of certain BLM lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Wild Horse Region Grazing Zone": Township 27S Range 10E, and Township 27S Range 11E;

(w) "Hanksville Region Grazing Zone," consisting of certain BLM lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Hanksville Region Grazing Zone": Township 29S Range 11E, Township 30S Range 11E, Township 28S Range 12E, Township 29S Range 12E, Township 30S Range 12E, and Township 30S Range 13E;

(x) "Jeffery Wells Region Grazing Zone," consisting of certain BLM lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Jeffery Wells Region Grazing Zone": Township 27S Range 14E and Township 27S Range 15E;

(y) "Robbers Roost Region Grazing Zone," consisting of certain BLM lands situated in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Robbers Roost Region Grazing Zone": Township 29S Range 14E;

(z) "French Springs Region Grazing Zone," the land area of which consists of certain BLM lands situated in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "French Springs Region Grazing Zone": Township 30S Range 16E;

(aa) "12 Mile C&H Region Grazing Zone," consisting of certain Forest Service lands in the following townships of Sanpete County, as more fully illustrated in the map prepared by the Sanpete County GIS department in February 2014, entitled "12 Mile C&H Region Grazing Zone": Township 19S Range 3E and Township 20S Range 3E;

(bb) "Horseshoe Region Grazing Zone," consisting of certain Forest Service lands in the following townships of Sanpete County, as more fully illustrated in the map prepared by the Sanpete County GIS department in February 2014, entitled "Horseshoe Region Grazing Zone": Township 14S Range 5E, Township 14S Range 6E, Township 15S Range 5E, and Township 15S Range 6E;

(cc) "Nokai Dome Region Grazing Zone," consisting of certain BLM and National Park Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "Nokai Dome Region Grazing Zone": Township 38S Range 11E, Township 38S Range 12E, Township 39S

Range 11E, Township 39S Range 12E, Township 39S Range 13E, Township 39S Range 14E, Township 39S Range 15E, Township 40S Range 10E, Township 40S Range 11E, Township 40S Range 12E, Township 40S Range 13E, Township 40S Range 14E, Township 41S Range 9E, Township 41S Range 10E, Township 41S Range 11E, and Township 41S Range 12E;

(dd) "Grand Gulch Region Grazing Zone," consisting of certain BLM and National Park Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "Grand Gulch Region Grazing Zone": Township 37S Range 17E, Township 37S Range 18E, Township 38S Range 16E, Township 38S Range 17E, Township 38S Range 18E, Township 39S Range 14E, Township 39S Range 15E, Township 39S Range 16E, Township 39S Range 17E, Township 39S Range 18E, Township 40S Range 14E, Township 40S Range 15E, Township 40S Range 16E, Township 40S Range 17E, and Township 40S Range 18E;

(ee) "Cedar Mesa East Region Grazing Zone," consisting of certain BLM and National Park Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "Cedar Mesa East Region Grazing Zone": Township 36S Range 20E, Township 37S Range 18E, Township 37S Range 19E, Township 37S Range 20E, Township 37S Range 21E, Township 38S Range 18E, Township 38S Range 19E, Township 38S Range 20E, Township 38S Range 21E, Township 39S Range 18E, Township 39S Range 19E, Township 39S Range 20E, Township 39S Range 21E, Township 40S Range 18E, Township 40S Range 19E, Township 40S Range 20E, Township 40S Range 21E, Township 41S Range 18E, Township 41S Range 19E, Township 41S Range 20E, and Township 41S Range 21E;

(ff) "Mancos Mesa Region Grazing Zone," consisting of certain BLM and National Park Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "Mancos Mesa Region Grazing Zone": Township 35S Range 13E, Township 36S Range 12E, Township 36S Range 13E, Township 36S Range 14E, Township 37S Range 12E, Township 37S Range 13E, Township 37S Range 14E, Township 37S Range 15E, Township 38S Range 11E, Township 38S Range 12E, Township 38S Range 13E, Township 38S Range 14E, Township 38S Range 15E, Township 38S Range 18E, Township 39S Range 13E, Township 39S Range 14E, and Township 39S Range 15E;

(gg) "Red Canyon Region Grazing Zone," consisting of certain BLM and National Park Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "Red Canyon Region Grazing Zone": Township 33S Range 14E, Township 34S Range 13E, Township 34S Range 14E, Township 34S Range 15E, Township 35S Range 13E, Township 35S Range 14E, Township 35S Range 15E, Township 36S Range 14E, Township 36S Range 15E, Township 36S Range 16E, Township 36S Range 17E, Township 37S Range 14E, Township 37S Range 15E, Township 37S Range 16E, Township 37S Range 17E, Township 38S Range 15E, and Township 38S Range 16E;

(hh) "White Canyon Region Grazing Zone," consisting of certain BLM and National Park Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "White Canyon Region Grazing Zone": Township 33S Range 14E, Township 33S Range 15E, Township

33S Range 16E, Township 34S Range 14E, Township 34S Range 15E, Township 34S Range 16E, Township 34S Range 17E, Township 35S Range 15E, Township 35S Range 16E, Township 35S Range 17E, Township 35S Range 18E, Township 36S Range 15E, Township 36S Range 16E, Township 36S Range 17E, Township 36S Range 18E, Township 37S Range 17E, and Township 37S Range 18E;

(ii) "Dark Canyon/Hammond Canyon Region Grazing Zone," consisting of certain Forest Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "Dark Canyon/Hammond Canyon Region Grazing Zone": Township 34S Range 17E, Township 34S Range 18E, Township 34S Range 19E, Township 34S Range 20E, Township 35S Range 17E, Township 35S Range 18E, Township 35S Range 19E, Township 35S Range 20E, Township 36S Range 18E, Township 36S Range 19E, Township 36S Range 20E, and Township 37S Range 19E;

(jj) "Chippean/Indian Creek Region Grazing Zone," consisting of certain Forest Service lands in the following townships of San Juan County, as more fully illustrated in the map prepared by the San Juan County GIS department in February 2014, entitled "Chippean/Indian Creek Region Grazing Zone": Township 32S Range 21E, Township 32S Range 22E, Township 33S Range 21E, Township 33S Range 22E, Township 34S Range 20E, Township 34S Range 21E, Township 34S Range 22E, Township 35S Range 20E, Township 35S Range 21E, and Township 35S Range 22E;

(kk) "Henry Mountain Region Grazing Zone," the land area of which consists of certain BLM lands situated in the following townships in Garfield County, as more fully illustrated in the map prepared by the Garfield County GIS department in February 2014, entitled "Henry Mountain Region Grazing Zone": Township 31S Range 7E, Township 31S Range 8E, Township 32S Range 8E, Township 33S Range 8E, Township 34S Range 8E, Township 31S Range 9E, Township 32S Range 9E, Township 33S Range 9E, Township 34S Range 9E, Township 35S Range 9E, Township 31S Range 10E, Township 32S Range 10E, Township 33S Range 10E, Township 34S Range 10E, Township 35S Range 10E, Township 31S Range 11E, Township 32S Range 11E, Township 33S Range 11E, Township 34S Range 11E, Township 32S Range 12E, Township 33S Range 12E, and Township 34S Range 12E;

(ll) "Glen Canyon Region Grazing Zone," the land area of which consists of certain BLM and Natural Park Service lands situated in the following townships in Garfield County, as more fully illustrated in the map prepared by the Garfield County GIS department in February 2014, entitled "Glen Canyon Region Grazing Zone": Township 36S Range 9E, Township 36S Range 10E, Township 37S Range 10E, Township 35S Range 11E, Township 36S Range 11E, Township 37S Range 11E, Township 31S Range 12E, Township 32S Range 12E, Township 33S Range 12E, Township 34S Range 12E, Township 35S Range 12E, Township 35 1/2S Range 12E, Township 36S Range 12E, Township 37S Range 12E, Township 31S Range 13E, Township 32S Range 13E, Township 33S Range 13E, Township 34S Range 13E, Township 35S Range 13E, Township 35 1/2S Range 13E, Township 36S Range 13E, Township 31S Range 14E, Township 32S Range 14E, Township 32 1/2S Range 14E, Township 33S Range 14E, Township 31S Range 15E, Township 32S Range 15E, Township 32 1/2S Range 15E, Township 33S Range 15E, Township 30 1/2S Range 16E, Township 31S Range 16E, Township 32S Range

16E, Township 30 1/2S Range 17E, Township 31S Range 17E, Township 32S Range 17E, Township 30 1/2S Range 18E, and Township 31S Range 18E;

(mm) "Glendale Bench Region Grazing Zone," the land area of which consists of certain BLM and Forest Service lands situated in the following townships in Kane County, as more fully illustrated in the map prepared by the Kane County GIS department in February 2014, entitled "Glendale Bench Region Grazing Zone": Township 39S Range 6W, Township 39S Range 5W, Township 39S Range 4.5W, Township 40S Range 7W, Township 40S Range 6W, Township 41S Range 7W, and Township 41S Range 6W; and

(nn) "John R. Region Grazing Zone," the land area of which consists of certain BLM and Forest Service lands situated in the following townships in Kane County, as more fully illustrated in the map prepared by the Kane County GIS department in February 2014, entitled "John R. Region Grazing Zone": Township 41S Range 7W, Township 41S Range 6W, Township 42S Range 7W, Township 42S Range 6W, Township 43S Range 6W, and Township 44S Range 6W.

(3) Printed copies of the maps referenced in Subsection (2) shall be available for inspection by the public at the offices of the Utah Association of Counties.

(4) The state finds with respect to the grazing zones described in Subsection (2) that:

(a) agricultural livestock industry on the lands comprising these zones has provided a significant contribution to the history, customs, culture, economy, welfare, and other values of each area for more than 100 years;

(b) the potential for abundant natural and vegetative resources exists within these zones if managed properly, that will support and expand continued, responsible agricultural livestock activities and wildlife habitat;

(c) agricultural livestock activities in these zones and the associated historic resources, human history, shaping of human endeavors, variety of cultural resources, landmarks, structures, and other objects of historic or scientific interest are worthy of recognition, preservation, and protection;

(d) (i) the highest management priority for lands within these zones is the preservation, restoration, and enhancement of watershed and rangeland health to sustain and expand forage production for both livestock grazing and wildlife habitat, and the restoration and development of historic, existing, and future livestock grazing and wildlife habitat resources in order to provide protection for the resources, objects, customs, culture, and values identified above; and

(ii) notwithstanding Subsection (4)(d)(i), if part or all of any zone lies within a sage grouse management area, then the management priorities for such part shall be consistent with the management priorities set forth in Subsection (4)(d)(i) to the maximum extent consistent with the management priorities of the sage grouse management area;

(e) subject to Subsection (4)(d)(ii), responsible development of any deposits of energy and mineral resources, including oil, natural gas, oil shale, oil sands, coal, phosphate, gold, uranium, and copper, as well as areas with wind and solar energy potential, that may exist in these zones is compatible with the management priorities of Subsection (4)(d)(i) in these zones; and

(f) subject to Subsection (4)(d)(ii), responsible development of any recreation resources, including roads, campgrounds, water resources, trails, OHV use, sightseeing, canyoneering,

hunting, fishing, trapping, and hiking resources that may exist in these grazing zones is compatible with the management priorities of Subsection (4)(d)(i) in these grazing zones.

(5) The state finds with respect to the zones described in Subsection (2) that the historic levels of livestock grazing activity and other values identified in Subsection (4) in each zone have greatly diminished, or are under other serious threat, due to:

(a) unreasonable, arbitrary, and unlawfully restrictive federal management policies, including:

(i) de facto managing for wilderness in nonwilderness areas and non-WSAs;

(ii) ignoring the chiefly valuable for grazing designation of the Secretary of the Interior applicable to each of these zones; and

(iii) the arbitrary administrative reductions in animal unit months of permitted forage;

(b) inflexible federal grazing practices that disallow grazing at different times each year proven to be most effective for maintaining and enhancing rangeland conditions;

(c) mismanagement of wild horses and burros resulting in competition for forage by excess and mismanaged populations of wild horses and burros in Beaver and Emery counties;

(d) improper management of vegetation resulting in the overgrowth of pinion, invasive species, and juniper, and other woody vegetation that:

(i) compromise watershed and rangeland health;

(ii) crowd out grazing forage;

(iii) degrade habitat and limit wildlife populations;

(iv) reduce water yield; and

(v) heighten the risk of catastrophic wildfire; and

(e) other practices that degrade overall rangeland health.

(6) To protect and preserve against the threats described in Subsection (5), the state supports the following with respect to the zones described in Subsection (2):

(a) efficient and sustained policies, programs, and practices directed at preserving, restoring, and enhancing watershed and rangeland health to maximize:

(i) all permitted forage production for livestock grazing and other compatible uses, including flexible grazing on and off dates adaptive to yearly climate and range conditions; and

(ii) forage for fish and wildlife;

(b) a cooperative management approach by federal agencies, the state, and local government agencies to achieve broadly supported management plans for the full development of:

(i) forage resources for grazing livestock and wildlife; and

(ii) other uses compatible with livestock grazing and wildlife utilization;

(c) effective and responsible management of wild horses and burros to eliminate excess populations; and

(d) effective and responsible management of wildlife habitat.

(7) The state requests that the federal agencies that administer lands within each grazing zone:

(a) fully cooperate and coordinate with the state and the respective counties within which each grazing zone is situated to develop, amend, and implement land and resource management plans, and implement management decisions that are consistent with the purposes, goals, and policies described in this section to the maximum extent allowed under federal law;

(b) expedite the processing, granting, and streamlining of grazing permits, range improvements, and applications to enhance and otherwise develop all existing and permitted grazing resources located within each grazing zone, including renewable vegetative resources;

(c) allow continued maintenance and increased development of roads, power lines, pipeline infrastructure, and other utilities necessary to achieve the goals, purposes, and policies described in this section and consistent with multiple use and sustained yield principles;

(d) refrain from any planning decisions and management actions that will undermine, restrict, or diminish the goals, purposes, and policies for each grazing zone as stated in this section;

(e) subject to Subsection (4)(d)(ii), refrain from implementing a policy that is contrary to the goals and purposes described within this section; and

(f) refrain from implementing utilization standards less than 50%, unless:

(i) implementing a standard of less than 50% utilization on a temporary basis is necessary to resolve site-specific concerns; and

(ii) the federal agency consults, coordinates, and cooperates fully with local governments.

(8) (a) The state recognizes the importance of all grazing districts on Utah BLM and Forest Service lands but establishes the grazing zones described in Subsection (2) to provide special protection and preservation against the identified threats found in Subsection (5) to exist in these zones.

(b) It is the intent of the state to designate additional grazing agricultural commodity zones in future years, if circumstances warrant special protection and preservation for new zones.

(9) The state calls upon applicable federal, state, and local agencies to coordinate with each other and establish applicable intergovernmental standing commissions, with membership consisting of representatives from the United States government, the state, and local governments to coordinate and achieve consistency in planning decisions and management actions in zones described in Subsection (2) in order to achieve the goals, purposes, and policies described in this section.

(10) Notwithstanding the provisions of this section, and subject to Subsection (4)(d)(ii), the state's mineral, oil, gas, and energy policies and plans on land within the zones described in Subsection (2) shall be governed by Sections 63J-4-401 and 63J-8-104.

Enacted by Chapter 321, 2014 General Session

63J-8-105.9. Utah Timber Agricultural Commodity Zones established -- Findings -- Management and land use priorities.

(1) There are established and designated Utah Timber Agricultural Commodity Zones for the purpose of:

(a) preserving and protecting the agricultural timber, logging, and forest products industry within these zones from ongoing threats;

(b) preserving and protecting the significant history, culture, customs, and economic value of the agricultural timber, logging, and forest products industry within these zones from ongoing threats; and

(c) maximizing efficient and responsible restoration, reclamation, preservation, enhancement, and development of timber, logging, and forest products and affected natural, historical, and cultural activities within these zones, in order to protect and preserve these zones from ongoing threats.

(2) The titles, land area, and boundaries of these zones are described as follows:

(a) "Tushar Mountain Region Timber Zone," the land area of which consists of certain Forest Service lands in the following townships in Beaver County, as more fully illustrated in the map jointly prepared by the Beaver and Piute counties GIS departments in February 2014, entitled "Tushar Mountain Region Timber Zone":

(i) in Beaver County, Township 28S Range 4W, Township 29S Range 4W, Township 27S Range 5W, Township 28S Range 5W, Township 29S Range 5W, Township 30S Range 5W, Township 26S Range 6W, Township 27S Range 6W, Township 28S Range 6W, Township 29S Range 6W, Township 30S Range 6W; and

(ii) in Piute County, Township 26S Range 6W, Township 27S Range 6W, Township 26S Range 5W, Township 27S Range 5W, Township 28S Range 5W, Township 29S Range 5W, Township 30S Range 5W, Township 26S Range 4.5W, Township 26S Range 4W, Township 28S Range 4W, Township 29S Range 4W, Township 30S Range 4W;

(b) "Panguitch Lake Region Timber Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Iron, Kane, and Garfield counties, as more fully illustrated in the map jointly prepared by the Iron, Kane, and Garfield counties GIS departments in February 2014, entitled "Panguitch Lake Region Timber Zone":

(i) in Iron County, Township 34S Range 7W, Township 35S Range 8W, Township 36S Range 8W, Township 36S Range 9W (excluding Cedar Breaks National Monument and Ashdown Wilderness Area), Township 37S Range 8W, and Township 37S Range 9W;

(ii) in Kane County, Township 38S Range 9W, Township 38S Range 8W, Township 38S Range 7W, Township 38S Range 6W, Township 39S Range 8W, Township 39S Range 7W, Township 39S Range 6W; and

(iii) in Garfield County, Township 35S Range 7W, Township 35S Range 6W, Township 36S Range 7W, Township 36S Range 6W, Township 37S Range 7W, and Township 37S Range 6W;

(c) "Monroe Mountain Region Timber Zone," consisting of certain Forest Service lands in the following townships in Piute County, as more fully illustrated in the map prepared by the Piute County GIS department in February 2014, entitled "Monroe Mountain Region Timber Zone": Township 26S Range 3W, Township 27S Range 2.5W, Township 28S Range 2.5W, Township 29S Range 2.5W, Township 26S Range 2W, Township 27S Range 2W, Township 28S Range 2W, Township 29S Range 2W, Township 26S Range 1W, and Township 7S Range 1W;

(d) "Boulder Mountain Region Timber Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Wayne and Garfield counties, as more fully illustrated in the map jointly prepared by the Wayne and Garfield counties GIS departments in February 2014, entitled "Boulder Mountain Region Timber Zone":

(i) in Wayne County, Township 30S Range 3E, Township 30S Range 4E, and Township 30S Range 5E; and

(ii) in Garfield County, Township 31S Range 1E, Township 31S Range 2E, Township 31S Range 3E, Township 32S Range 2E, Township 32S Range 3E, Township 32S Range 4E,

Township 33S Range 3E, Township 33S Range 4E, Township 30 1/2S Range 5E, Township 31S Range 5E, Township 31S Range 6E, Township 32S Range 5E, and Township 32S Range 6E;

(e) "Thousand Lake Region Timber Zone," consisting of certain Forest Service lands in the following townships in Wayne County, as more fully illustrated in the map jointly prepared by the Wayne County GIS department in February 2014, entitled "Thousand Lake Region Timber Zone": Township 26S Range 4E, Township 27S Range 4E, and Township 28S Range 4E;

(f) "Millers Flat Region Timber Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Sanpete County, as more fully illustrated in the map jointly prepared by the Sanpete County GIS department in February 2014, entitled "Millers Flat Region Timber Zone": Township 16S Range 5E, Township 17S Range 5E, Township 17S Range 4E, and Township 17S Range 6E;

(g) "East Fork Timber Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Garfield and Kane counties, as more fully illustrated in the map jointly prepared by the Garfield and Kane counties GIS departments in February 2014, entitled "East Fork Region Timber Zone":

(i) in Garfield County, Township 36S Range 4 1/2W, Township 36S Range 4W, Township 37S Range 5W, Township 37S Range 4 1/2W, and Township 37S Range 4W; and

(ii) in Kane County, Township 38S Range 5W, Township 38S Range 4.5W, Township 39S Range 5W, and Township 39S Range 4.5W;

(h) "Upper Valley Timber Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Garfield County, as more fully illustrated in the map jointly prepared by the Garfield County GIS department in February 2014, entitled "Upper Valley Region Timber Zone": Township 34S Range 1W, Township 35S Range 1W, Township 35S Range 1E, Township 36S Range 1W, Township 36S Range 1E, and Township 37S Range 1E;

(i) "Iron Springs Timber Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Garfield County, as more fully illustrated in the map jointly prepared by the Garfield County GIS department in February 2014, entitled "Iron Springs Region Timber Zone": Township 32S Range 1E, Township 33S Range 1W, Township 33S Range 1E, and Township 34S Range 1W; and

(j) "Dutton Timber Zone," the land area of which consists of certain Forest Service lands situated in the following townships in Garfield County, as more fully illustrated in the map jointly prepared by the Garfield County GIS department in February 2014, entitled "Dutton Region Timber Zone": Township 32S Range 3W, Township 32S Range 2W, Township 33S Range 3W, and Township 33S Range 2W.

(3) Printed copies of the maps referenced in Subsection (2) shall be available for inspection by the public at the offices of the Utah Association of Counties.

(4) The state finds with respect to the zones described in Subsection (2) that:

(a) agricultural timber, logging, and forest product industries on the lands comprising these timber zones have provided a significant contribution to the history, customs, culture, economy, welfare, and other values of each area for many decades;

(b) abundant natural and vegetative resources exist within these zones to support and expand continued, responsible timber, logging, and other forest product activities;

(c) agricultural timber, logging, and forest product activities in these zones, and the associated historic resources, human history, shaping of human endeavors, variety of cultural resources, landmarks, structures, and other objects of historic or scientific interest are worthy of recognition, preservation, and protection;

(d) (i) the highest management priority for lands within these zones is maintenance and promotion of forest and vegetation ecosystem health achieved by responsible active management in development of historic, existing, and future timber, logging, and forest product resources in order to provide protection for the resources, objects, customs, culture, and values identified above; and

(ii) notwithstanding Subsection (4)(d)(i), if part or all of any zone lies within a sage grouse management area, then the management priorities for such part shall be consistent with the management priorities set forth in Subsection (4)(d)(i) to the maximum extent consistent with the management priorities of the sage grouse management area;

(e) subject to Subsection (4)(d)(ii), responsible development of any deposits of energy and mineral resources, including oil, natural gas, oil shale, oil sands, coal, phosphate, gold, uranium, and copper, as well as areas with wind and solar energy potential, that may exist in these zones is compatible with the management priorities of Subsection (4)(d)(i) in these zones; and

(f) subject to Subsection (4)(d)(ii), responsible development of any recreation resources, including wildlife, roads, campgrounds, water resources, trails, OHV use, sightseeing, canyoneering, hunting, fishing, trapping, and hiking resources that may exist in these timber zones is compatible with the management priorities of Subsection (4)(d)(i) in these timber zones.

(5) The state finds that the historic levels of timber, logging, and forest products activities in the zones described in Subsection (2) have greatly diminished, or are under serious threat, due to:

(a) unreasonable, arbitrary, and unlawfully restrictive federal management policies, including:

(i) de facto managing for wilderness in nonwilderness areas;

(ii) ignoring the multiple use sustained yield mission of the Forest Service;

(iii) ignoring the fact that the Forest Service's parent agency is the United States Department of Agriculture whose mission includes providing timber as an important agriculture resource; and

(iv) the arbitrary administrative reductions in timber, logging, and forest products activities;

(b) improper management of forest vegetation resulting in the overcrowding of old growth alpine species and the crowding out of aspen diversity, all of which results in:

(i) devastation of entire mountainsides due to insect infestation and disease;

(ii) reduced water yield;

(iii) increased catastrophic wildfire;

(iv) increased soil erosion;

(v) degradation of wildlife habitat; and

(vi) suppression and threatened extinction of important rural economic activities; and

(c) other practices that degrade overall forest health.

(6) To protect and preserve against the threats described in Subsection (5), the state supports the following with respect to the zones described in Subsection (2):

(a) efficient and responsible development, within each timber zone, of:

(i) robust timber thinning and harvesting programs and activities; and

(ii) other uses compatible with increased timber, logging, and forest product activities, including a return to historic levels of timber, logging, and forest product activity in each of these zones;

(b) a cooperative management approach by federal agencies, the state, and local governments to achieve broadly supported management plans for the full development, within each timber zone, of:

(i) forest product resources; and

(ii) other uses compatible with timber activities; and

(c) effective and responsible management of wildlife habitat.

(7) The state requests that the federal agencies that administer lands within each timber zone:

(a) fully cooperate and coordinate with the state and the respective counties within which each timber zone is situated to develop, amend, and implement land and resource management plans and implement management decisions that are consistent with the purposes, goals, and policies described in this section to the maximum extent allowed under federal law;

(b) expedite the processing, granting, and streamlining of logging and forest product harvesting permits, range improvements, and applications to enhance and otherwise develop existing and permitted timber resources located within each timber zone, including renewable vegetative resources;

(c) expedite stewardship programs to allow private enterprise to carry out the timber, logging, and forest activities described in this section;

(d) allow continued maintenance and increased development of roads, power lines, pipeline infrastructure, and other utilities necessary to achieve the goals, purposes, and policies described in this section and consistent with multiple use and sustained yield principles;

(e) refrain from any planning decisions and management actions that will undermine, restrict, or diminish the goals, purposes, and policies for each timber zone as stated in this section; and

(f) subject to Subsection (4)(d)(ii), refrain from implementing a policy that is contrary to the goals and purposes described within this section.

(8) (a) The state recognizes the importance of all areas on BLM and Forest Service lands high value lumber and forest product resources but establishes the special Timber Agricultural Commodity Zones to provide special protection and preservation against the identified threats found in Subsection (5) to exist in these zones.

(b) It is the intent of the Legislature to designate additional Timber Agricultural Commodity Zones in future years, if circumstances warrant special protection and preservation for new zones.

(9) The state calls upon applicable federal, state, and local agencies to coordinate with each other and establish applicable intergovernmental standing commissions, with membership consisting of representatives from the United States government, the state, and local

governments to coordinate and achieve consistency in planning decisions and management actions in the zones described in Subsection (2).

(10) Notwithstanding the provisions of this section, and subject to Subsection (4)(d)(ii), the state's mineral, oil, gas, and energy policies, as well as its grazing policies, on land within zones described in Subsection (2), shall continue to be governed by Sections 63J-4-401 and 63J-8-104.

Enacted by Chapter 321, 2014 General Session

63J-8-106. County supported federal land use designation proposed in proposed congressional land use legislation -- Process for legislative review of proposed federal legislation land use within a county.

(1) (a) Notwithstanding any other provision of this chapter, the Legislature may, in accordance with this section, recommend to the Utah congressional delegation proposed congressional land use legislation that is supported by a county.

(b) A county that fails to comply with the requirements of this section may not communicate or otherwise represent in any way that a federal land use designation contained in proposed congressional land use legislation has the support or approval of the Legislature.

(2) If a county supports a federal land use designation contained in proposed congressional land use legislation, the county shall:

(a) prepare a report on the proposed congressional land use legislation in accordance with Subsection (3);

(b) draft a concurrent resolution for a legislative committee's consideration, in accordance with Subsection (7)(a), in support of the proposed congressional land use legislation; and

(c) subject to Subsection (4)(a), deliver the report and draft concurrent resolution to the office.

(3) The report required in Subsection (2)(a) shall include:

(a) a copy of the proposed congressional land use legislation;

(b) a detailed description of the land or watercourse proposed for a federal land use designation, including:

(i) the total acres of federal land proposed for a federal land use designation;

(ii) (A) a map showing the location of the land or watercourse; and

(B) the proposed type of federal land use designation for each location;

(iii) a proposed land conveyance or land proposed for auction by the BLM, if any; and

(iv) (A) school and institutional trust land, as defined in Section 53C-1-103, proposed for a land exchange, if any; and

(B) whether the county has coordinated with SITLA on the proposed land exchange;

(c) an explanation of whether a federal land use designation will assist in resolving long-standing public lands issues, such as wilderness disputes, economic development, recreational use, and access to public lands;

(d) a narrative description of the economic, recreational, and cultural impacts, taken as a whole, on a county and the state that would occur if Congress adopted the proposed congressional land use legislation, including an impact on state revenues;

(e) an account of actions, if any, proposed in a federal land use designation to minimize impacts on:

(i) resource extraction activities occurring on the land or in the watercourse proposed for a federal land use designation, including mining and energy development; and

(ii) motorized recreational use and public access;

(f) a summary of potential benefits gained by the county and state if Congress adopts the proposed congressional land use legislation;

(g) a description of the stakeholders and their positions on a federal land use designation;

(h) whether land identified for a federal land use designation is BLM recommended wilderness;

(i) an explanation of what the proposed congressional land use legislation proposes for federal land located in the county other than land identified for the federal land use designation;

(j) (i) a description of the impact that, if adopted by Congress, the proposed congressional land use legislation would have on access to roads currently identified as part of an adopted county transportation plan as described in Section 63J-4-401; and

(ii) if a federal land use designation proposes to close a road described in Subsection (3)(j)(i), an explanation for the road closure and a copy of the minutes of any county public hearing in which the proposed road closures were discussed and public comment was taken;

(k) (i) a description of a proposed resolution for an R.S. 2477 right-of-way, if any, located within the area identified in a federal land use designation; and

(ii) whether a proposed resolution described in Subsection (3)(k)(i) would include a quiet title action concerning an R.S. 2477 right-of-way;

(l) an explanation of whether a federal land use designation proposes a hard release of all public lands and watercourses not included in the federal land use designation, placing the land and watercourses in multiple use management;

(m) an explanation of whether a federal land use designation proposes a prohibition on further federal action under the Antiquities Act of 1906, 16 U.S.C. Sec. 431 et seq.;

(n) a narrative description of a federal land use designation's interaction with, if any, a regional haze rule adopted by the United States Environmental Protection Agency;

(o) an explanation of whether a federal land use designation would authorize best management practices as part of an active effort to control on the land or watercourse proposed for a federal land use designation:

(i) wildfire;

(ii) invasive species, including insects; and

(iii) disease;

(p) if applicable, a statement as to whether a federal land use designation would allow for the continuation of existing grazing permits;

(q) a statement as to the presence or need of passive water management facilities or activities for livestock or wildlife, such as guzzlers or fencing, for the management of wildlife or livestock;

(r) if a federal land use designation identifies land that has oil, gas, or mineral deposits, an explanation as to why the federal land use designation includes the land;

(s) (i) a statement as to whether a federal land use designation:

(A) affects land or a watercourse located exclusively within the county; or

(B) affects, whether by an actual federal land use designation or by implication if a federal land use designation is adopted, land or a watercourse located in another county; and

(ii) if the land use proposal would affect land or a watercourse located in another county, whether that county supports the proposed congressional land use legislation;

(t) an explanation of whether a proposed land use designation designates land as wilderness in the National Wilderness Preservation System or designates land as a national conservation area that is not part of:

(i) BLM recommended wilderness; or

(ii) Forest Service land recommended for wilderness designation in RARE II; and

(u) a statement explaining whether and to what extent members of Utah's congressional delegation and their staff were consulted in preparing the proposed congressional land use legislation and the federal land use designation contained therein.

(4) (a) No later than 60 days before delivering a report and draft concurrent resolution in accordance with Subsection (2), a county shall contact and inform the office of the county's intention to prepare and deliver the report and draft concurrent resolution.

(b) The office may give general guidance to a county described in Subsection (4)(a), as requested, as to compliance with this section.

(5) The office shall prepare an evaluation of the county's report, including whether the county has addressed each matter described in Subsection (3).

(6) The office shall deliver the evaluation described in Subsection (5), including a copy of the county's report, the proposed congressional land use legislation, and the draft concurrent resolution, no later than 30 days after receiving the county's report:

(a) if the Legislature is not in session, and subject to Subsection (6)(b), to the chair of the Natural Resources, Agriculture, and Environment Interim Committee; or

(b) if the Legislature is in session or there are no scheduled meetings of the Natural Resources, Agriculture, and Environment Interim Committee before the beginning of the next legislative session, to the chair of either the House Natural Resources, Agriculture, and Environment Committee or the Senate Natural Resources, Agriculture, and Environment Committee.

(7) (a) At a committee's next scheduled meeting after receiving a report, the draft concurrent resolution, and a copy of the proposed congressional land use legislation, the committee shall:

(i) review:

(A) the county's report;

(B) the draft concurrent resolution, if the concurrent resolution has a legislative sponsor; and

(C) the office's evaluation;

(ii) if the draft concurrent resolution is presented to the committee, consider whether to approve or reject the draft concurrent resolution;

(iii) if the draft concurrent resolution is rejected, provide direction to the county as to the reasons the resolution was rejected and the actions that the county might take to secure committee approval of the resolution; and

(iv) take any additional action the committee finds necessary.

(b) A legislative committee may not accept for review a county-supported federal land use designation contained in proposed congressional land use legislation that does not meet the requirements of this section.

(8) (a) If the committee rejects the draft concurrent resolution, a county may resubmit a revised report and draft concurrent resolution to the office in accordance with the terms of this section.

(b) Upon receipt of a revised report and draft concurrent resolution, the office shall comply with the procedures set forth in this section.

(c) Upon receipt of a revised report, evaluation, and draft concurrent resolution by the office, a committee described in Subsection (6) shall comply with the procedures set forth in this section.

(9) The governor may call a special session to consider the concurrent resolution presented to and approved by a committee described in Subsection (7)(a).

(10) If a concurrent resolution described in this section is adopted by the Legislature and signed by the governor, the Office of the Governor shall forward a copy of the concurrent resolution, the county's report, and the proposed congressional land use legislation to Utah's congressional delegation.

Repealed and Re-enacted by Chapter 165, 2012 General Session

63J-8-107. Authority of the governor.

Nothing in this chapter may be construed to alter, affect, or diminish the authority of the governor.

Enacted by Chapter 165, 2012 General Session

Appendix B

Planning Duties of the Planning Coordinator and Office

[*See* Utah Code, Title 63J, Chapter 4, as amended]

63J-4-401. Planning duties of the planning coordinator and office.

(1) The state planning coordinator shall:

(a) act as the governor's adviser on state, regional, metropolitan, and local governmental planning matters relating to public improvements and land use;

(b) counsel with the authorized representatives of the Department of Transportation, the State Building Board, the Department of Health, the Department of Workforce Services, the Labor Commission, the Department of Natural Resources, the School and Institutional Trust Lands Administration, and other proper persons concerning all state planning matters;

(c) when designated to do so by the governor, receive funds made available to Utah by the federal government;

(d) receive and review plans of the various state agencies and political subdivisions relating to public improvements and programs;

(e) when conflicts occur between the plans and proposals of state agencies, prepare specific recommendations for the resolution of the conflicts and submit the recommendations to the governor for a decision resolving the conflict;

(f) when conflicts occur between the plans and proposals of a state agency and a political subdivision or between two or more political subdivisions, advise these entities of the conflict and make specific recommendations for the resolution of the conflict;

(g) act as the governor's planning agent in planning public improvements and land use and, in this capacity, undertake special studies and investigations;

(h) provide information and cooperate with the Legislature or any of its committees in conducting planning studies;

(i) cooperate and exchange information with federal agencies and local, metropolitan, or regional agencies as necessary to assist with federal, state, regional, metropolitan, and local programs;

(j) make recommendations to the governor that the planning coordinator considers advisable for the proper development and coordination of plans for state government and political subdivisions; and

(k) oversee and supervise the activities and duties of the public lands policy coordinator.

(2) The state planning coordinator may:

(a) perform regional and state planning and assist state government planning agencies in performing state planning;

(b) provide planning assistance to Indian tribes regarding planning for Indian reservations; and

(c) assist city, county, metropolitan, and regional planning agencies in performing local, metropolitan, and regional planning, provided that the state planning coordinator and the state planning coordinator's agents and designees recognize and promote the plans, policies, programs, processes, and desired outcomes of each planning agency whenever possible.

(3) When preparing or assisting in the preparation of plans, policies, programs, or processes related to the management or use of federal lands or natural resources on federal lands in Utah, the state planning coordinator shall:

(a) incorporate the plans, policies, programs, processes, and desired outcomes of the counties where the federal lands or natural resources are located, to the maximum extent consistent with state and federal law, provided that this requirement shall not be interpreted to infringe upon the authority of the governor;

(b) identify inconsistencies or conflicts between the plans, policies, programs, processes, and desired outcomes prepared under Subsection (3)(a) and the plans, programs, processes, and desired outcomes of local government as early in the preparation process as possible, and seek resolution of the inconsistencies through meetings or other conflict resolution mechanisms involving the necessary and immediate parties to the inconsistency or conflict;

(c) present to the governor the nature and scope of any inconsistency or other conflict that is not resolved under the procedures in Subsection (3)(b) for the governor's decision about the position of the state concerning the inconsistency or conflict;

(d) develop, research, and use factual information, legal analysis, and statements of desired future condition for the state, or subregion of the state, as necessary to support the plans, policies, programs, processes, and desired outcomes of the state and the counties where the federal lands or natural resources are located;

(e) establish and coordinate agreements between the state and federal land management agencies, federal natural resource management agencies, and federal natural resource regulatory agencies to facilitate state and local participation in the development, revision, and implementation of land use plans, guidelines, regulations, other instructional memoranda, or similar documents proposed or promulgated for lands and natural resources administered by federal agencies; and

(f) work in conjunction with political subdivisions to establish agreements with federal land management agencies, federal natural resource management agencies, and federal natural resource regulatory agencies to provide a process for state and local participation in the preparation of, or coordinated state and local response to, environmental impact analysis documents and similar documents prepared pursuant to law by state or federal agencies.

(4) The state planning coordinator shall comply with the requirements of Subsection 63C-4a-203(8) before submitting any comments on a draft environmental impact statement or on an environmental assessment for a proposed land management plan, if the governor would be subject to Subsection 63C-4a-203(8) if the governor were submitting the material.

(5) The state planning coordinator shall cooperate with and work in conjunction with appropriate state agencies and political subdivisions to develop policies, plans, programs, processes, and desired outcomes authorized by this section by coordinating the development of positions:

(a) through the Resource Development Coordinating Committee;

(b) in conjunction with local government officials concerning general local government plans;

(c) by soliciting public comment through the Resource Development Coordinating Committee; and

(d) by working with the Public Lands Policy Coordinating Office.

(6) The state planning coordinator shall recognize and promote the following principles when preparing any policies, plans, programs, processes, or desired outcomes relating to federal lands and natural resources on federal lands pursuant to this section:

(a) (i) the citizens of the state are best served by applying multiple-use and sustained-yield principles in public land use planning and management; and

(ii) multiple-use and sustained-yield management means that federal agencies should develop and implement management plans and make other resource-use decisions that:

(A) achieve and maintain in perpetuity a high-level annual or regular periodic output of mineral and various renewable resources from public lands;

(B) support valid existing transportation, mineral, and grazing privileges at the highest reasonably sustainable levels;

(C) support the specific plans, programs, processes, and policies of state agencies and local governments;

(D) are designed to produce and provide the desired vegetation for the watersheds, timber, food, fiber, livestock forage, and wildlife forage, and minerals that are necessary to meet present needs and future economic growth and community expansion without permanent impairment of the productivity of the land;

(E) meet the recreational needs and the personal and business-related transportation needs of the citizens of the state by providing access throughout the state;

(F) meet the recreational needs of the citizens of the state;

(G) meet the needs of wildlife;

(H) provide for the preservation of cultural resources, both historical and archaeological;

(I) meet the needs of economic development;

(J) meet the needs of community development; and

(K) provide for the protection of water rights;

(b) managing public lands for "wilderness characteristics" circumvents the statutory wilderness process and is inconsistent with the multiple-use and sustained-yield management standard that applies to all Bureau of Land Management and U.S. Forest Service lands that are not wilderness areas or wilderness study areas;

(c) all waters of the state are:

(i) owned exclusively by the state in trust for its citizens;

(ii) are subject to appropriation for beneficial use; and

(iii) are essential to the future prosperity of the state and the quality of life within the state;

(d) the state has the right to develop and use its entitlement to interstate rivers;

(e) all water rights desired by the federal government must be obtained through the state water appropriation system;

(f) land management and resource-use decisions which affect federal lands should give priority to and support the purposes of the compact between the state and the United States related to school and institutional trust lands;

(g) development of the solid, fluid, and gaseous mineral resources of the state is an important part of the economy of the state, and of local regions within the state;

(h) the state should foster and support industries that take advantage of the state's outstanding opportunities for outdoor recreation;

(i) wildlife constitutes an important resource and provides recreational and economic opportunities for the state's citizens;

(j) proper stewardship of the land and natural resources is necessary to ensure the health of the watersheds, timber, forage, and wildlife resources to provide for a continuous supply of resources for the people of the state and the people of the local communities who depend on these resources for a sustainable economy;

(k) forests, rangelands, timber, and other vegetative resources:

(i) provide forage for livestock;

(ii) provide forage and habitat for wildlife;

(iii) provide resources for the state's timber and logging industries;

(iv) contribute to the state's economic stability and growth; and

(v) are important for a wide variety of recreational pursuits;

(l) management programs and initiatives that improve watersheds, forests, and increase forage for the mutual benefit of wildlife species and livestock, logging, and other agricultural industries by utilizing proven techniques and tools are vital to the state's economy and the quality of life in Utah; and

(m) (i) land management plans, programs, and initiatives should provide that the amount of domestic livestock forage, expressed in animal unit months, for permitted, active use as well as the wildlife forage included in that amount, be no less than the maximum number of animal unit months sustainable by range conditions in grazing allotments and districts, based on an on-the-ground and scientific analysis;

(ii) the state opposes the relinquishment or retirement of grazing animal unit months in favor of conservation, wildlife, and other uses;

(iii) (A) the state favors the best management practices that are jointly sponsored by cattlemen's, sportsmen's, and wildlife management groups such as chaining, logging, seeding, burning, and other direct soil and vegetation prescriptions that are demonstrated to restore forest and rangeland health, increase forage, and improve watersheds in grazing districts and allotments for the mutual benefit of domestic livestock and wildlife;

(B) when practices described in Subsection (6)(m)(iii)(A) increase a grazing allotment's forage beyond the total permitted forage use that was allocated to that allotment in the last federal land use plan or allotment management plan still in existence as of January 1, 2005, a reasonable and fair portion of the increase in forage beyond the previously allocated total permitted use should be allocated to wildlife as recommended by a joint, evenly balanced committee of livestock and wildlife representatives that is appointed and constituted by the governor for that purpose;

(C) the state favors quickly and effectively adjusting wildlife population goals and population census numbers in response to variations in the amount of available forage caused by drought or other climatic adjustments, and state agencies responsible for managing wildlife population goals and population census numbers will give due regard to both the needs of the livestock industry and the need to prevent the decline of species to a point where listing under the terms of the Endangered Species Act when making such adjustments;

(iv) the state opposes the transfer of grazing animal unit months to wildlife for supposed reasons of rangeland health;

(v) reductions in domestic livestock animal unit months must be temporary and scientifically based upon rangeland conditions;

(vi) policies, plans, programs, initiatives, resource management plans, and forest plans may not allow the placement of grazing animal unit months in a suspended use category unless there is a rational and scientific determination that the condition of the rangeland allotment or district in question will not sustain the animal unit months sought to be placed in suspended use;

(vii) any grazing animal unit months that are placed in a suspended use category should be returned to active use when range conditions improve;

(viii) policies, plans, programs, and initiatives related to vegetation management should recognize and uphold the preference for domestic grazing over alternate forage uses in established grazing districts while upholding management practices that optimize and expand forage for grazing and wildlife in conjunction with state wildlife management plans and programs in order to provide maximum available forage for all uses; and

(ix) in established grazing districts, animal unit months that have been reduced due to rangeland health concerns should be restored to livestock when rangeland conditions improve, and should not be converted to wildlife use.

(7) The state planning coordinator shall recognize and promote the following findings in the preparation of any policies, plans, programs, processes, or desired outcomes relating to federal lands and natural resources on federal lands under this section:

(a) as a coholder of R.S. 2477 rights-of-way with the counties, the state supports its recognition by the federal government and the public use of R.S. 2477 rights-of-way and urges the federal government to fully recognize the rights-of-way and their use by the public as expeditiously as possible;

(b) it is the policy of the state to use reasonable administrative and legal measures to protect and preserve valid existing rights-of-way granted by Congress under R.S. 2477, and to support and work in conjunction with counties to redress cases where R.S. 2477 rights-of-way are not recognized or are impaired; and

(c) transportation and access routes to and across federal lands, including all rights-of-way vested under R.S. 2477, are vital to the state's economy and to the quality of life in the state, and must provide, at a minimum, a network of roads throughout the resource planning area that provides for:

(i) movement of people, goods, and services across public lands;

(ii) reasonable access to a broad range of resources and opportunities throughout the resource planning area, including:

(A) livestock operations and improvements;

(B) solid, fluid, and gaseous mineral operations;

(C) recreational opportunities and operations, including motorized and non-motorized recreation;

(D) search and rescue needs;

(E) public safety needs; and

(F) access for transportation of wood products to market;

(iii) access to federal lands for people with disabilities and the elderly; and

(iv) access to state lands and school and institutional trust lands to accomplish the purposes of those lands.

(8) The state planning coordinator shall recognize and promote the following findings in the preparation of any plans, policies, programs, processes, or desired outcomes relating to federal lands and natural resources on federal lands pursuant to this section:

(a) the state's support for the addition of a river segment to the National Wild and Scenic Rivers System, 16 U.S.C. Sec. 1271 et seq., will be withheld until:

(i) it is clearly demonstrated that water is present and flowing at all times;

(ii) it is clearly demonstrated that the required water-related value is considered outstandingly remarkable within a region of comparison consisting of one of the three physiographic provinces in the state, and that the rationale and justification for the conclusions are disclosed;

(iii) it is clearly demonstrated that the inclusion of each river segment is consistent with the plans and policies of the state and the county or counties where the river segment is located as those plans and policies are developed according to Subsection (3);

(iv) the effects of the addition upon the local and state economies, agricultural and industrial operations and interests, outdoor recreation, water rights, water quality, water resource planning, and access to and across river corridors in both upstream and downstream directions from the proposed river segment have been evaluated in detail by the relevant federal agency;

(v) it is clearly demonstrated that the provisions and terms of the process for review of potential additions have been applied in a consistent manner by all federal agencies;

(vi) the rationale and justification for the proposed addition, including a comparison with protections offered by other management tools, is clearly analyzed within the multiple-use mandate, and the results disclosed;

(vii) it is clearly demonstrated that the federal agency with management authority over the river segment, and which is proposing the segment for inclusion in the National Wild and Scenic River System will not use the actual or proposed designation as a basis to impose management standards outside of the federal land management plan;

(viii) it is clearly demonstrated that the terms and conditions of the federal land and resource management plan containing a recommendation for inclusion in the National Wild and Scenic River System:

(A) evaluates all eligible river segments in the resource planning area completely and fully for suitability for inclusion in the National Wild and Scenic River System;

(B) does not suspend or terminate any studies for inclusion in the National Wild and Scenic River System at the eligibility phase;

(C) fully disclaims any interest in water rights for the recommended segment as a result of the adoption of the plan; and

(D) fully disclaims the use of the recommendation for inclusion in the National Wild and Scenic River System as a reason or rationale for an evaluation of impacts by proposals for projects upstream, downstream, or within the recommended segment;

(ix) it is clearly demonstrated that the agency with management authority over the river segment commits not to use an actual or proposed designation as a basis to impose Visual Resource Management Class I or II management prescriptions that do not comply with the provisions of Subsection (8)(t); and

(x) it is clearly demonstrated that including the river segment and the terms and conditions for managing the river segment as part of the National Wild and Scenic River System will not prevent, reduce, impair, or otherwise interfere with:

(A) the state and its citizens' enjoyment of complete and exclusive water rights in and to the rivers of the state as determined by the laws of the state; or

(B) local, state, regional, or interstate water compacts to which the state or any county is a party;

(b) the conclusions of all studies related to potential additions to the National Wild and Scenic River System, 16 U.S.C. Sec. 1271 et seq., are submitted to the state for review and action by the Legislature and governor, and the results, in support of or in opposition to, are included in any planning documents or other proposals for addition and are forwarded to the United States Congress;

(c) the state's support for designation of an Area of Critical Environmental Concern (ACEC), as defined in 43 U.S.C. Sec. 1702, within federal land management plans will be withheld until:

(i) it is clearly demonstrated that the proposed area satisfies all the definitional requirements of the Federal Land Policy and Management Act of 1976, 43 U.S.C. Sec. 1702(a);

(ii) it is clearly demonstrated that the area proposed for designation as an ACEC is limited in geographic size and that the proposed management prescriptions are limited in scope to the minimum necessary to specifically protect and prevent irreparable damage to the relevant and important values identified, or limited in geographic size and management prescriptions to the minimum required to specifically protect human life or safety from natural hazards;

(iii) it is clearly demonstrated that the proposed area is limited only to areas that are already developed or used or to areas where no development is required;

(iv) it is clearly demonstrated that the proposed area contains relevant and important historic, cultural or scenic values, fish or wildlife resources, or natural processes which are unique or substantially significant on a regional basis, or contain natural hazards which significantly threaten human life or safety;

(v) the federal agency has analyzed regional values, resources, processes, or hazards for irreparable damage and its potential causes resulting from potential actions which are consistent with the multiple-use, sustained-yield principles, and the analysis describes the rationale for any special management attention required to protect, or prevent irreparable damage to the values, resources, processes, or hazards;

(vi) it is clearly demonstrated that the proposed designation is consistent with the plans and policies of the state and of the county where the proposed designation is located as those plans and policies are developed according to Subsection (3);

(vii) it is clearly demonstrated that the proposed ACEC designation will not be applied redundantly over existing protections provided by other state and federal laws for federal lands or resources on federal lands, and that the federal statutory requirement for special management attention for a proposed ACEC will discuss and justify any management requirements needed in addition to those specified by the other state and federal laws;

(viii) the difference between special management attention required for an ACEC and normal multiple-use management has been identified and justified, and that any determination of irreparable damage has been analyzed and justified for short and long-term horizons;

(ix) it is clearly demonstrated that the proposed designation:

(A) is not a substitute for a wilderness suitability recommendation;

(B) is not a substitute for managing areas inventoried for wilderness characteristics after 1993 under the BLM interim management plan for valid wilderness study areas; and

(C) it is not an excuse or justification to apply de facto wilderness management standards; and

(x) the conclusions of all studies are submitted to the state, as a cooperating agency, for review, and the results, in support of or in opposition to, are included in all planning documents;

(d) sufficient federal lands are made available for government-to-government exchanges of school and institutional trust lands and federal lands without regard for a resource-to-resource correspondence between the surface or mineral characteristics of the offered trust lands and the offered federal lands;

(e) federal agencies should support government-to-government exchanges of land with the state based on a fair process of valuation which meets the fiduciary obligations of both the state and federal governments toward trust lands management, and which assures that revenue authorized by federal statute to the state from mineral or timber production, present or future, is not diminished in any manner during valuation, negotiation, or implementation processes;

(f) agricultural and grazing lands should continue to produce the food and fiber needed by the citizens of the state and the nation, and the rural character and open landscape of rural Utah should be preserved through a healthy and active agricultural and grazing industry, consistent with private property rights and state fiduciary duties;

(g) the resources of the forests and rangelands of the state should be integrated as part of viable, robust, and sustainable state and local economies, and available forage should be evaluated for the full complement of herbivores the rangelands can support in a sustainable manner, and forests should contain a diversity of timber species, and disease or insect infestations in forests should be controlled using logging or other best management practices;

(h) the state opposes any additional evaluation of national forest service lands as "roadless" or "unroaded" beyond the forest service's second roadless area review evaluation and opposes efforts by agencies to specially manage those areas in a way that:

(i) closes or declassifies existing roads unless multiple side by side roads exist running to the same destination and state and local governments consent to close or declassify the extra roads;

(ii) permanently bars travel on existing roads;

(iii) excludes or diminishes traditional multiple-use activities, including grazing and proper forest harvesting;

(iv) interferes with the enjoyment and use of valid, existing rights, including water rights, local transportation plan rights, R.S. 2477 rights, grazing allotment rights, and mineral leasing rights; or

(v) prohibits development of additional roads reasonably necessary to pursue traditional multiple-use activities;

(i) the state's support for any forest plan revision or amendment will be withheld until the appropriate plan revision or plan amendment clearly demonstrates that:

(i) established roads are not referred to as unclassified roads or a similar classification;

(ii) lands in the vicinity of established roads are managed under the multiple-use, sustained-yield management standard; and

(iii) no roadless or unroaded evaluations or inventories are recognized or upheld beyond those that were recognized or upheld in the forest service's second roadless area review evaluation;

(j) the state's support for any recommendations made under the statutory requirement to examine the wilderness option during the revision of land and resource management plans by the U.S. Forest Service will be withheld until it is clearly demonstrated that:

(i) the duly adopted transportation plans of the state and county or counties within the planning area are fully and completely incorporated into the baseline inventory of information from which plan provisions are derived;

(ii) valid state or local roads and rights-of-way are recognized and not impaired in any way by the recommendations;

(iii) the development of mineral resources by underground mining is not affected by the recommendations;

(iv) the need for additional administrative or public roads necessary for the full use of the various multiple-uses, including recreation, mineral exploration and development, forest health activities, and grazing operations is not unduly affected by the recommendations;

(v) analysis and full disclosure is made concerning the balance of multiple-use management in the proposed areas, and that the analysis compares the full benefit of multiple-use management to the recreational, forest health, and economic needs of the state and the counties to the benefits of the requirements of wilderness management; and

(vi) the conclusions of all studies related to the requirement to examine the wilderness option are submitted to the state for review and action by the Legislature and governor, and the results, in support of or in opposition to, are included in any planning documents or other proposals that are forwarded to the United States Congress;

(k) the invasion of noxious weeds and undesirable invasive plant species into the state should be reversed, their presence eliminated, and their return prevented;

(l) management and resource-use decisions by federal land management and regulatory agencies concerning the vegetative resources within the state should reflect serious consideration of the proper optimization of the yield of water within the watersheds of the state;

(m) (i) it is the policy of the state that:

(A) mineral and energy production and environmental protection are not mutually exclusive;

(B) it is technically feasible to permit appropriate access to mineral and energy resources while preserving nonmineral and nonenergy resources;

(C) resource management planning should seriously consider all available mineral and energy resources;

(D) the development of the solid, fluid, and gaseous mineral resources of the state and the renewable resources of the state should be encouraged;

(E) the waste of fluid and gaseous minerals within developed areas should be prohibited; and

(F) requirements to mitigate or reclaim mineral development projects should be based on credible evidence of significant impacts to natural or cultural resources;

(ii) the state's support for mineral development provisions within federal land management plans will be withheld until the appropriate land management plan environmental impact statement clearly demonstrates:

(A) that the authorized planning agency has:

(I) considered and evaluated the mineral and energy potential in all areas of the planning area as if the areas were open to mineral development under standard lease agreements; and

(II) evaluated any management plan prescription for its impact on the area's baseline mineral and energy potential;

(B) that the development provisions do not unduly restrict access to public lands for energy exploration and development;

(C) that the authorized planning agency has supported any closure of additional areas to mineral leasing and development or any increase of acres subject to no surface occupancy restrictions by adhering to:

(I) the relevant provisions of the Federal Land Policy and Management Act of 1976, 43 U.S.C. Sec. 1701 et seq.;

(II) other controlling mineral development laws; and

(III) the controlling withdrawal and reporting procedures set forth in the Federal Land Policy and Management Act of 1976, 43 U.S.C. Sec. 1701 et seq.;

(D) that the authorized planning agency evaluated whether to repeal any moratorium that may exist on the issuance of additional mining patents and oil and gas leases;

(E) that the authorized planning agency analyzed all proposed mineral lease stipulations and considered adopting the least restrictive necessary to protect against damage to other significant resource values;

(F) that the authorized planning agency evaluated mineral lease restrictions to determine whether to waive, modify, or make exceptions to the restrictions on the basis that they are no longer necessary or effective;

(G) that the authorized federal agency analyzed all areas proposed for no surface occupancy restrictions, and that the analysis evaluated:

(I) whether directional drilling is economically feasible and ecologically necessary for each proposed no surface occupancy area;

(II) whether the directional drilling feasibility analysis, or analysis of other management prescriptions, demonstrates that the proposed no surface occupancy prescription, in effect, sterilizes the mineral and energy resources beneath the area; and

(III) whether, if the minerals are effectively sterilized, the area must be reported as withdrawn under the provisions of the Federal Land Policy and Management Act; and

(H) that the authorized planning agency has evaluated all directional drilling requirements in no surface occupancy areas to determine whether directional drilling is feasible from an economic, ecological, and engineering standpoint;

(n) motorized, human, and animal-powered outdoor recreation should be integrated into a fair and balanced allocation of resources within the historical and cultural framework of multiple-uses in rural Utah, and outdoor recreation should be supported as part of a balanced plan of state and local economic support and growth;

(o) off-highway vehicles should be used responsibly, the management of off-highway vehicles should be uniform across all jurisdictions, and laws related to the use of off-highway vehicles should be uniformly applied across all jurisdictions;

(p) (i) rights-of-way granted and vested under the provisions of R.S. 2477 should be preserved and acknowledged;

(ii) land use management plans, programs, and initiatives should be consistent with both state and county transportation plans developed according to Subsection (3) in order to provide a network of roads throughout the planning area that provides for:

(A) movement of people, goods, and services across public lands;

(B) reasonable access to a broad range of resources and opportunities throughout the planning area, including access to livestock, water, and minerals;

(C) economic and business needs;

(D) public safety;

(E) search and rescue;

(F) access for people with disabilities and the elderly;

(G) access to state lands; and

(H) recreational opportunities;

(q) transportation and access provisions for all other existing routes, roads, and trails across federal, state, and school trust lands within the state should be determined and identified, and agreements should be executed and implemented, as necessary to fully authorize and determine responsibility for maintenance of all routes, roads, and trails;

(r) the reasonable development of new routes and trails for motorized, human, and animal-powered recreation should be implemented;

(s) (i) forests, rangelands, and watersheds, in a healthy condition, are necessary and beneficial for wildlife, livestock grazing, and other multiple-uses;

(ii) management programs and initiatives that are implemented to increase forage for the mutual benefit of the agricultural industry, livestock operations, and wildlife species should utilize all proven techniques and tools;

(iii) the continued viability of livestock operations and the livestock industry should be supported on the federal lands within the state by management of the lands and forage resources, by the proper optimization of animal unit months for livestock, in accordance with the multiple-use provisions of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1701 et seq., the provisions of the Taylor Grazing Act of 1934, 43 U.S.C. 315 et seq., and the provisions of the Public Rangelands Improvement Act of 1978, 43 U.S.C. 1901 et seq.;

(iv) provisions for predator control initiatives or programs under the direction of state and local authorities should be implemented; and

(v) resource-use and management decisions by federal land management and regulatory agencies should support state-sponsored initiatives or programs designed to stabilize wildlife populations that may be experiencing a scientifically demonstrated decline in those populations; and

(t) management and resource use decisions by federal land management and regulatory agencies concerning the scenic resources of the state must balance the protection of scenery with the full management requirements of the other authorized uses of the land under multiple-use

management, and should carefully consider using Visual Resource Management Class I protection only for areas of inventoried Class A scenery or equivalent.

(9) Notwithstanding any provision of Section 63J-8-105.5, the state is committed to establishing and administering an effective statewide conservation strategy for greater sage grouse.

(10) Nothing contained in this section may be construed to restrict or supersede the planning powers conferred upon state departments, agencies, instrumentalities, or advisory councils of the state or the planning powers conferred upon political subdivisions by any other existing law.

(11) Nothing in this section may be construed to affect any lands withdrawn from the public domain for military purposes, which are administered by the United States Army, Air Force, or Navy.

Amended by Chapter 101, 2013 General Session

Appendix C

Public Lands Policy Coordinating Office

[*See* Utah Code, Title 63J, Chapter 4]

63J-4-601. Definitions.

As used in this part:

(1) "Coordinator" means the public lands policy coordinator appointed in this part.

(2) "Office" means the Public Lands Policy Coordinating Office created by this part.

(3) "Political subdivision" means a county, municipality, local district, special service district, school district, inter-local cooperation agreement entity, or any administrative subunit of them.

(4) "State planning coordinator" means the person appointed under Subsection 63J-4-202(1)(a)(ii).

Amended by Chapter 121, 2009 General Session

63J-4-602. Public Lands Policy Coordinating Office -- Coordinator -- Appointment -- Qualifications -- Compensation.

(1) There is created within state government the Public Lands Policy Coordinating Office. The office shall be administered by a public lands policy coordinator.

(2) The coordinator shall be appointed by the governor with the consent of the Senate and shall serve at the pleasure of the governor.

(3) The coordinator shall have demonstrated the necessary administrative and professional ability through education and experience to efficiently and effectively manage the office's affairs.

(4) The coordinator and employees of the office shall receive compensation as provided in Title 67, Chapter 19, Utah State Personnel Management Act.

Renumbered and Amended by Chapter 382, 2008 General Session

63J-4-603. Powers and duties of coordinator and office.

(1) The coordinator and the office shall:

(a) make a report to the Constitutional Defense Council created under Section 63C-4a-202 concerning R.S. 2477 rights and other public lands issues under Title 63C, Chapter 4a, Constitutional and Federalism Defense Act;

(b) provide staff assistance to the Constitutional Defense Council created under Section 63C-4a-202 for meetings of the council;

(c) (i) prepare and submit a constitutional defense plan under Section 63C-4a-403; and

(ii) execute any action assigned in a constitutional defense plan;

(d) under the direction of the state planning coordinator, assist in fulfilling the state planning coordinator's duties outlined in Section 63J-4-401 as those duties relate to the development of public lands policies by:

(i) developing cooperative contracts and agreements between the state, political subdivisions, and agencies of the federal government for involvement in the development of public lands policies;

(ii) producing research, documents, maps, studies, analysis, or other information that supports the state's participation in the development of public lands policy;

(iii) preparing comments to ensure that the positions of the state and political subdivisions are considered in the development of public lands policy;

(iv) partnering with state agencies and political subdivisions in an effort to:

(A) prepare coordinated public lands policies;

(B) develop consistency reviews and responses to public lands policies;

(C) develop management plans that relate to public lands policies; and

(D) develop and maintain a statewide land use plan that is based on cooperation and in conjunction with political subdivisions; and

(v) providing other information or services related to public lands policies as requested by the state planning coordinator;

(e) facilitate and coordinate the exchange of information, comments, and recommendations on public lands policies between and among:

(i) state agencies;

(ii) political subdivisions;

(iii) the Office of Rural Development created under Section 63M-1-1602;

(iv) the Resource Development Coordinating Committee created under Section 63J-4-501;

(v) School and Institutional Trust Lands Administration created under Section 53C-1-201;

(vi) the committee created under Section 63F-1-508 to award grants to counties to inventory and map R.S. 2477 rights-of-way, associated structures, and other features; and

(vii) the Constitutional Defense Council created under Section 63C-4a-202;

(f) perform the duties established in Title 9, Chapter 8, Part 3, Antiquities, and Title 9, Chapter 8, Part 4, Historic Sites;

(g) consistent with other statutory duties, encourage agencies to responsibly preserve archaeological resources;

(h) maintain information concerning grants made under Subsection (1)(j), if available;

(i) report annually, or more often if necessary or requested, concerning the office's activities and expenditures to:

(i) the Constitutional Defense Council; and

(ii) the Legislature's Natural Resources, Agriculture, and Environment Interim Committee jointly with the Constitutional Defense Council;

(j) make grants of up to 16% of the office's total annual appropriations from the Constitutional Defense Restricted Account to a county or statewide association of counties to be used by the county or association of counties for public lands matters if the coordinator, with the advice of the Constitutional Defense Council, determines that the action provides a state benefit;

(k) provide staff services to the Snake Valley Aquifer Advisory Council created in Section 63C-12-103;

(l) coordinate and direct the Snake Valley Aquifer Research Team created in Section 63C-12-107; and

(m) conduct the public lands transfer study and economic analysis required by Section 63J-4-606.

(2) The coordinator and office shall comply with Subsection 63C-4a-203(8) before submitting a comment to a federal agency, if the governor would be subject to Subsection 63C-4a-203(8) if the governor were submitting the material.

(3) The office may enter into a contract or other agreement with another state agency to provide information and services related to:

(a) the duties authorized by Title 72, Chapter 3, Highway Jurisdiction and Classification Act;

(b) legal actions concerning Title 72, Chapter 3, Highway Jurisdiction and Classification Act, or R.S. 2477 matters; or

(c) any other matter within the office's responsibility.

Amended by Chapter 101, 2013 General Session
Amended by Chapter 337, 2013 General Session

Appendix D
Federal Land Policy and Management Act of 1976
Section 202; Land Use Planning

LAND USE PLANNING

Sec. 202. [43 U.S.C. 1712] (a) The Secretary shall, with public involvement and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans which pro-vide by tracts or areas for the use of the public lands. Land use plans shall be developed for the public lands regardless of whether such lands previously have been classified, withdrawn, set aside, or otherwise designated for one or more uses.

(b) In the development and revision of land use plans, the Secretary of Agriculture shall coordinate land use plans for lands in the National Forest System with the land use planning and management programs of and for Indian tribes by, among other things, considering the policies of approval tribal land resource management programs.

(c) In the development and revision of land use plans, the Secretary shall–

(1) use and observe the principles of multiple use and sustained yield set forth in this and other applicable law;

(2) use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences;

(3) give priority to the designation and protection of areas of critical environmental concern;

(4) rely, to the extent it is available, on the inventory of the public lands, their resources, and other values;

(5) consider present and potential uses of the public lands;

(6) consider the relative scarcity of the values involved and the availability of alternative means (including recycling) and sites for realization of those values;

(7) weigh long-term benefits to the public against short-term benefits;

(8) provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans; and

(9) to the extent consistent with the laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located, including, but not limited to, the statewide outdoor recreation plans developed under the Act of September 3, 1964 (78 Stat. 897), as amended [16 U.S.C. 460l–4 et seq. note], and of or for Indian tribes by, among other things, considering the policies of approved State and tribal land resource management programs. In implementing this directive, the Secretary shall, to the extent he finds practical, keep apprised of State, local, and tribal land use plans; assure that consideration is given to those State, local, and tribal plans that are germane in the development of land use plans for public lands; assist in resolving, to the extent practical, inconsistencies between Federal and

non-Federal Government plans, and shall provide for meaningful public involvement of State and local government officials, both elected and appointed, in the development of land use programs, land use regulations, and land use decisions for public lands, including early public notice of proposed decisions which may have a significant impact on non-Federal lands. Such officials in each State are authorized to furnish advice to the Secretary with respect to the development and revision of land use plans, land use guidelines, land use rules, and land use regulations for the public lands within such State and with respect to such other land use matters as may be referred to them by him. Land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act.

(d) Any classification of public lands or any land use plan in effect on the date of enactment of this Act is subject to review in the land use planning process conducted under this section, and all public lands, regardless of classification, are subject to inclusion in any land use plan developed pursuant to this section. The Secretary may modify or terminate any such classification consistent with such land use plans.

(e) The Secretary may issue management decisions to implement land use plans developed or revised under this section in accordance with the following:

(1) Such decisions, including but not limited to exclusions (that is, total elimination) of one or more of the principal or major uses made by a management decision shall remain subject to reconsideration, modification, and termination through revision by the Secretary or his delegate, under the provisions of this section, of the land use plan involved. (2) Any management decision or action pursuant to a management decision that excludes (that is, totally eliminates) one or more of the principal or major uses for two or more years with respect to a tract of land of one hundred thousand acres or more shall be reported by the Secretary to the House of Representatives and the Senate. If within ninety days from the giving of such notice (exclusive of days on which either House has adjourned for more than three consecutive days), the Congress adopts a concurrent resolution of nonapproval of the management decision or action, then the management decision or action shall be promptly terminated by the Secretary. If the committee to which a resolution has been referred during the said ninety day period, has not reported it at the end of thirty calendar days after its referral, it shall be in order to either discharge the commit-tee from further consideration of such resolution or to discharge the committee from consideration of any other resolution with respect to the management decision or action. A motion to discharge may be made only by an individual favoring the resolution, shall be highly privileged (except that it may not be made after the committee has reported such a resolution), and debate thereon shall be limited to not more than one hour, to be divided equally between those favoring and those opposing the resolution. An amendment to the motion shall not be in order, and it shall not be in order to move to reconsider the vote by which the motion was agreed to or disagreed to. If the motion to discharge is agreed to or disagreed to, the motion may not be made with respect to any other resolution with respect to the same management decision or action. When the committee has reprinted, or has been discharged from further consideration of a resolution, it shall at any time thereafter be in order (even though a previous motion to the same effect has been disagreed to) to move to proceed to the consideration of the resolution. The motion shall be highly privileged and shall not be debatable. An amendment to the motion shall not be in order, and it shall not be in order to move to reconsider the vote by which the motion was agreed to or disagreed to.

(3) Withdrawals made pursuant to section 204 of this Act may be used in carrying out management decisions, but public lands shall be removed from or restored to the operation of the Mining Law of 1872,

as amended (R.S. 2318–2352; 30 U.S.C. 21 et seq.) or transferred to another department, bureau, or agency only by withdrawal action pursuant to section 204 or other action pursuant to applicable law: *Provided*, That nothing in this section shall prevent a wholly owned Government corporation from acquiring and holding rights as a citizen under the Mining Law of 1872.

(f) The Secretary shall allow an opportunity for public involvement and by regulation shall establish procedures, including public hearings where appropriate, to give Federal, State, and local governments and the public, adequate notice and opportunity to comment upon and participate in the formulation of plans and programs relating to the management of the public lands.

Appendix E

Revenue Models

Active AUM Revenue Model

Livestock Data		
Brood Cows	15280	Head
Bulls	685	Head
Calves Weaned	12988	Head
Heifers Calves Kept for Replacement	2418.06	Head
Cows Culled Annually	1528	Head
Bulls Culled Annually	171.25	Head
Cows Dead	306	Head
Replacement Heifers Dead	130	Head
Heifers Retained for Expansion	0	Head
Years Cows Kept in Herd	10	Years
Replacement Heifers Culled	455	Head
Percent Calf Crop to Weaning	85.00%	Percent
Cows per Bull Ratio	22.31	Cows
Days from Birth to Weaning	210	Days
Average Weaning Weight of Steers Calve	547	Lbs/Head
Number of Steer Calves Sold	6,434	Head
Average Weaning Weight of Heifers Calve	507	Lbs/Head
Number of Heifer Calves Sold	4,531	Head
Average Weight of Heifers Yearlings	779	Lbs/Head
Average Weight of Culled Heifers	818	Lbs/Head
Average Weight of Culled Cows	1,115	Lbs/Head
Average Weight of Bull	1,748	Lbs/Head
Years Bull Kept in Herd	4	Years
Replacement Bull Cost	$2,690.00	$/Head
Hay Cost per Ton	183	$/Ton
Price of Protein Supplement	33	$/CWT
Price of Salt and Minerals	24	$/CWT
Interest Paid on Loans	3.00%	Percent
Price of Steer Calves	$1.70	$/Lb
Price of Heifer Calves	$1.58	$/Lb
Price of Heifer Yearlings	$1.49	$/Lb
Price of Cull Cows	$0.84	$/Lb
Price of Cull Bulls	$0.96	$/Lb
Price of Cull Heifers	$1.46	$/Lb

Active AUM Revenue Model

AUMs By Source and Use

Brood Cows	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL AUMs	GRAND TOTAL ANNUAL AUMS	% of Total
GSEDNM	10,219	9,987	9,409	6,289	4,734	2,750	2,591	2,642	2,448	4,388	8,358	10,367	74,184	76,457	35.94%
GCNRA	394	394	394	394	0	987	987	987	987	987	394	394	7,301	7,581	3.56%
Other BLM	622	622	622	1,279	3,550	1,175	1,175	1,175	1,604	1,604	1,525	923	15,876	17,486	8.22%
Forest Service	863	863	863	863	863	6,896	7,059	7,059	6,729	4,171	863	863	37,959	43,210	20.31%
State Lands	177	177	79	148	49	202	173	99	99	99	168	188	1,659	1,888	0.89%
Private Native Range	533	533	651	2,676	2,873	1,896	1,585	1,585	1,215	775	779	578	15,677	18,509	8.70%
Private Improved Range	197	197	0	0	420	248	248	248	197	414	148	0	2,316	3,625	1.70%
Irrigated Pasture	336	336	336	138	839	770	770	770	671	1,595	1,624	440	8,626	12,553	5.90%
Feeding Hay and other	1,938	2,170	2,925	3,493	1,953	356	692	715	1,329	1,245	1,420	1,526	19,762	31,420	14.77%
Balance	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	183,360	212,729	100.00%

Bulls	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL AUMs	Cows AUM %	86.19%
GSEDNM	68	68	68	87	180	187	180	187	180	180	75	68	1,530	Bulls AUM %	4.64%
GCNRA	0	0	0	0	0	31	31	31	31	31	0	0	155	Replacement Heifers %	9.17%
Other BLM	81	112	75	137	143	44	44	44	118	118	81	81	1,076		100.00%
Forest Service	0	0	0	0	0	348	348	348	317	274	0	0	1,636		
State Lands	0	0	0	12	12	6	6	6	12	6	44	44	149		
Private Native Range	12	12	12	12	19	50	50	50	50	62	44	19	392	GSENM ACTIVE AUMS	76,457
Private Improved Range	0	0	0	12	68	56	56	50	50	50	0	0	342	TOTAL AUMS SUPPORTED	212,729
Irrigated Pasture	87	87	87	50	87	75	75	75	63	87	118	118	1,009		
Feeding Hay and other	573	542	580	511	312	26	32	32	0	13	461	492	3,575	COWS SUPPORTED	15,280
Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	BULLS SUPPORTED	685
TOTAL	822	822	822	822	822	822	822	822	822	822	822	822	9,864	Replacement HeifersSupported	2,031

Replacement Heifers	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL AUMs	CHECK BALANACE	
GSEDNM	18	18	18	18	65	143	107	107	107	107	18	18	743	GSEDNM	76,457
GCNRA	0	0	0	0	0	30	30	30	30	30	0	0	148	GCNRA	7,604
Other BLM	119	0	0	6	6	0	0	0	89	89	208	119	635	Other BLM	17,587
Forest Service	148	148	148	148	148	812	670	670	640	623	0	148	4,304	Forest Service	43,898
State Lands	0	0	0	0	0	0	0	0	0	0	47	47	95	State Lands	1,904
Private Native Range	89	89	89	326	326	344	344	344	344	374	119	119	2,905	Private Native Range	18,974
Private Improved Range	0	0	0	0	154	184	184	184	184	184	77	0	1,150	Private Improved Range	3,808
Irrigated Pasture	190	190	237	237	267	403	403	403	314	332	249	249	3,474	Irrigated Pasture	13,108
Feeding Hay and other	1,371	1,490	1,442	1,199	968	20	197	197	227	197	1,217	1,235	9,761	Feeding Hay and other	33,098
Balance	0	0	0	0	0	-0	-0	-0	-0	0	0	0	0	TOTAL AUMS	216,437
TOTAL	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	1,934	23,213		

TOTAL ANNUAL AUMS	216,437
Revenues	
Steer Calves	$6,038,770.60
Heifer Calves	$3,629,218.35
Culled Replacement Heifers	$542,895.80
Culled Cows	$1,431,124.80
Culled Bulls	$287,371.20
TOTAL REVENUE	$11,929,380.75
REVENUE/AUM	$55.12

Active & Suspended AUM Revenue Model

Livestock Data		
Brood Cows	21,212	Head
Bulls	952	Head
Calves Weaned	18,030	Head
Heifers Calves Kept for Replacement	3,257	Head
Cows Culled Annually	2,121	Head
Bulls Culled Annually	238	Head
Cows Dead	424	Head
Replacement Heifers Dead	180	Head
Heifers Retained for Expansion	0	Head
Years Cows Kept in Herd	10	Years
Replacement Heifers Culled	631	Head
Percent Calf Crop to Weaning	85.00%	Percent
Cows per Bull Ratio	22.28	Cows
Days from Birth to Weaning	210	Days
Average Weaning Weight of Steers Calves	547	Lbs/Head
Number of Steer Calves Sold	9,035	Head
Average Weaning Weight of Heifers Calve	507	Lbs/Head
Number of Heifer Calves Sold	8,269	Head
Average Weight of Heifers Yearlings	779	Lbs/Head
Average Weight of Culled Heifers	818	Lbs/Head
Average Weight of Culled Cows	1,115	Lbs/Head
Average Weight of Bull	1,748	Lbs/Head
Years Bull Kept in Herd	4	Years
Replacement Bull Cost	$2,690.00	$/Head
Hay Cost per Ton	183	$/Ton
Price of Protein Supplement	33	$/CWT
Price of Salt and Minerals	24	$/CWT
Interest Paid on Loans	3.00%	Percent
Price of Steer Calves	$1.70	$/Lb
Price of Heifer Calves	$1.58	$/Lb
Price of Heifer Yearlings	$1.49	$/Lb
Price of Cull Cows	$0.84	$/Lb
Price of Cull Bulls	$0.96	$/Lb
Price of Cull Heifers	$1.46	$/Lb

Active & Suspended AUM Revenue Model

AUMs By Source and Use

Brood Cows	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL AUMs
GSEDNM	14,187	13,864	13,082	8,731	6,571	3,818	3,598	3,668	3,398	6,092	11,603	14,392	102,984
GCNRA	547	547	547	547	0	1,370	1,370	1,370	1,370	1,370	547	547	10,135
Other BLM	863	863	883	1,775	4,928	1,631	1,631	1,631	2,227	2,227	2,117	1,281	22,039
Forest Service	1,198	1,198	1,198	1,198	1,198	9,573	9,800	9,800	9,342	5,791	1,198	1,198	52,695
State Lands	246	246	110	206	68	280	240	138	138	138	233	261	2,304
Private Native Range	740	740	904	3,714	3,988	2,632	2,200	2,200	1,686	1,075	1,082	802	21,764
Private Improved Range	274	274	0	0	583	344	344	344	274	575	206	0	3,216
Irrigated Pasture	467	467	467	191	1,165	1,069	1,069	1,069	991	2,215	2,255	611	11,974
Feeding Hay and other	2,689	3,012	4,080	4,849	2,711	494	961	993	1,845	1,728	1,970	2,119	27,433
Balance	0	0	-0	-0	-0	0	-0	-0	0	0	0	-0	
TOTAL	21,212	21,212	21,212	21,212	21,212	21,212	21,212	21,212	21,212	21,212	21,212	21,212	254,543

GRAND TOTAL ANNUAL AUMS	% of Total
106,138	35.94%
10,523	3.56%
24,274	8.22%
59,985	20.31%
2,622	0.89%
25,694	8.70%
5,032	1.70%
17,426	5.90%
43,618	14.77%
295,312	100.00%

Bulls	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL AUMs
GSEDNM	95	95	95	121	251	259	251	259	251	251	104	95	2,126
GCNRA	0	0	0	0	0	43	43	43	43	43	0	0	216
Other BLM	112	156	104	190	199	61	61	61	164	164	112	112	1,496
Forest Service	0	0	0	0	0	484	484	484	441	380	0	0	2,273
State Lands	0	0	0	17	17	9	9	9	17	9	61	61	208
Private Native Range	17	17	17	17	26	69	69	69	69	86	61	26	544
Private Improved Range	0	0	0	17	95	78	78	69	69	69	0	0	475
Irrigated Pasture	121	121	121	69	121	104	104	104	88	121	164	164	1,402
Feeding Hay and other	797	754	805	711	434	36	45	45	0	19	641	684	4,971
Balance	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	
TOTAL	1142.5296	1142.71232	1141.98348	1142.73312	1142.685	1142.414	1142.732	1142.732	1142.4	1142.597	1142.461	1142.461	13,710

Cows AUM %	86.19%
Bulls AUM %	4.64%
Replacement Heifers %	9.17%
	100.00%
GSENM ACTIVE & SUSPENDED	106,138
TOTAL AUMS SUPPORTED	295,312
COWS SUPPORTED	21,212
BULLS SUPPORTED	952
Replacement HeifersSupported	2,820

Replacement Heifers	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL AUMs
GSEDNM	25	25	25	25	90	198	148	148	148	148	25	25	1,028
GCNRA	0	0	0	0	0	41	41	41	41	41	0	0	205
Other BLM	165	0	0	8	8	0	0	0	124	124	288	165	881
Forest Service	206	206	206	206	206	1,127	930	930	889	864	0	206	5,974
State Lands	0	0	0	0	0	0	0	0	0	0	66	66	132
Private Native Range	124	124	124	452	452	477	477	477	477	519	165	165	4,032
Private Improved Range	0	0	0	0	214	255	255	255	255	255	107	0	1,596
Irrigated Pasture	263	263	329	329	370	560	560	560	436	461	346	346	4,823
Feeding Hay and other	1,903	2,068	2,003	1,665	1,345	27	274	274	315	274	1,689	1,714	13,554
Balance	0	0	-0	0	-0	0	-0	-0	0	-0	0	0	
TOTAL	2,685	2,685	2,686	2,685	2,686	2,685	2,686	2,686	2,685	2,686	2,685	2,685	32,226

CHECK BALANACE	
GSEDNM	106,138
GCNRA	10,556
Other BLM	24,416
Forest Service	60,942
State Lands	2,643
Private Native Range	26,340
Private Improved Range	5,287
Irrigated Pasture	18,199
Feeding Hay and other	45,957
TOTAL AUMS	300,480

TOTAL ANNUAL AUMS	300,480
Revenues	
Steer Calves	$8,383,141.49
Heifer Calves	$5,038,153.12
Culled Replacement Heifers	$753,658.75
Culled Cows	$1,986,715.92
Culled Bulls	$399,383.04
TOTAL REVENUE	$16,561,052.32
REVENUE/AUM	$55.12

Appendix F

IMPLAN MODELS

	A	B	C	D	E	F	G	H
1	**Output Multipliers**		Copyright 2014 Minnesota IMPLAN Group, Inc.					
2	IndustryCode	Description	DirectEffects	IndirectEffects	InducedEffects	Total	TypeIMultiplier	TypeSAMMultiplier
3	1	Oilseed farming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	2	Grain farming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	3	Vegetable and melon farming	1.000000	0.180159	0.126453	1.306612	1.180159	1.306612
6	4	Fruit farming	1.000000	0.175693	0.114499	1.290192	1.175693	1.290192
7	5	Tree nut farming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	6	Greenhouse, nursery, and floriculture production	1.000000	0.141720	0.081514	1.223234	1.141720	1.223234
9	7	Tobacco farming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	8	Cotton farming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	9	Sugarcane and sugar beet farming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	10	All other crop farming	1.000000	0.239827	0.081282	1.321109	1.239827	1.321109
13	11	Cattle ranching and farming	1.000000	0.891877	0.065722	1.957599	1.891877	1.957599
14	12	Dairy cattle and milk production	1.000000	0.154364	0.044647	1.199011	1.154364	1.199011
15	13	Poultry and egg production	1.000000	0.123980	0.054369	1.178349	1.123980	1.178349
16	14	Animal production, except cattle and poultry and eggs	1.000000	0.205601	0.039237	1.244838	1.205601	1.244838
17	15	Forestry, forest products, and timber tract production	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	16	Commercial logging	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	17	Commercial Fishing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	18	Commercial hunting and trapping	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	19	Support activities for agriculture and forestry	1.000000	0.041901	0.318511	1.360412	1.041901	1.360412
22	20	Extraction of oil and natural gas	1.000000	0.125762	0.064335	1.190097	1.125762	1.190097
23	21	Mining coal	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	22	Mining iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	23	Mining copper, nickel, lead, and zinc	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	24	Mining gold, silver, and other metal ore	1.000000	0.173695	0.084431	1.258127	1.173695	1.258127
27	25	Mining and quarrying stone	1.000000	0.105848	0.066831	1.172679	1.105848	1.172679
28	26	Mining and quarrying sand, gravel, clay, and ceramic and refractory minerals	1.000000	0.182309	0.175320	1.357629	1.182309	1.357629
29	27	Mining and quarrying other nonmetallic minerals	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	28	Drilling oil and gas wells	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	29	Support activities for oil and gas operations	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	30	Support activities for other mining	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	31	Electric power generation, transmission, and distribution	1.000000	0.083562	0.061107	1.144669	1.083562	1.144669
34	32	Natural gas distribution	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	33	Water, sewage and other treatment and delivery systems	1.000000	0.346101	0.098919	1.445020	1.346101	1.445020
36	34	Construction of new nonresidential commercial and health care structures	1.000000	0.204102	0.089029	1.293131	1.204102	1.293131
37	35	Construction of new nonresidential manufacturing structures	1.000000	0.141034	0.089850	1.230884	1.141034	1.230884
38	36	Construction of other new nonresidential structures	1.000000	0.210610	0.089416	1.300026	1.210610	1.300026
39	37	Construction of new residential permanent site single- and multi-family structures	1.000000	0.220041	0.077245	1.297287	1.220041	1.297287
40	38	Construction of other new residential structures	1.000000	0.214106	0.093839	1.307945	1.214106	1.307945
41	39	Maintenance and repair construction of nonresidential structures	1.000000	0.199403	0.098473	1.297877	1.199403	1.297877
42	40	Maintenance and repair construction of residential structures	1.000000	0.194363	0.109651	1.304014	1.194363	1.304014
43	41	Dog and cat food manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44	42	Other animal food manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45	43	Flour milling and malt manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46	44	Wet corn milling	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47	45	Soybean and other oilseed processing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48	46	Fats and oils refining and blending	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

	A	B	C	D	E	F	G	H
48	46	Fats and oils refining and blending	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49	47	Breakfast cereal manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50	48	Sugar cane mills and refining	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51	49	Beet sugar manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52	50	Chocolate and confectionery manufacturing from cacao beans	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53	51	Confectionery manufacturing from purchased chocolate	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54	52	Nonchocolate confectionery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	53	Frozen food manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56	54	Fruit and vegetable canning, pickling, and drying	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57	55	Fluid milk and butter manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58	56	Cheese manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59	57	Dry, condensed, and evaporated dairy product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60	58	Ice cream and frozen dessert manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
61	59	Animal (except poultry) slaughtering, rendering, and processing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
62	60	Poultry processing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
63	61	Seafood product preparation and packaging	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
64	62	Bread and bakery product manufacturing	1.000000	0.086259	0.201806	1.288065	1.086259	1.288065
65	63	Cookie, cracker, and pasta manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
66	64	Tortilla manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
67	65	Snack food manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
68	66	Coffee and tea manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
69	67	Flavoring syrup and concentrate manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
70	68	Seasoning and dressing manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
71	69	All other food manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
72	70	Soft drink and ice manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
73	71	Breweries	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
74	72	Wineries	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
75	73	Distilleries	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
76	74	Tobacco product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
77	75	Fiber, yarn, and thread mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
78	76	Broadwoven fabric mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
79	77	Narrow fabric mills and schiffli machine embroidery	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
80	78	Nonwoven fabric mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
81	79	Knit fabric mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
82	80	Textile and fabric finishing mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
83	81	Fabric coating mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
84	82	Carpet and rug mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
85	83	Curtain and linen mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
86	84	Textile bag and canvas mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
87	85	All other textile product mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
88	86	Apparel knitting mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
89	87	Cut and sew apparel contractors	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
90	88	Men's and boys' cut and sew apparel manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
91	89	Women's and girls' cut and sew apparel manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
92	90	Other cut and sew apparel manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
93	91	Apparel accessories and other apparel manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
94	92	Leather and hide tanning and finishing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

	A	B	C	D	E	F	G	H
95	93	Footwear manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
96	94	Other leather and allied product manufacturing	1.000000	0.185198	0.038659	1.223858	1.185198	1.223858
97	95	Sawmills and wood preservation	1.000000	0.563025	0.084412	1.647437	1.563025	1.647437
98	96	Veneer and plywood manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
99	97	Engineered wood member and truss manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
100	98	Reconstituted wood product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
101	99	Wood windows and doors and millwork manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
102	100	Wood container and pallet manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
103	101	Manufactured home (mobile home) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
104	102	Prefabricated wood building manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
105	103	All other miscellaneous wood product manufacturing	1.000000	0.595903	0.081277	1.677179	1.595903	1.677179
106	104	Pulp mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
107	105	Paper mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
108	106	Paperboard Mills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
109	107	Paperboard container manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
110	108	Coated and laminated paper, packaging paper and plastics film manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
111	109	All other paper bag and coated and treated paper manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
112	110	Stationery product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
113	111	Sanitary paper product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
114	112	All other converted paper product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
115	113	Printing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
116	114	Support activities for printing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
117	115	Petroleum refineries	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
118	116	Asphalt paving mixture and block manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
119	117	Asphalt shingle and coating materials manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
120	118	Petroleum lubricating oil and grease manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
121	119	All other petroleum and coal products manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
122	120	Petrochemical manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
123	121	Industrial gas manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
124	122	Synthetic dye and pigment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
125	123	Alkalies and chlorine manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
126	124	Carbon black manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
127	125	All other basic inorganic chemical manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
128	126	Other basic organic chemical manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
129	127	Plastics material and resin manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
130	128	Synthetic rubber manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
131	129	Artificial and synthetic fibers and filaments manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
132	130	Fertilizer manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
133	131	Pesticide and other agricultural chemical manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
134	132	Medicinal and botanical manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
135	133	Pharmaceutical preparation manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
136	134	In-vitro diagnostic substance manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
137	135	Biological product (except diagnostic) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
138	136	Paint and coating manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
139	137	Adhesive manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
140	138	Soap and cleaning compound manufacturing	1.000000	0.064615	0.015952	1.080567	1.064615	1.080567
141	139	Toilet preparation manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

	A	B	C	D	E	F	G	H
142	140	Printing ink manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
143	141	All other chemical product and preparation manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
144	142	Plastics packaging materials and unlaminated film and sheet manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
145	143	Unlaminated plastics profile shape manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
146	144	Plastics pipe and pipe fitting manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
147	145	Laminated plastics plate, sheet (except packaging), and shape manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
148	146	Polystyrene foam product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
149	147	Urethane and other foam product (except polystyrene) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
150	148	Plastics bottle manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
151	149	Other plastics product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
152	150	Tire manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
153	151	Rubber and plastics hoses and belting manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
154	152	Other rubber product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
155	153	Pottery, ceramics, and plumbing fixture manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
156	154	Brick, tile, and other structural clay product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
157	155	Clay and nonclay refractory manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
158	156	Flat glass manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
159	157	Other pressed and blown glass and glassware manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
160	158	Glass container manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
161	159	Glass product manufacturing made of purchased glass	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
162	160	Cement manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
163	161	Ready-mix concrete manufacturing	1.000000	0.242504	0.064589	1.307093	1.242504	1.307093
164	162	Concrete pipe, brick, and block manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
165	163	Other concrete product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
166	164	Lime and gypsum product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
167	165	Abrasive product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
168	166	Cut stone and stone product manufacturing	1.000000	0.160611	0.167181	1.327792	1.160611	1.327792
169	167	Ground or treated mineral and earth manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
170	168	Mineral wool manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
171	169	Miscellaneous nonmetallic mineral product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
172	170	Iron and steel mills and ferroalloy manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
173	171	Steel product manufacturing from purchased steel	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
174	172	Alumina refining and primary aluminum production	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
175	173	Secondary smelting and alloying of aluminum	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
176	174	Aluminum product manufacturing from purchased aluminum	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
177	175	Primary smelting and refining of copper	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
178	176	Primary smelting and refining of nonferrous metal (except copper and aluminum)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
179	177	Copper rolling, drawing, extruding and alloying	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
180	178	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding and allo	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
181	179	Ferrous metal foundries	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
182	180	Nonferrous metal foundries	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
183	181	All other forging, stamping, and sintering	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
184	182	Custom roll forming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
185	183	Crown and closure manufacturing and metal stamping	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
186	184	Cutlery, utensil, pot, and pan manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
187	185	Handtool manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
188	186	Plate work and fabricated structural product manufacturing	1.000000	0.143221	0.089568	1.232789	1.143221	1.232789

	A	B	C	D	E	F	G	H
189	187	Ornamental and architectural metal products manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
190	188	Power boiler and heat exchanger manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
191	189	Metal tank (heavy gauge) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
192	190	Metal can, box, and other metal container (light gauge) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
193	191	Ammunition manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
194	192	Arms, ordnance, and accessories manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
195	193	Hardware manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
196	194	Spring and wire product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
197	195	Machine shops	1.000000	0.159450	0.202306	1.361755	1.159450	1.361755
198	196	Turned product and screw, nut, and bolt manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
199	197	Coating, engraving, heat treating and allied activities	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
200	198	Valve and fittings other than plumbing manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
201	199	Plumbing fixture fitting and trim manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
202	200	Ball and roller bearing manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
203	201	Fabricated pipe and pipe fitting manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
204	202	Other fabricated metal manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
205	203	Farm machinery and equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
206	204	Lawn and garden equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
207	205	Construction machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
208	206	Mining and oil and gas field machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
209	207	Other industrial machinery manufacturing	1.000000	0.166248	0.037951	1.204199	1.166248	1.204199
210	208	Plastics and rubber industry machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
211	209	Semiconductor machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
212	210	Vending, commercial, industrial, and office machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
213	211	Optical instrument and lens manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
214	212	Photographic and photocopying equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
215	213	Other commercial and service industry machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
216	214	Air purification and ventilation equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
217	215	Heating equipment (except warm air furnaces) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
218	216	Air conditioning, refrigeration, and warm air heating equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
219	217	Industrial mold manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
220	218	Metal cutting and forming machine tool manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
221	219	Special tool, die, jig, and fixture manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
222	220	Cutting tool and machine tool accessory manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
223	221	Rolling mill and other metalworking machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
224	222	Turbine and turbine generator set units manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
225	223	Speed changer, industrial high-speed drive, and gear manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
226	224	Mechanical power transmission equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
227	225	Other engine equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
228	226	Pump and pumping equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
229	227	Air and gas compressor manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
230	228	Material handling equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
231	229	Power-driven handtool manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
232	230	Other general purpose machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
233	231	Packaging machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
234	232	Industrial process furnace and oven manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
235	233	Fluid power process machinery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

	A	B	C	D	E	F	G	H
236	234	Electronic computer manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
237	235	Computer storage device manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
238	236	Computer terminals and other computer peripheral equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
239	237	Telephone apparatus manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
240	238	Broadcast and wireless communications equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
241	239	Other communications equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
242	240	Audio and video equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
243	241	Electron tube manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
244	242	Bare printed circuit board manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
245	243	Semiconductor and related device manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
246	244	Electronic capacitor, resistor, coil, transformer, and other inductor manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
247	245	Electronic connector manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
248	246	Printed circuit assembly (electronic assembly) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
249	247	Other electronic component manufacturing	1.000000	0.123183	0.133724	1.256907	1.123183	1.256907
250	248	Electromedical and electrotherapeutic apparatus manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
251	249	Search, detection, and navigation instruments manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
252	250	Automatic environmental control manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
253	251	Industrial process variable instruments manufacturing	1.000000	0.151896	0.059920	1.211816	1.151896	1.211816
254	252	Totalizing fluid meters and counting devices manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
255	253	Electricity and signal testing instruments manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
256	254	Analytical laboratory instrument manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
257	255	Irradiation apparatus manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
258	256	Watch, clock, and other measuring and controlling device manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
259	257	Software, audio, and video media for reproduction	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
260	258	Magnetic and optical recording media manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
261	259	Electric lamp bulb and part manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
262	260	Lighting fixture manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
263	261	Small electrical appliance manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
264	262	Household cooking appliance manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
265	263	Household refrigerator and home freezer manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
266	264	Household laundry equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
267	265	Other major household appliance manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
268	266	Power, distribution, and specialty transformer manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
269	267	Motor and generator manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
270	268	Switchgear and switchboard apparatus manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
271	269	Relay and industrial control manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
272	270	Storage battery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
273	271	Primary battery manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
274	272	Communication and energy wire and cable manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
275	273	Wiring device manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
276	274	Carbon and graphite product manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
277	275	All other miscellaneous electrical equipment and component manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
278	276	Automobile manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
279	277	Light truck and utility vehicle manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
280	278	Heavy duty truck manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
281	279	Motor vehicle body manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
282	280	Truck trailer manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

	A	B	C	D	E	F	G	H
283	281	Motor home manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
284	282	Travel trailer and camper manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
285	283	Motor vehicle parts manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
286	284	Aircraft manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
287	285	Aircraft engine and engine parts manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
288	286	Other aircraft parts and auxiliary equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
289	287	Guided missile and space vehicle manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
290	288	Propulsion units and parts for space vehicles and guided missiles manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
291	289	Railroad rolling stock manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
292	290	Ship building and repairing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
293	291	Boat building	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
294	292	Motorcycle, bicycle, and parts manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
295	293	Military armored vehicle, tank, and tank component manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
296	294	All other transportation equipment manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
297	295	Wood kitchen cabinet and countertop manufacturing	1.000000	0.315998	0.129404	1.445402	1.315998	1.445402
298	296	Upholstered household furniture manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
299	297	Nonupholstered wood household furniture manufacturing	1.000000	0.183287	0.059730	1.243018	1.183287	1.243018
300	298	Metal and other household furniture (except wood) manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
301	299	Institutional furniture manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
302	300	Wood television, radio, and sewing machine cabinet manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
303	301	Office furniture and custom architectural woodwork and millwork manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
304	302	Showcase, partition, shelving, and locker manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
305	303	Mattress manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
306	304	Blind and shade manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
307	305	Surgical and medical instrument, laboratory and medical instrument manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
308	306	Surgical appliance and supplies manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
309	307	Dental equipment and supplies manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
310	308	Ophthalmic goods manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
311	309	Dental laboratories manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
312	310	Jewelry and silverware manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
313	311	Sporting and athletic goods manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
314	312	Doll, toy, and game manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
315	313	Office supplies (except paper) manufacturing	1.000000	0.096209	0.101325	1.197534	1.096209	1.197534
316	314	Sign manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
317	315	Gasket, packing, and sealing device manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
318	316	Musical instrument manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
319	317	All other miscellaneous manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
320	318	Broom, brush, and mop manufacturing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
321	319	Wholesale trade businesses	1.000000	0.144888	0.107744	1.252632	1.144888	1.252632
322	320	Retail Stores - Motor vehicle and parts	1.000000	0.147650	0.226573	1.374223	1.147650	1.374223
323	321	Retail Stores - Furniture and home furnishings	1.000000	0.233448	0.155072	1.388520	1.233448	1.388520
324	322	Retail Stores - Electronics and appliances	1.000000	0.125494	0.134599	1.260093	1.125494	1.260093
325	323	Retail Stores - Building material and garden supply	1.000000	0.148496	0.185625	1.334121	1.148496	1.334121
326	324	Retail Stores - Food and beverage	1.000000	0.150839	0.205715	1.356555	1.150839	1.356555
327	325	Retail Stores - Health and personal care	1.000000	0.175562	0.209258	1.384820	1.175562	1.384820
328	326	Retail Stores - Gasoline stations	1.000000	0.148775	0.172788	1.321562	1.148775	1.321562
329	327	Retail Stores - Clothing and clothing accessories	1.000000	0.194428	0.143962	1.338390	1.194428	1.338390

	A	B	C	D	E	F	G	H
330	328	Retail Stores - Sporting goods, hobby, book and music	1.000000	0.132082	0.180410	1.312492	1.132082	1.312492
331	329	Retail Stores - General merchandise	1.000000	0.131800	0.172030	1.303830	1.131800	1.303830
332	330	Retail Stores - Miscellaneous	1.000000	0.111859	0.162238	1.274097	1.111859	1.274097
333	331	Retail Nonstores - Direct and electronic sales	1.000000	0.079424	0.093204	1.172627	1.079424	1.172627
334	332	Transport by air	1.000000	0.152000	0.117490	1.269489	1.152000	1.269489
335	333	Transport by rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
336	334	Transport by water	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
337	335	Transport by truck	1.000000	0.126177	0.144295	1.270472	1.126177	1.270472
338	336	Transit and ground passenger transportation	1.000000	0.022297	0.262213	1.284510	1.022297	1.284510
339	337	Transport by pipeline	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
340	338	Scenic and sightseeing transportation and support activities for transportation	1.000000	0.162304	0.175304	1.337608	1.162304	1.337608
341	339	Couriers and messengers	1.000000	0.076416	0.255903	1.332320	1.076416	1.332320
342	340	Warehousing and storage	1.000000	0.118234	0.252592	1.370826	1.118234	1.370826
343	341	Newspaper publishers	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
344	342	Periodical publishers	1.000000	0.223573	0.087264	1.310837	1.223573	1.310837
345	343	Book publishers	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
346	344	Directory, mailing list, and other publishers	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
347	345	Software publishers	1.000000	0.156760	0.083843	1.240603	1.156760	1.240603
348	346	Motion picture and video industries	1.000000	0.317198	0.079401	1.396599	1.317198	1.396599
349	347	Sound recording industries	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
350	348	Radio and television broadcasting	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
351	349	Cable and other subscription programming	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
352	350	Internet publishing and broadcasting	1.000000	0.191896	0.088524	1.280419	1.191896	1.280419
353	351	Telecommunications	1.000000	0.287019	0.071437	1.358456	1.287019	1.358456
354	352	Data processing, hosting, ISP, web search portals and related services	1.000000	0.159711	0.077802	1.237513	1.159711	1.237513
355	353	Other information services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
356	354	Monetary authorities and depository credit intermediation activities	1.000000	0.091218	0.031721	1.122938	1.091218	1.122938
357	355	Nondepository credit intermediation and related activities	1.000000	0.459476	0.265850	1.725326	1.459476	1.725326
358	356	Securities, commodity contracts, investments, and related activities	1.000000	0.369757	0.055702	1.425459	1.369757	1.425459
359	357	Insurance carriers	1.000000	0.401392	0.143561	1.544953	1.401392	1.544953
360	358	Insurance agencies, brokerages, and related activities	1.000000	0.386196	0.172498	1.558695	1.386196	1.558695
361	359	Funds, trusts, and other financial vehicles	1.000000	0.239915	0.134378	1.374293	1.239915	1.374293
362	360	Real estate establishments	1.000000	0.159204	0.041807	1.201011	1.159204	1.201011
363	361	Imputed rental activity for owner-occupied dwellings	1.000000	0.123017	0.010271	1.133288	1.123017	1.133288
364	362	Automotive equipment rental and leasing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
365	363	General and consumer goods rental except video tapes and discs	1.000000	0.127175	0.292604	1.419779	1.127175	1.419779
366	364	Video tape and disc rental	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
367	365	Commercial and industrial machinery and equipment rental and leasing	1.000000	0.191806	0.086744	1.278550	1.191806	1.278550
368	366	Lessors of nonfinancial intangible assets	1.000000	0.363493	0.045861	1.409355	1.363493	1.409355
369	367	Legal services	1.000000	0.214151	0.140794	1.354945	1.214151	1.354945
370	368	Accounting, tax preparation, bookkeeping, and payroll services	1.000000	0.142660	0.061965	1.204625	1.142660	1.204625
371	369	Architectural, engineering, and related services	1.000000	0.319346	0.107311	1.426657	1.319346	1.426657
372	370	Specialized design services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
373	371	Custom computer programming services	1.000000	0.327795	0.119832	1.447627	1.327795	1.447627
374	372	Computer systems design services	1.000000	0.445697	0.162379	1.608076	1.445697	1.608076
375	373	Other computer related services, including facilities management	1.000000	0.149475	0.091407	1.240882	1.149475	1.240882
376	374	Management, scientific, and technical consulting services	1.000000	0.239818	0.197822	1.437640	1.239818	1.437640

	A	B	C	D	E	F	G	H
377	375	Environmental and other technical consulting services	1.000000	0.232627	0.123669	1.356296	1.232627	1.356296
378	376	Scientific research and development services	1.000000	0.286897	0.115302	1.402199	1.286897	1.402199
379	377	Advertising and related services	1.000000	0.098559	0.120595	1.219154	1.098559	1.219154
380	378	Photographic services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
381	379	Veterinary services	1.000000	0.153461	0.125319	1.278781	1.153461	1.278781
382	380	All other miscellaneous professional, scientific, and technical services	1.000000	0.124751	0.067028	1.191779	1.124751	1.191779
383	381	Management of companies and enterprises	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
384	382	Employment services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
385	383	Travel arrangement and reservation services	1.000000	0.189533	0.130274	1.319807	1.189533	1.319807
386	384	Office administrative services	1.000000	0.222232	0.252062	1.474293	1.222232	1.474293
387	385	Facilities support services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
388	386	Business support services	1.000000	0.179718	0.207910	1.387627	1.179718	1.387627
389	387	Investigation and security services	1.000000	0.122597	0.267620	1.390217	1.122597	1.390217
390	388	Services to buildings and dwellings	1.000000	0.129432	0.150236	1.279668	1.129432	1.279668
391	389	Other support services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
392	390	Waste management and remediation services	1.000000	0.146974	0.106042	1.253015	1.146974	1.253015
393	391	Private elementary and secondary schools	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
394	392	Private junior colleges, colleges, universities, and professional schools	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
395	393	Other private educational services	1.000000	0.188527	0.197665	1.386192	1.188527	1.386192
396	394	Offices of physicians, dentists, and other health practitioners	1.000000	0.145354	0.218699	1.364053	1.145354	1.364053
397	395	Home health care services	1.000000	0.084373	0.265740	1.350113	1.084373	1.350113
398	396	Medical and diagnostic labs and outpatient and other ambulatory care services	1.000000	0.084360	0.148152	1.232513	1.084360	1.232513
399	397	Private hospitals	1.000000	0.171065	0.177782	1.348847	1.171065	1.348847
400	398	Nursing and residential care facilities	1.000000	0.124438	0.246941	1.371379	1.124438	1.371379
401	399	Child day care services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
402	400	Individual and family services	1.000000	0.162966	0.259417	1.422383	1.162966	1.422383
403	401	Community food, housing, and other relief services, including rehabilitation services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
404	402	Performing arts companies	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
405	403	Spectator sports companies	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
406	404	Promoters of performing arts and sports and agents for public figures	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
407	405	Independent artists, writers, and performers	1.000000	0.107011	0.083913	1.190924	1.107011	1.190924
408	406	Museums, historical sites, zoos, and parks	1.000000	0.202144	0.176975	1.379118	1.202144	1.379118
409	407	Fitness and recreational sports centers	1.000000	0.229130	0.191563	1.420692	1.229130	1.420692
410	408	Bowling centers	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
411	409	Amusement parks, arcades, and gambling industries	1.000000	0.164482	0.164230	1.328712	1.164482	1.328712
412	410	Other amusement and recreation industries	1.000000	0.099013	0.227122	1.326135	1.099013	1.326135
413	411	Hotels and motels, including casino hotels	1.000000	0.219139	0.124116	1.343255	1.219139	1.343255
414	412	Other accommodations	1.000000	0.278123	0.141094	1.419218	1.278123	1.419218
415	413	Food services and drinking places	1.000000	0.129139	0.176786	1.305925	1.129139	1.305925
416	414	Automotive repair and maintenance, except car washes	1.000000	0.122187	0.202471	1.324658	1.122187	1.324658
417	415	Car washes	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
418	416	Electronic and precision equipment repair and maintenance	1.000000	0.097118	0.131390	1.228508	1.097118	1.228508
419	417	Commercial and industrial machinery and equipment repair and maintenance	1.000000	0.092228	0.150893	1.243120	1.092228	1.243120
420	418	Personal and household goods repair and maintenance	1.000000	0.063300	0.110514	1.173814	1.063300	1.173814
421	419	Personal care services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
422	420	Death care services	1.000000	0.121656	0.219742	1.341398	1.121656	1.341398
423	421	Dry-cleaning and laundry services	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

	A	B	C	D	E	F	G	H
424	422	Other personal services	1.000000	0.167309	0.137338	1.304648	1.167309	1.304648
425	423	Religious organizations	1.000000	0.054080	0.035280	1.089359	1.054080	1.089359
426	424	Grantmaking, giving, and social advocacy organizations	1.000000	0.189678	0.409891	1.599569	1.189678	1.599569
427	425	Civic, social, professional, and similar organizations	1.000000	0.521917	1.066497	2.588414	1.521917	2.588414
428	426	Private household operations	1.000000	0.000000	0.395811	1.395811	1.000000	1.395811
429	427	US Postal Service	1.000000	0.101332	0.341106	1.442437	1.101332	1.442437
430	428	Federal electric utilities	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
431	429	Other Federal Government enterprises	1.000000	0.060341	0.112160	1.172501	1.060341	1.172501
432	430	State and local government passenger transit	1.000000	0.844438	0.797835	2.642273	1.844438	2.642273
433	431	State and local government electric utilities	1.000000	0.026429	0.120718	1.147148	1.026429	1.147148
434	432	Other state and local government enterprises	1.000000	0.233756	0.151800	1.385556	1.233756	1.385556
435	433	* Not an industry (Used and secondhand goods)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
436	434	* Not an industry (Scrap)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
437	435	* Not an industry (Rest of the world adjustment)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
438	436	* Not an industry (Noncomparable foreign imports)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
439	437	* Employment and payroll only (state & local govt, non-education)	1.000000	0.000000	0.325445	1.325445	1.000000	1.325445
440	438	* Employment and payroll only (state & local govt, education)	1.000000	0.000000	0.329219	1.329219	1.000000	1.329219
441	439	* Employment and payroll only (federal govt, non-military)	1.000000	0.000000	0.259503	1.259503	1.000000	1.259503
442	440	* Employment and payroll only (federal govt, military)	1.000000	0.000000	0.172548	1.172548	1.000000	1.172548

Appendix G - Geologic Science

Kane County has a geologic history reaching back over a billion years. Approximately 270 million years of this history is revealed in the rocks, paleontology, and scenery of the county. The oldest rocks found in the county record a time when the equator angled northeast from southern California past the southeastern corner of Utah. Kane County was then marginal marine lowlands of streams, flood plains, and tidal flats. The sea lay to the west, but occasionally spread east across the area leaving beds of limestone with sea shells, sponges, and other fossils between red beds of sandstone and mudstone. The Hermit, Toroweap, Kaibab and Moenkopi Formations record these events covering the first 35 million years (middle of the Permian through early Triassic) of geological history. Periods of erosion are recorded between the Kaibab and Moenkopi Formations and between the Moenkopi and Chinle Formations. Reptile tracks are found in beds of the Moenkopi Formation. These Permian through Triassic formations are seen in the Buckskin Mountain areas of the county.

During the late Triassic, this region was subjected to a period of erosion before being covered by great sand dunes in early Jurassic time (208 to 187 million years ago). The depositional environment changed from windblown sand dunes to stream laid sand beds and back to windblown sand dunes. Early Jurassic rocks form the Vermillion (Wingate/Moenave and Kayenta Formations) and White Cliffs (Navajo Sandstone) of the Grand Staircase. Though generally void of fossils, these rocks occasionally exhibit the fossilized tracks of reptiles including small to medium sized dinosaurs.

The middle Jurassic is represented by the Carmel Formation. It is composed of color banded layers of sandstone, limestone, calcareous shale, siltstone, gypsum, and mudstone. They were deposited in and near the southern edge of a shallow sea that advanced into the area from the north. Limestones contain marine fossils of mollusks, brachiopods, crinoids, coral and algae. Desert sand dunes of the Entrada Formation formed on top of the Carmel Formation as the sea retreated to the north. Another period of erosion occurred before the Late Jurassic Morrison Formation (famous for its dinosaur fossils) was deposited by in lakes and east flowing streams. The Morrison is found on the east side of the county at the foot of the Straight Cliff and southeast of the Kaiparowits Plateau. Middle and Late Jurassic sedimentary formations along with periods of erosion span time from about 180 to 144 million years ago. Early Cretaceous erosion and non-deposition represent a period of 45 million years.

During Late Cretaceous time, mountains rose to the west and provided sediments for streams flowing east into a great continental sea. This sea covered most of the interior continental United States from Alaska to the Gulf of Mexico. As sediments accumulated, the area

along the shore sagged. The shoreline moved back and forth from east to west creating a series of alternating terrestrial-marine deposits covering over 30 million years at the end of the Cretaceous Period. The Dakota Formation was deposited on remnants of either Morrison (east) or Entrada (west) and is a mix of stream sediments and near-shore marine deposits. The Dakota was covered by marine clays of Tropic Shale. Deposition continued, becoming more terrestrial through time, resulting in the Straight Cliffs Formation, the Wahweap Formation, and the Kaiparowits Formation. These formations are seen on and around the Kaiparowits Plateau and form the Gray Cliffs of the Grand Staircase.

The thickness, continuity and broad temporal distribution of the Kaiparowits Plateau's stratigraphy provide opportunities to study the paleontology of the late Cretaceous Era. Extremely significant fossils, including marine and brackish water mollusks, turtles, crocodilians, lizards, dinosaurs, fishes, and mammals, have been recovered from the Dakota, Tropic Shale and Wahweap Formations, and the Tibbet Canyon, Smoky Hollow and John Henry members of the Straight Cliffs Formation. Within the county, these formations have produced the only evidence in our hemisphere of terrestrial vertebrate fauna, including mammals, of the Cenomanian-Santonian ages. This sequence of rocks, including the overlying Wahweap and Kaiparowits Formations, contain one of the best and most continuous records of Late Cretaceous terrestrial life in the world.

The Canaan Peak Formation straddles the boundary between the Cretaceous and Tertiary Periods. The beginning of the Tertiary Period marked the end of marine environments in or near the monument. The dinosaurs had become extinct and radical changes began to occur in the geology of the county. Several large lakes occupied an area from southwestern Wyoming to southwestern Utah. The Claron Formation, seen as the Pink Cliffs at Bryce Canyon, was deposited at this time. The Tertiary Period lasted about 64 million years during which time Utah experienced uplifts, folding, faulting, and volcanism. Uplift of the Colorado Plateau and Utah in general over the last 15 million years activated the erosion cycle which uncovered geologic formations dating back 270 million years and created the topography and scenery we now see in the county. Quaternary sediments (younger than 1.6 million years) also occur in the county and have a potential for Pleistocene fossils.