BEAVER COUNTY, UTAH
RESOURCE MANAGEMENT PLAN

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INTRODUCTION

Plan Process and Methodology

The purpose of this County Resource Management Plan ("CRMP") is to amend the Beaver County General Plan and to address issues related to public and private lands. It is intended, to the maximum extent allowed by law, to establish criteria, policies, and requirements to be followed in the various state and federal land planning processes and to provide consistency across agency boundaries while preserving and enhancing Beaver County's custom, culture, resources, and socioeconomic base.

The information used as the basis for this plan was obtained from various state and federal agencies, experts in various natural resources, public participation, and independent research. After this plan was completed and recommended, the Beaver County Planning and Zoning Commission held a public hearing on the proposed plan on May 16, 2017. The Beaver County Planning and Zoning Commission then forwarded the plan to the Beaver County Commissioners. On June 6, 2017, the Beaver County Commissioners held another public hearing and formally adopted the plan by ordinance 2017-03.

County History and Culture

Natural resources in Beaver County have been explored and documented as far back as the Dominguez-Escalante Expedition in the late 18th Century. Archaeological discoveries have chronicled Beaver County's history going back as far as 10,000 years, showing that Beaver County has been home to a variety of peoples and civilizations who utilized the abundant natural resources to survive. Beaver County's modern day inhabitants still rely heavily on these same resources in order to sustain a high quality of life. As such, it's indisputable that Beaver County's culture and history is directly and inextricably tied to its natural resources.

The earliest settlers of Beaver County came from Parowan in April 1856. The settlers built log cabins along the Beaver River, utilizing the river to help cultivate a successful agricultural system. These settlers brought with them the livestock they relied on for food, labor and transportation. Parley P. Pratt, a Mormon leader, passing through the area six years earlier, wrote: "This is an excellent place for an extensive settlement." The grassy meadows and sloughs flanking the Beaver River would provide prime grazing and hay for their livestock. The mountains and desert valleys would provide additional grazing forage to support the agriculture-based settlement. By the 1880's, large numbers of cattle and sheep were being raised in Beaver County, as it became a center for livestock production in southwestern Utah. As the settlement grew, a town was established in the spring of 1858. The town and the river were named for the many beaver dams found here. Agriculture, including high quality grazing lands, still plays a prominent role in Beaver County's culture and economy. A variety of crops are produced for

local and outside consumption. Although the dairy industry's impact on the local economy is not as great as it has been in the past, the dairy industry is deeply rooted in Beaver County's history and culture and existing dairy operations provide jobs to many of the County's citizens.

In addition to agriculture, mineral explorers discovered lead in Beaver County in 1852. In 1858, recovery mines were built. In 1859, under the direction of Brigham Young, Isaac Grundy, Jesse Smith, Tarlton Lewis and Wm. Barton and others were sent to establish mining operations. The mine was originally called the Spanish Mine, was later renamed the Rollins Mine, and is now known as the Lincoln Mine. This mine was one of the first documented mines in Utah. That same year, the miners established a city near the mine, aptly named Minersville. Developers attempted to use lead mined from the Lincoln Mine to produce bullets, but an unidentified element in the material made it impossible. It was later discovered that this material was silver. This discovery would make Beaver County famous.

In 1875, two prospectors discovered a silver rich ore body and immediately staked a claim. After selling the claim to a bankrupt financier who promoted the mine venture, silver production exploded and the boomtown of Frisco sprung up and became one of the wildest mining camps in the west. The history of Frisco and the Horn Silver Mine is one of the most drama filled and riveting tales of the old west, literally reading like pulp fiction. By 1879, the Horn Silver was being called the richest silver mine in the world. By 1885, the Horn Silver Mine had shipped some 25,000 tons of ore and produced an estimated $60,000,000 in zinc, copper, lead, silver and gold.

The Cactus Mine, located on the west side of the San Francisco Mountains, was discovered in 1870 and became one of the earliest mines in the district. Mining operations struggled for thirty years until 1900, when Samuel Newhouse bought the property. A wealthy entrepreneur, Newhouse had formerly financed the copper mine at Bingham Canyon and understood the mining business. With enough capital to make the mine productive, business began to boom. Initially, the mining camp was known as Tent Town for its temporary dwellings, but by 1905, the eponymous town of Newhouse had sprung up with many permanent structures, including a restaurant, library, livery stable, hospital, stores, hotel, opera house and dance hall. Samuel Newhouse kept tight control over his company town that was much smaller and quieter than the nearby town of Frisco, with public drunkenness strictly forbidden.

Shauntie was another mining camp that developed into a bustling boomtown. One of at least a half dozen camps in the Star District around 1870, Shauntie was the only camp with fresh water and quickly became the center for smelting in the district. In 1876 the town was completely destroyed by fire, but by 1877, only a year later over 40 buildings had been erected, including saloons, a hotel and a post office.

Shenendoah, Fortuna and many other mining camps developed into towns of various sizes in the heyday of mining in the county. These mining towns are abandoned now, but they demonstrate the importance of the mining industry in the history of early Beaver County. All this activity attests to the value of natural resource development and the socio-economic impacts from the mining industry. It was because of the mining industry that the telegraph and railroad were brought to southern Utah.

Energy development and natural resource extraction continue to be key to Beaver County's economy, supporting a multitude of local jobs, industries and activities. The entire region is a mineralogist's paradise, with opportunities to collect over 123 recognized mineral specimens, some of which are exclusively unique to this area. Beaver County is certainly a geological crossroad and is incomparable in its diversity of mineralogic, tectonic and stratigraphic activity.

County Resources and Character

Beaver County is 90 miles in length from east to west and 30 miles wide north to south, encompassing approximately 2,568 square miles. It is crossed by a number of short and mineral rich mountain ranges oriented generally on a north-south axis. The Beaver River originates in the County with which it shares a name and flows in a north-westerly direction eventually disappearing into Millard County at the southern end of the Great Basin drainage area.

The average growing season is 106 days and the mean temperature is 47 degrees Fahrenheit. Generally, the climate is temperate and not subject to extreme heat or cold. There are four well-defined seasons. The sun shines an average of 320 days each year. Precipitation averages 11.65 inches annually in Beaver Valley and 8.5 inches in the Milford area. Snowfall and wells provide additional water in what is otherwise a dry region. In Beaver Valley, June 10 generally marks the end of late frosts, while September 25 is generally the first of the early frosts. The Minersville area is protected from early and late frosts by breezes from Minersville Canyon to the east, providing a longer growing season. The Minersville area experiences late frosts before May 20, while early frosts occur after October 5. These conditions make Beaver County highly suitable for agriculture and grazing.

Overview of Main Concerns

In adopting this CRMP, Beaver County seeks to address two main concerns. First, Beaver County has found that it has not been fully engaged in coordination with the state and federal land management agencies in the planning and decision making processes that have direct and substantial effects on its citizens. Beaver County adopts this plan in order to set forth clear policies and guidelines that must be recognized by land management agencies when engaging in

planning and land management decision-making. Second, Beaver County has found that many land use plans and decisions are highly politicized, heavily influenced by special interest groups and often mischaracterize the realities of public land usage in Beaver County. Land management agencies have not fully accounted for the social and economic impacts that their planning and management decisions have on Beaver County and have made little or no effort to mitigate those undesirable impacts. With this plan, Beaver County seeks to ensure that the customs, culture, history, and economy of Beaver County is protected in planning and land use decisions moving forward. These concerns are addressed in greater detail throughout this CRMP.

LEGAL BASIS FOR COUNTY RESOURCE MANAGEMENT PLANNING

The authority for Beaver County, and all other counties in the State of Utah, to implement plans for the management of natural resources comes directly from state law. Utah Code § 17-27a-401(1) provides that "each county shall prepare and adopt a comprehensive, long-range general plan," which addresses, among other concerns: (a) present and future needs of the county; and (b) the growth and development of all or any part of the land within the unincorporated portions of the county. The law gives the county the authority to define the local customs, local culture, and the components necessary for the county's economic stability. *See* Utah Code §17-27a-401(4).

The statute also states that the plan shall serve "as a basis for communicating and coordinating with the federal government on land and resource management issues." Utah Code § 17-27a-401. In furtherance of this directive, "[t]he general plan shall contain a resource management plan for the public lands, as defined in Section 63L-6-102, within the county." Utah Code § 17-27a-401(3)(a). The legislature identified resources, programs, and policies that must be addressed within the resource management plan. *See* Utah Code § 17-27a-401(3)(b)(i)-(xxviii). Counties may obtain access to certain data gathered and held by state agencies that may be of assistance in the county's planning process. *See* Utah Code § 17-27a-402.

While the legislature recognized the county's important role in managing land and resources within its borders, the authority to plan does not give the county any direct jurisdiction over lands owned by the state or federal governments. *See* Utah Code §17-27a-304.

Federally owned land in Utah is primarily managed through the Bureau of Land Management ("BLM") and the United States Forest Service ("USFS"). Both the BLM and the USFS are required to engage in land and natural resource planning, following the procedures outlined in federal statutes and regulations. These plans directly affect the use and development of natural resources within Beaver County.

The BLM is required, pursuant to the Federal Land Policy and Management Act of 1976 ("FLPMA"), to "develop, maintain, and … revise land use plan which provide by tracts or areas for the use of [BLM] lands." 43 U.S.C. § 1712(a). The USFS is also required to do the same for "land and resource management plans for units of the [USFS]." 16 U.S.C. § 1604(a).

The BLM has a statutory mandate to coordinate their land and natural resource activities with the land use planning and management programs of State and local governments where the lands affected by those activities are located. 43 U.S.C. § 1712(c)(9). To fulfill this obligation,

the BLM must keep apprised of State and local land use plans, provide for meaningful public involvement of State and local government officials, and assist in resolving inconsistencies with federal and State and local plans. *Id*. BLM land use plans "***shall be consistent with State and local plans to the maximum extent [the State and local plans are] consistent with Federal law and the purposes of [FLPMA].***" *Id*. (emphasis added). So long as State and local plans are consistent with the Federal laws and regulations applicable to federal lands, BLM land use plans "will adhere to the terms, conditions, and decisions of officially approved and adopted resource related plans" of State and local governments. 43 C.F.R. § 1610.3-1.

The USFS also has a statutory mandate within the National Forest Management Act (NFMA) of 1976, to coordinate their land and natural resource plans with the corresponding plans of State and local governments. *See* 16 U.S.C. § 1604(a). The USFS "must provide opportunities for the coordination of Forest Service planning efforts . . ." 36 C.F.R. 219.9. The USFS is required to "discuss any inconsistency" between land use and natural resource plans and "any approved State or local plan and laws." If any inconsistencies exist, the plan must "describe the extent to the [USFS] would reconcile its proposed action with the plan or law." 40 C.F.R. § 1506.2(d).

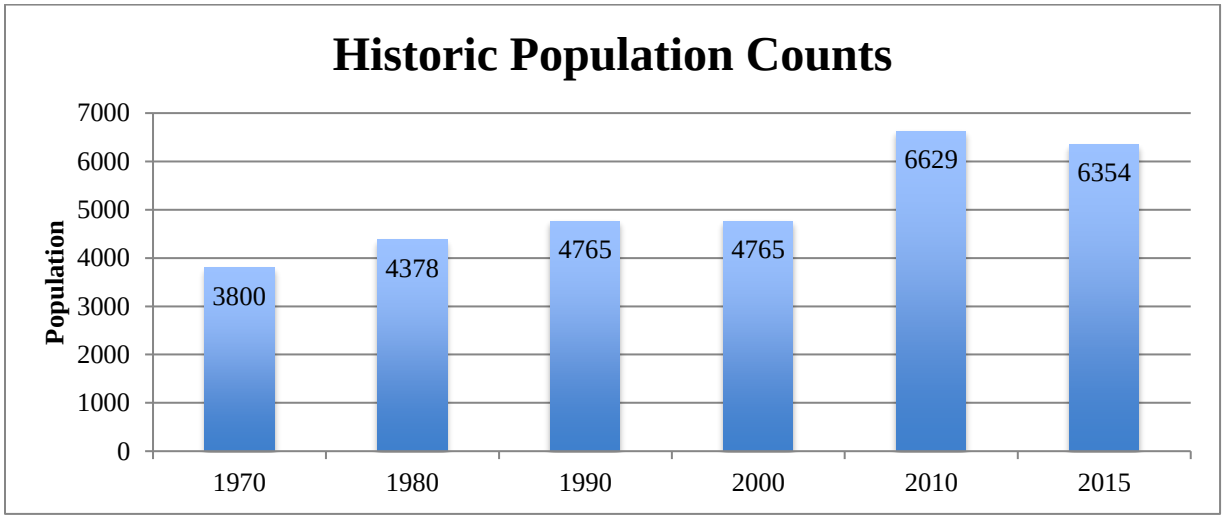
SOCIAL-ECONOMIC LINKAGES

Nearly 80% of the land in Beaver County is owned or managed by the federal government. The lack of private land ownership means that the social and economic viability of Beaver County is dependent on the access and use of public land. All public land use decisions have a substantial impact on the citizens of Beaver County. Beaver County's social and economic connection to public lands is evidenced in the following indicators:

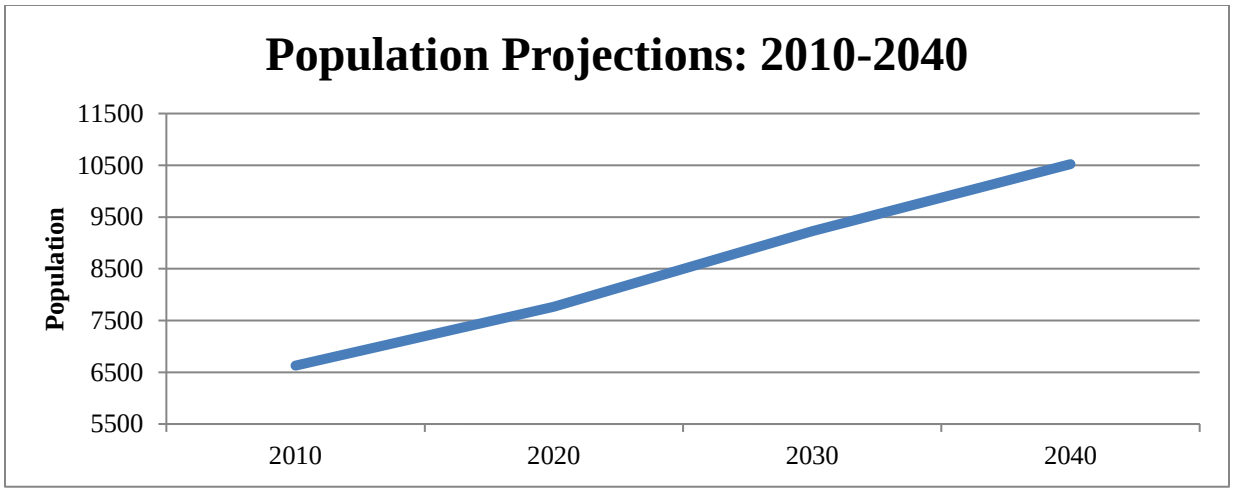
Demographics

1. Population Change

While the population of Beaver County increased by 139% between 2000 and 2010, the overall population decreased by 4% between 2010 and 2015. However, Beaver County is projected to undergo steady growth over the next few decades.

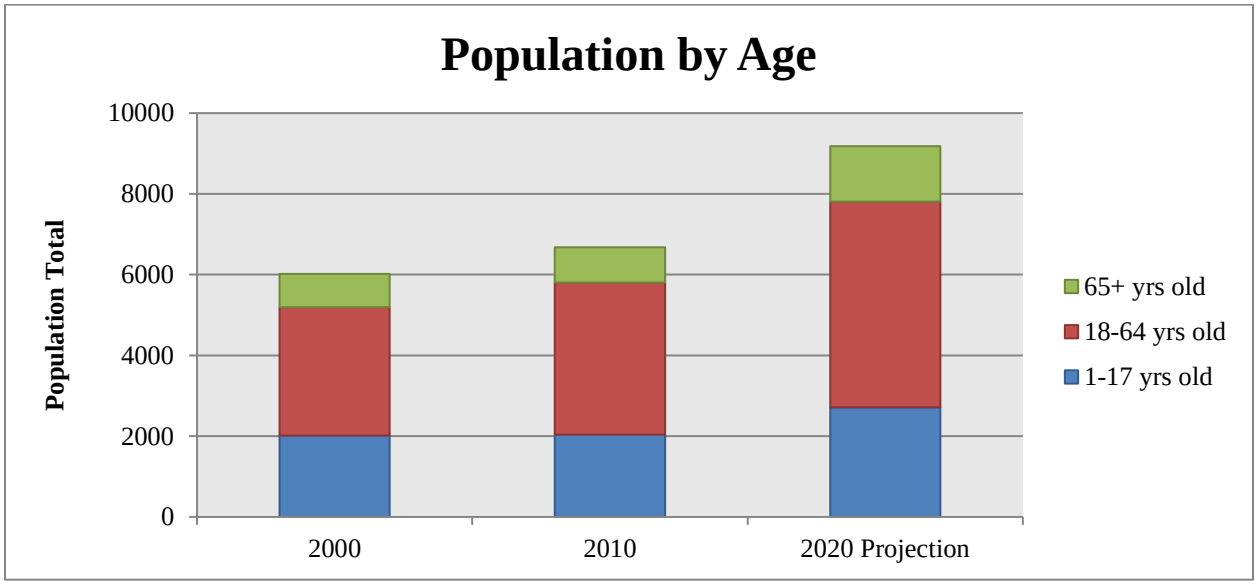


Source: U.S. Census Bureau



Source: U.S. Census Bureau

2. Age Groups



Source: Bureau of Economic and Business Research

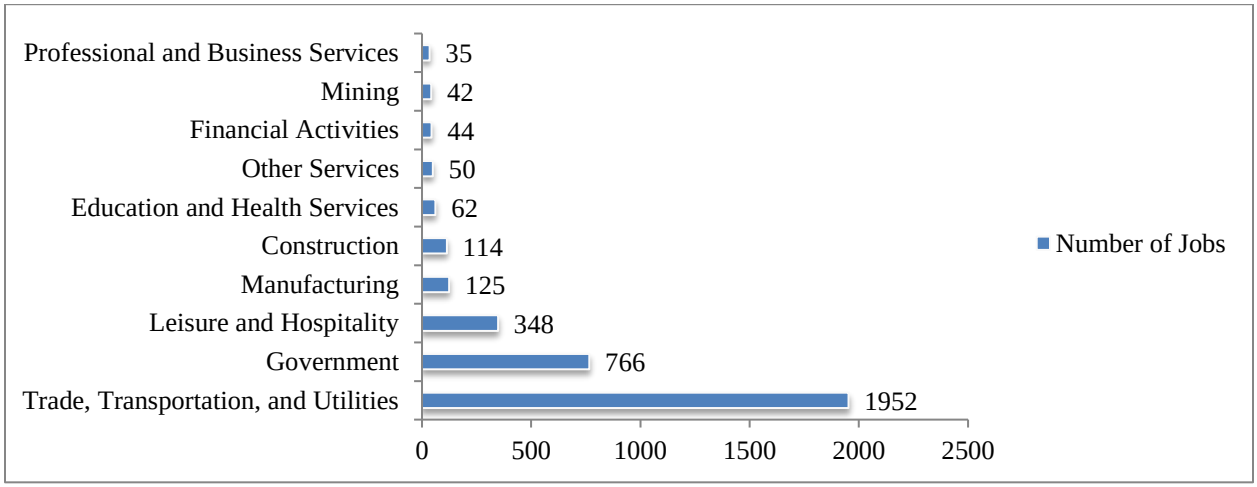
3. Most Populous Cities

Most Populous Cities in Beaver County	
City/Town	**Population**
Beaver	3,112
Milford	1,409
Minersville	907

Source: U.S. Census Bureau, 2010 Census

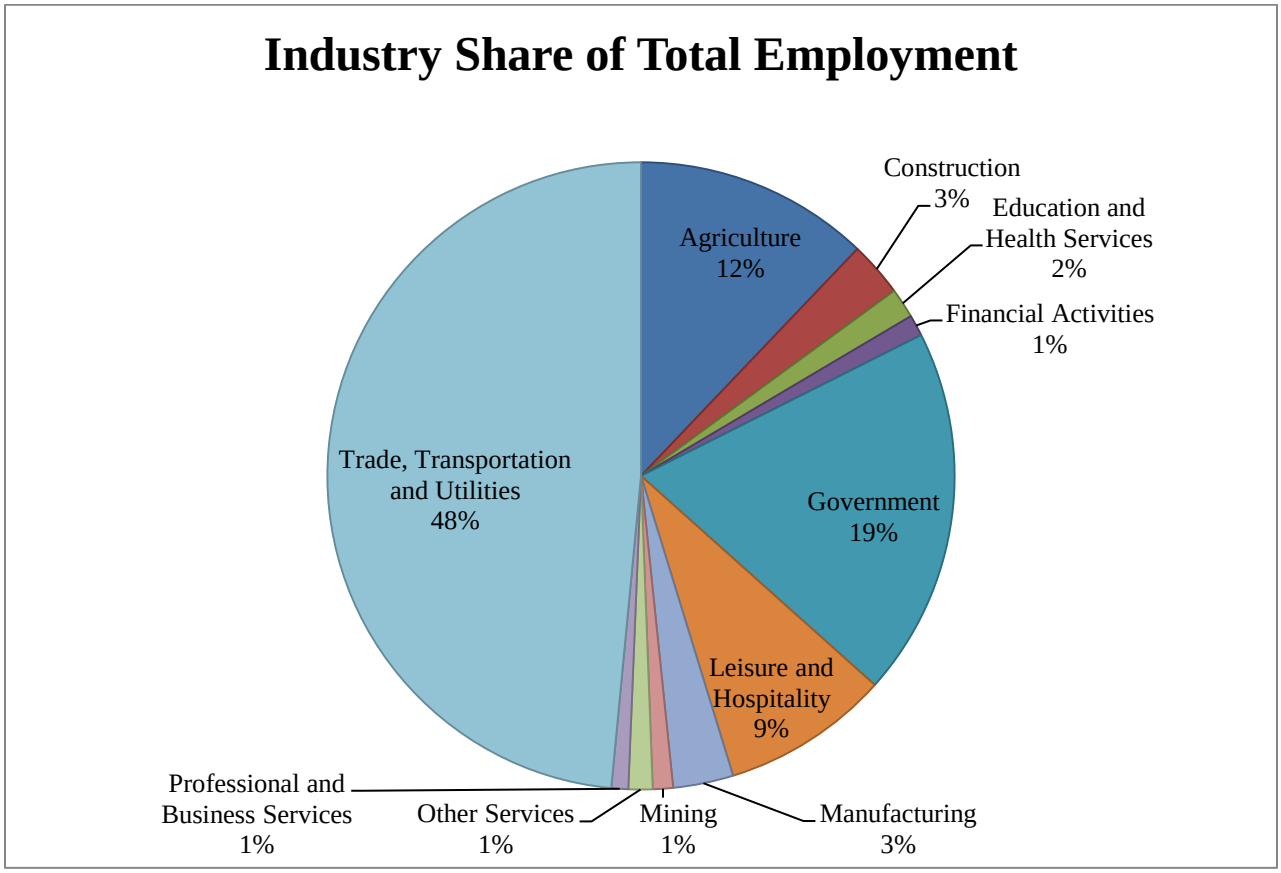
Employment

1. Nonagricultural Employment



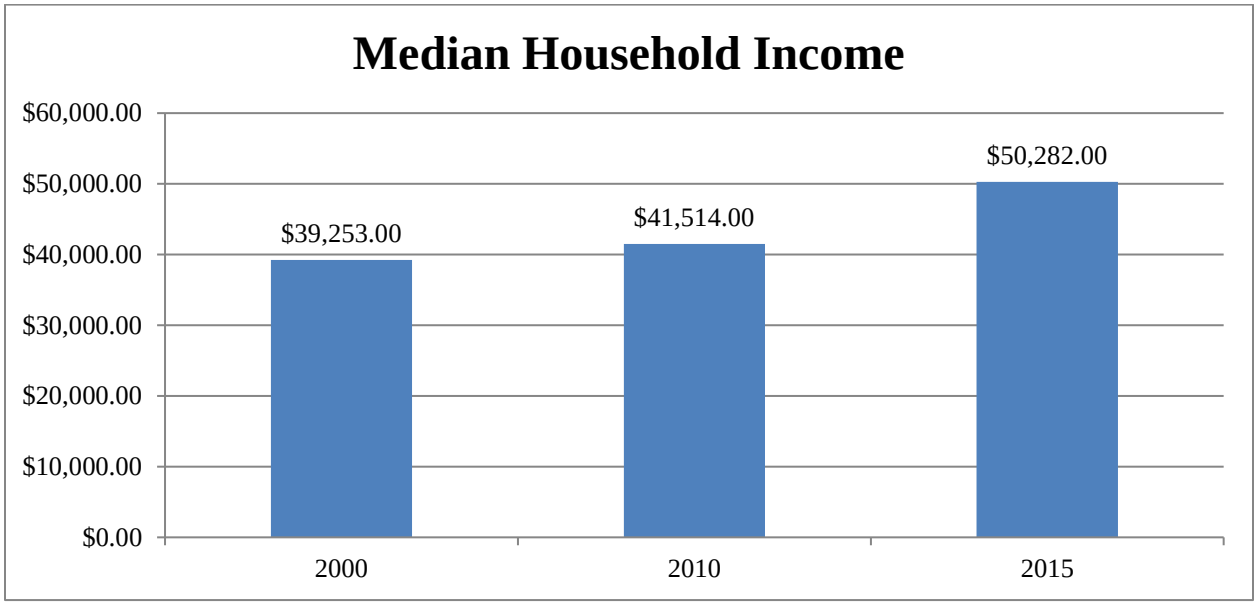
Source: Utah Department of Workforce Services

2. Industry Share of Total Employment



Source: Utah Department of Workforce Services

3. Median Household Income



Sources: U.S. Census Bureau

CURRENT RESOURCE MANAGEMENT SETTING

Beaver County's heritage is directly tied to the natural resources found within its borders, as set forth in the Culture and History section above. Further, given the limited private land ownership in Beaver County, the county's social and economic reliance on these resources is just as important today as it was when the county was first settled. As such, the current management of public lands in Beaver County is of great concern to its citizenship.

Federal and state agencies that manage public lands largely ignore Beaver County's input and desires in the development of land use plans and decisions. The invitation to participate in federal agency planning is mostly symbolic and typically comes after much of the planning and development stages are complete. Beaver County is frequently invited to offer comments on agency actions, but commenting on the action does not equate to meaningful participation.

Issues of Resource Management Conflict and Concern and Need for Change

1. **Partnerships:** Beaver County has found that planning and management agencies have not taken sufficient steps to cultivate a meaningful cooperative partnership with Beaver County and at times do not inform Beaver County of the initiation of planning and decision making processes. A lack of communication and sharing of information has impaired the ability to establish effective partnerships.

2. **Planning Timelines:** When Beaver County is provided with an opportunity to participate, it comes at a time when the majority of the planning work has been conducted or decisions have been made. Often, Beaver County has different policies and unique perspectives on particular issues not possessed by the agency. Without a meaningful opportunity to share these policies and perspectives, plans and management decisions mischaracterize land and resources conditions in Beaver County and implement actions that have a profoundly negative impact on the county.

3. **Direct Impacts:** While Beaver County recognizes that public lands belong to the public as a whole, planning and management agencies have not given enough consideration to the direct and substantial impact their planning and management decisions have on the citizens of Beaver County. This results in plans and decisions that are often times harmful to the local economy and culture of the County.

4. **Local Economic Impact:** Planning and management agencies have not considered the impact of specific plans and decisions on the economy of Beaver County to the extent necessary to maintain Beaver County's social and economic viability. Agencies should

fully address the social and economic impacts of any agency action on Beaver County. Plans and management decisions should mitigate any negative impacts of the action on Beaver County. The plan or decision should explicitly describe those mitigation measures.

5. **Planning Resources:** Planning and management agencies have failed to keep Beaver County adequately involved regarding the initiation of planning and decision making activities. Beaver County would like these agencies to take a more active role in fostering communication with the County during all planning and decision-making processes in consideration of Beaver County's limited resources.

DESIRED RESOURCE MANAGEMENT SETTING

Meaningful involvement in public land planning, decisions, and management is a priority for Beaver County. This is reflected in the following policy statements, goals, objectives, and monitoring procedures:

1. **Partnerships:** Beaver County will become a formal partner with management agencies supported by cooperative agreements.

2. **Planning Timelines:** Cooperative agreements with management agencies will be contingent on the inclusion of language that guarantees that Beaver County will have meaningful involvement through the entirety of planning and decision making processes, including the scoping process.

3. **Direct Impacts:** The cooperative agreements will require that the policies and specific input of Beaver County be given weighted and regular consideration in making each planning and management decision.

4. **Local Economic Impact:** Beaver County will only support public land plans and decisions that result in a sustainable net benefit to the local economy. Cooperative agreements with management agencies will require agencies to thoroughly analyze potential impacts to Beaver County's economy.

5. **Planning Resources:** Beaver County has limited resources that can be dedicated to protecting their rights to participate in land use planning and management decisions. Management agencies should take a more active role in communicating with Beaver County at each stage of the planning or decision-making process. Beaver County will designate an individual or committee as the point of contact for each agency. That individual or entity will report to the County Commission on the involvement of Beaver County in planning and management decisions. If necessary, this individual or committee will recommend changes to the CRMP's desired management setting including policies, goals and objectives.

1. LAND USE

I. FINDINGS

Locally elected governments and elected officials have far ranging and important responsibilities to their constituents, described by state statutes as protecting their "health, safety and welfare." That responsibility includes interacting with federal agencies on all issues impacting the local community, County or conservation district(s). Adoption of "local land use plans" or "resource management plans" set local policy regarding the use and management of federal lands and the adoption of federal policies, programs, and other types of federal decision-making and give local governments a stronger voice in coordinating with federal agencies. These local land use policies are not zoning policies and do not regulate the use of private lands. This plan is intended to protect the local citizens' use of federal and public lands and resources.

Federal agencies and departments are mandated by various federal statutes to engage local governments in federal decision-making that will impact the local land use, management of natural resources, the citizens, and the local tax base. Federal agency consideration of a local land use plans, resource management plans, and other "officially adopted policy" plays a key role in the success of coordination of local, state and federal entities and with consistency review under the National Environmental Policy Act ("NEPA").

These land use or resource plans are separate and different from county "general plans" which counties use to determine zoning, public services and facilities, transportation, etc. General plans apply to land that is largely within the county's jurisdiction and are based upon specific state authorization. By contrast, many rural counties officially adopt a separate land use plan or natural resource management plan that contains policies relating to surrounding public lands and reflects the local government's position on how to best manage those lands. These local plans also describe the local economy or tax base as well as local "customs and cultures" which federal agencies are required to consider and reconcile any inconsistencies between the local plans and any federal land use plans.

Rural counties' socioeconomic well-being, health, safety, and culture can be strongly impacted by the management of the surrounding federal or public lands. Moreover, courts have clearly recognized that county governments are generally required by state law to use their authority to protect the economic, social, and general well-being of the people and resources that are within their jurisdictions. The development of this land use plan is to ensure the local socioeconomic well-being, the culture and customs of the constituents, and natural resource health are considered in federal decisions.

Statutory Requirements for Federal Agencies

The National Environmental Policy Act (NEPA)

NEPA applies to "every major Federal action significantly affecting the quality of the human environment[.]" *See* 42 U.S.C. § 4332(2)(C). When the federal government spends any amount of money for almost any action, NEPA compliance is required. There are several ways local governments participate in the NEPA process. First, as part of a federal agency's "consistency review" process in an EIS, any inconsistencies with local plans must be addressed and described. The EIS should also describe how the federal agency would reconcile its proposed action with the local plan. *See* 40 C.F.R. §§ 1506.2(d). Second, local governments are invited to participate in the NEPA process as "cooperating agencies" due to their "special expertise." A local government's special expertise is defined as the authority granted under state statute to protect the health, safety and welfare of its citizens.

Federal Land Policy and Management Act (FLPMA)

FLPMA, which governs the BLM, provides detailed requirements for "coordination" and "consistency" with local land use plans. FLPMA states:

> *To the extent consistent with laws governing the administration of the public lands, coordinate the inventory, planning and management activities for such lands with the land use planning and management programs of other Federal departments and agencies of the State and local governments within which the lands are located . . .*
>
> 43 U.S.C. § 1712 (emphasis added).

FLPMA further requires, to the extent practical, the BLM must stay apprised of local land use plans, assure that local plans germane to the development of BLM land use plans are given consideration, and to the extent practical, BLM must assist in resolving inconsistencies between local and BLM land use plans. The BLM must also provide for meaningful involvement of local governments in the development of BLM land use programs, regulations, and decisions. Additionally, FLPMA requires BLM land use plans be consistent with local land use plans, provided that achieving consistency does not result in violating federal law.

Utah Code §§ 63J-8-103 and 63L-8-104 define state participation in managing public lands and require consistency between federal and state plans. Section 63J-8-103 states:

> 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 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 Forest Service coordinate planning efforts with those of state and local government, the state [and Beaver County] adopts the following policy for the management of the subject lands[.]

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.

National Forest Management Act (NFMA)

NFMA governs the USFS, and requires the agency to "coordinate" with local land use plans:

> *[T]he Secretary of Agriculture shall develop, maintain, and, as appropriate, revise land and resource management plans for units of the National Forest System, coordinated with the land and resource management planning processes of State and local governments and other Federal agencies. . .*
>
> 16 U.S.C. § 1604(a) (emphasis added).

The fact that the USFS is directed to "coordinate" with local governments implies, by its plain meaning, that the USFS must engage in a process that involves more than simply "considering" the plans and policies of local governments; it must attempt to achieve compatibility between USFS plans and local land use plans.

Governor's Consistency Review Process

State Governors are entitled to a separate consistency review of BLM land use plans, revisions, and amendments. 43 C.F.R. § 1610.3-2 provides an opportunity for the Governor to review all proposed plans to identify any inconsistencies with State or local plans. If the

Governor's comments result in changes to the plan, the public should be re-engaged in the process.

Federal Data Quality Act

To the greatest extent possible, data should drive all land use planning decisions. The Federal Data Quality Act ("FDQA") provides policy and procedural guidance to federal agencies to ensure and maximize the "quality, objectivity, utility, and integrity" of information disseminated by federal agencies. As required by OMB guidelines, all federal agencies producing information, or "data", must meet basic quality standards, including influential scientific information representing the views of the agency cannot be disseminated until it has been "peer reviewed" by qualified specialists.

Federal agency Resource Management Plans ("RMPs") form the basis for every action and approved use on the public lands. The BLM, Forest Service and other agencies prepare RMPs for areas of public lands, called planning areas, which may be a local or sub-regional jurisdiction. Planning emphasizes a collaborative environment in which local, state, and tribal governments, the public, user groups, and private industry work with \federal agencies to identify appropriate uses of the public lands. Plans are periodically revised as changing conditions and resource demands require.

RMPs are used by land management agencies to accomplish the following:

a. Allocate resources and determine appropriate uses for the public lands;
b. Develop a strategy to manage and protect resources; and
c. Establish systems to monitor and evaluate the status of resources and effectiveness of management practices over time.

Beaver County has established an ongoing planning process to ensure that federal RMPs remain consistent with applicable laws, regulations, orders, and policies. In addition, Beaver County demands that federal plans be consistent, to the maximum extent allowed by law, with this CRMP. This process will involve cooperative assessment, decision-making, implementation, monitoring, and evaluation efforts. There will also be ongoing adjustment through maintenance, amendment, and revision. This process allows for continued refinement to respond to new issues and ever-changing circumstances.

Beaver County is 90 miles in length from east to west and 30 miles wide from north to south, with an area of 2,568 square miles. Beaver County land ownership is 77% Federal, 12.6% Private, and 10.1% State Trust Lands. Land use is 0.4% residential, 0.25% commercial, and 3.5% agricultural. Cultivated cropland accounts for approximately 32,000 acres or 1.9% of the land in the county. Much of the federal land is used for recreation, grazing, wildlife habitat,

timber, mining and energy development. Private land is primarily used for residential neighborhoods, community developments, agriculture and commercial business.

For approximately 160 years, Beaver County's residents have relied on the use of public lands as part of their livelihood and heritage. Many residents still derive their living in some degree from the natural resources obtained from public land or the use of those lands. These lands and their resources cannot be separated from the custom, culture, quality of life and economic well-being of Beaver County. Agriculture, livestock grazing, mining, recreation, tourism and timber industries are the lifeblood of Beaver County and all require access to and the use of public lands.

II. OBJECTIVES

Beaver County's objectives with regard to land use are as follows:

1. To ensure that federal lands are managed for multiple uses as mandated in the Multiple Use Sustained Yield Act and other federal law. This approach places an emphasis on striking a balance in land use planning among the competing values of recreation, grazing, timber, watershed protection, fish and wildlife, mining and energy. Efforts should be made to protect critical wildlife habitat, watersheds, scenery, and important natural resources. Efforts should also be made to allow for greater utilization of the land in the areas of recreation, grazing, timber, mining and energy development;

2. To encourage the development of new facilities, paths, trails and other recreational features that encourage recreational activity on public lands. Where appropriate, the use and installation of signs and interpretive devices should be made available. Roads and trails are necessary for recreation and emergency services and should be left open; and

3. To ensure the wise use, conservation and protection of public lands and their resources, including well-planned management strategies.

III. POLICIES AND GUIDELINES

Private Property Rights

1. It is the policy of Beaver County, consistent with Section 63J-8-104(j) of the Utah Code, that federal land management agencies shall manage lands under their jurisdiction so as to not interfere with the property rights of private landowners as follows:

a. Beaver County recognizes that there are parcels of private fee-title land located adjacent to or surrounded by federal lands;

b. Federal land management policies and standards shall 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 County zoning and land use laws; and

c. A private landowner, or a guest or client of a private landowner, should not be denied the right of motorized access to the landowner's property.

Public Lands

2. Public lands shall be managed for multiple uses, sustained yield, the prevention of waste of natural resources, and to protect the health, safety and welfare of the citizens of the county.

3. Public lands shall be properly managed for fish, wildlife, livestock production, timber harvest, recreation, energy production, mineral extraction and the preservation of natural, scenic, scientific and historical values.

4. State and federal agencies shall develop and implement management plans and decisions that facilitate land and resource use allocation that supports the specific plans, programs and policies of state and local governments.

5. Management plans shall be designed to produce and provide the forage, food, fiber and minerals necessary to meet future economic needs and community growth and expansion.

6. Management plans shall also meet the recreation needs of the citizens of Beaver County and its visitors. Opportunities for new facilities, paths and trails shall be encouraged.

7. Local federal land agencies shall provide to Beaver County, on a regular basis, a list of yearly activities and plans scheduled to occur within the county.

8. Beaver County shall have the opportunity for meaningful involvement in public land planning before the general public and to have meaningful involvement prior to the selection of a preferred alternative.

9. Counties may request that monitoring or studies occur to determine the effects that land and resource management plans have on the local economy. Counties are allowed to define what constitutes "community or economic stability."

10. All management plans and decisions must insure that special designations do not influence the use of resources on lands not listed or designated.

11. Beaver County opposes the imposition of areas of critical environmental concern ("ACEC's"), National Conservation Areas, or Visual Resource Management ("VRM") classifications as substitutes for wilderness inventory units, or as means to displace valid surface occupying multiple use activities.

12. Restrictions placed on any resource must be based on trend analysis and only imposed after a complete documentation of that analysis.

13. Lands designated open for specific uses should be available on a timely basis. If such use is not covered in a resource management plan, then it will be analyzed in a separate document or by amendment to the RMP. Extended delays or no action will not be used as a method to accomplish management goals.

14. Beaver County opposes the use of a buffer zone management philosophy that dictates land use practices and influences decisions beyond the scope and boundaries of the specific land use designation or management prescription. 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.

15. The subject lands managed by the BLM are to be managed to the basic standard of preventing 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 NEPA.

16. 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.

17. The BLM and the USFS 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 NEPA, 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 (e)(1); and

c. Avoiding and eliminating all forms of planning that parallel or duplicate the planning processes subject to Subsection (e)(1)."

18. The BLM and USFS 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 preserve traditional multiple use and sustained yield management on the subject lands to:

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

b. Support valid existing transportation, mineral, and grazing privileges in the subject lands at the highest reasonably sustainable levels;

c. 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;

d. 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;

e. 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);

f. Protect against adverse effects to historic properties, as defined by 36 C.F.R. Sec. 800;

g. Meet the needs of community economic growth and development;

h. Provide for the protection of existing water rights and the reasonable development of additional water rights; and

i. Provide for reasonable and responsible development of electrical transmission, broadband internet, and energy pipeline infrastructure on the subject lands."

2. ENERGY, MINING, MINERAL & GEOLOGICAL RESOURCES

2.1 Mining, Mineral & Geological Resources

This section describes the major mineral occurrences in Beaver County, the general locations of known deposits, the quality and/or size of the mineral deposit and the potential for future development of these resources. The potential for any development is based on current estimates of market value, demand, and economic viability and is subject to change.

I. FINDINGS

Beaver County has a responsibility to its citizens to protect and expand the tax base and increase economic activity in order to provide a good standard of living, to provide a quality environment for the enjoyment and use of its citizens (including protection of local values and lifestyles), to represent the interests of its residents in coordinating with other local, state and federal agencies in planning, management and regulatory activities. In fulfilling that responsibility, it is important that the County's mineral and geological resources are fully utilized.

Mineral resources provide the raw materials required to manufacture many of the products that make modern society possible. Minerals are the source of materials used to construct buildings, build roads, make cars, generate electricity, develop technology, and provide countless consumer goods. Mineral resources require varying levels of processing and refining that are often dictated by end use. As society changes and advances, additional mineral resources will be required to fuel those changes. For instance, a transition to renewable energy will require substantial additional production of copper, lithium, cobalt, rare earth elements, critical minerals, and other resources.

Mining in Utah is primarily regulated by the Utah Division of Oil, Gas and Mining (DOGM). Their mission is to regulate the exploration and development of coal and non-coal minerals in a manner which encourages responsible reclamation and development, protects correlative rights, prevents waste, and protects human health and safety, the environment and the interests of the state. Under the Mined Land Reclamation Act of 1975, DOGM is responsible for the prevention of conditions which are detrimental to the general safety and welfare of the citizens of the state of Utah from activities associated with the mining industry. Permitting and inspection/enforcement procedures, initiated by this act, ensure proper mine operation and the reclamation of affected lands. This act also makes it illegal for mines to be abandoned without reclamation.

Mineral resources are divided into 4 defined categories in federal permitting; (1) locatable minerals (e.g., copper, gold, iron, and silver); (2) mineral materials or salable minerals (e.g., sand, gravel, stone and pumice); (3) solid leasable minerals (e.g., coal, phosphate, sodium and potassium); and (4) fluid minerals (e.g., oil and gas and geothermal resources).

1. Locatable Minerals

Locatable minerals in Beaver County principally include gold, silver, copper, lead, zinc, and iron, and several industrial minerals and gemstones. Uncommon varieties of sand, gravel, limestone, marble and other building stones may also fall under the category of locatable minerals.

The BLM manages the Mining Law program on the federal mineral estate including authorizing and permitting mineral exploration, mining and reclamation actions. Areas with high potential for locatable mineral development are shown on Map 1.

Locatable mineral exploration and extraction has been a significant and economically important part of the history of Beaver County. The Marysvale-Pioche Mineral belt, one of the three great metallogenic provinces in Utah, covers most of Beaver County. There have been 23 distinct mining districts and at least 4 additional unorganized districts identified in the county that leave a testament to the historic significance of mining and the rich mineral resources found here. The most productive districts have been the San Francisco Mountains, Beaver Lake Mountains, Rocky Range and Star districts, which were substantial producers of lead, silver and copper, with lesser amounts of zinc and gold. The famous Horn Silver Mine, a bonanza-grade lead and silver deposit, and the associated mining town of Frisco was one of the richest known silver deposits of its time.

Beaver County contains the largest known deposit of what is arguably the most rare gemstone in the world, the red variety of beryl. Current mineral exploration and development focuses primarily on copper and gold resources, but there is excellent potential for other base and precious metal resource development.

All locatable mineral exploration and development activities that disturb the surface of a mining claim (or site) on BLM administered land, requires prior acceptance or authorization and the necessary permits which are obtained through the local BLM field office. Additionally, the Utah Division of Oil, Gas and Mining (“DOGM”) regulates the exploration and development of coal, oil and gas, and minerals within the state. State policies, regulations and permitting affect all private and state lands and are applied in conjunction with federal law on federally owned lands. Approximately 80 percent of mining surface disturbances lie on private lands that were patented into private ownership under the patenting provisions of the General Mining Law. Subject to valid existing rights, the patenting provision is currently unavailable due to a Congressional moratorium.

Copper

Utah is the second largest copper producer in the United States, trailing only Arizona. The largest source of copper in the state is the Bingham District in northern Utah. In Beaver County, the largest deposits of copper are associated with Oligocene, calc-alkaline, intrusive centered mining districts northwest of Milford, including the Beaver Lake, Rocky Range, and San Francisco mining districts. The three districts combined have produced more than 3 million tons of ore (both on private and BLM-administered land), yielding 0.88 percent to 1.4 percent copper. Development potential for copper is high, and there are currently two Plans of Operations for copper.

Gemstones

The primary gemstone of interest in the county is red beryl. The only economic deposit of red beryl in the world is mined at the Ruby Violet mine in the southern Wah Wah Mountains. An estimated 60,000 carats of red beryl, 10 percent of which is facetable, has been produced at the site in the last 25 years. There is currently one Plan of Operations and one notice for red beryl and there is high potential for future development.

Although previous large-scale developments have not been realized, small-scale development will continue to occur with larger-scale development certainly possible at the Ruby Violet mine.

Gold and Silver

Utah is the third leading producing state for silver and the fourth leading producing state for gold in the United States. Most of Utah's production occurs in the Bingham, Tintic, and Park City districts. The Escalante and Gold Springs Districts are the leading producers of gold and silver in the district in nearby Iron County. There are currently no Plan of Operations or notices for gold and silver in Beaver County. Most of the historic silver claims have been played out and the gold claims haven't produced as significantly as surrounding districts with most production coming as a byproduct of copper mining. The potential for gold and silver development in the county is low to moderate for gold deposits in the Fortuna and Newton districts and silver in the San Francisco, Star and White Mountain districts.

Iron

Utah ranks fifth in the nation in iron ore production, most of which occurs in nearby Iron County in the Iron Springs mining district, which is the most productive iron district in the western United States. Beaver County has low to moderate potential for iron ore production in the Blue and Wah Wah Mountains.

Kaolinite

Kaolinite is a soft, earthy clay mineral that is generally the product of hydrothermal alteration of rhyolitic rocks. Kaolinite has a wide variety of applications, including medicine, ceramics, food additives, and cosmetics. Kaolinite produced in this area is primarily used in cement.

The primary deposits of kaolinite are at Blawn Mountain and White Mountain. There is one Plan of Operations on BLM-administered land in this area. Development potential at known mines and prospects is high.

Lead and Zinc

Utah is the second largest producer of lead and fourth largest producer of zinc in the Nation. Most of the lead and zinc production in the county occurred in the San Francisco and Star mining districts. Development potential in these districts is low to medium given minimal production of these resources in recent years. There are no notices or Plans of Operations on BLM-administered land in the area.

Uncommon Variety Minerals

Uncommon variety minerals include certain varieties of marble and limestone. Common varieties of marble and limestone are disposed of as salable minerals and are discussed in the *Mineral Materials* section. The BLM determines a variety is uncommon and subject to the General Mining Law case by case based on certain judicially and administratively defined characteristics (BLM 2012g). At present, there are two notices for uncommon variety marble and two Plans of Operations for uncommon variety limestone on BLM-administered land.

Perlite

Perlite, a form of lightweight aggregate, is volcanic in origin and has a variety of industrial and domestic applications. Most of the known occurrences of perlite in the county are in the Mineral Mountains with the most substantial perlite deposit being at the Schoo Mine. Development potential in this area is high.

Tungsten

Tungsten is a hard, rare metal primarily used in the production of alloys, steels, and other hard materials. Production of tungsten in Utah has primarily been driven by brief periods of high tungsten prices as a result of high demand during war years (BLM 2011b). Tungsten can primarily be found in the Rocky Range, Granite, Lincoln, and Star mining districts in Beaver County. Development potential for tungsten is moderate.

Uranium

Utah is a major producer of uranium in the United States, but almost all production (98 percent) in the state occurs on the Colorado Plateau in southeastern Utah. In Beaver County, historical mining has produced nearly 20,000 tons of ore, yielding approximately 40 tons of triuranium octoxide (U_3O_8), a form of yellowcake. There are currently no notices or Plans of Operations for uranium mining in the county and development potential remains low.

Molybdenum

Utah is the third leading molybdenum producing state in the U.S. Although there has been no recorded molybdenum production in Beaver County, there are several known deposits with moderate to high development potential over the long term, namely in the Pine Grove mining district.

Potash

Utah is one of only two potash-producing states in the country, and three locations in Utah currently produce potash commercially. Uniquely, Utah produces two types of potash: potassium sulfate and potassium chloride. Potassium sulfate has a significantly higher market value than potassium chloride, $376 more per ton (in 2020). Utah is the sole domestic producer of potassium sulfate. The primary use of both types of potash is fertilizer; however, potash is also used in the production of soap, glass, ceramics and batteries and is a component in drilling mud used in the oil and gas industry. Crystal Peak Minerals began the EIS and permitting process for their Plan of Development to extract potash from the Sevier Lake playa in 2018. Also, as noted below, potassium sulfate can be produced from the large alunite deposits in the Blawn Mountain area.

Miscellaneous Minerals

Other locatable commodities in Beaver County include barite, fluorite/fluorspar, high-calcium limestone and high-magnesium dolomite, gypsum, sulfur and mercury. These mineral resources are present, and several have been mined historically in the past, however, either because they occur in limited quantities or are difficult to extract, or due to other current market forces, they are unlikely candidates for commercial development. These resources could be produced on a small scale or for local uses.

Forecast

Historically, the economics of locatable mineral resources, particularly the base metals, have been cyclical, reflecting periods of strong demand and limited supplies followed by oversupply and weaker demand. Renewable energy components are driving the rare earth mineral

demand worldwide. Demand and prices for precious metals, like gold and silver, is enhanced by periods of general social, political, and economic uncertainties and unrest. Most locatable mineral commodities trade in the worldwide marketplace, so price and demand can be dictated by world events. At present, a substantial marketplace factor is the economic expansion of China and its enormous demand for a wide variety of mineral commodities. This economic growth is forecast to continue to control demand for all of the base metals.

Beginning in 2005, strong market demand allowed the copper mine operation west of Milford to go into production. Known copper resources in the Beaver Lake Mountains will allow for continued development and expansion into the foreseeable future, provided market prices remain strong. As of August 2016, a decrease in copper prices has idled the copper operation west of Milford.

The dominant area for future locatable mineral development in Beaver County will center on the known copper deposits and surrounding area from the Rocky Range to the San Francisco Mountains. Outside this area, smaller scale mineral development in the western half of the county has excellent potential as long as land access remains open in the higher potential areas.

2. Salable Minerals

Salable minerals, also referred to as mineral materials, known to be present in the County include common-variety deposits of sand, gravel, cinders and aggregate, and lesser amounts of building stones. *See* Maps 2-4.

Rock used for crushed stone and railroad ballast is present at the Twin Mountain quarry northwest of Milford and dominates all other mineral material sales within the county. This quarry, which is located on leased BLM land, began operations in 1997. Since 1997 through 2015, this operation has produced and sold 8.5 million tons of crushed, washed railroad ballast rock to the Union Pacific Railroad and has produced and sold 1.4 million tons of reject fines, by-product crushed rock, and rip-rap boulders to the Union Pacific Railroad, Beaver County and other commercial entities. The quarry has produced an average of 500,000 tons of ballast each year. The total revenue that has been generated from these products since operations began is approximately $50,000,000.

Sand and gravel resources are widespread throughout the County, primarily in Quaternary alluvial deposits. Given the abundance of sand and gravel resources, accessibility and proximity to end use is the primary driver of the location of development. There are an estimated 80 sand and gravel pits and prospects in the county, and most of them are along major transportation corridors (BLM 2011b). Sand and gravel pits range in size from one acre to as much as 100 acres in size. Most of the larger pits are on private or state land located along the Interstate 15 corridor while smaller gravel pits located on BLM-administered land are dispersed throughout the county.

Beaver County and Utah Department of Transportation ("UDOT") rely on fill material, sand, gravel and cinders for construction and maintenance of state and county roads obtained from material site ROWs and free use permits from the BLM.

Building-stone resources, such as marble and limestone, which are commonly used for landscaping and other decorative purposes, are present in the county and actively mined at a number of locations, although to a lesser extent than crushed rock and sand and gravel resources. Common clay resources and lapidary material are also present in the area, but the development potential for these resources is generally low, and there has been limited historical mining of these resources.

Forecast

Market demand for mineral materials in general mirrors the overall economic wellbeing and growth of the local and regional economies. The low unit value of mineral material commodities typically makes their cost-effective extraction dependent on transportation costs, resulting in localized supply and demand. Certain markets, such as railroad operations, with ready transportation, allow for sales into a regional market. In the immediate future, the demand for mineral materials will likely remain soft, reflecting the general depressed conditions for infrastructure, commercial and residential growth in southwestern Utah. However, longer-term needs could expand with the growth of local economies. For example, heightened development of Cedar City or cities to the south could increase material sales.

There are large quantities of salable mineral reserves estimated in the County, therefore a sustainable level of mineral resources is available to meet any expected future demand.

Development potential for crushed stone and ballast is high at existing quarries, however, limited historical development elsewhere in the area suggests future development will likely not expand substantially beyond current levels. Development potential of sand and gravel is high at existing pits and prospects in host formations within a few miles of major transportation corridors. Similar to crushed stone and ballast, development of sand and gravel resources is expected to continue at current levels. Continued mining of building stone at existing quarries will likely remain similar to current levels, with a lower potential for exploration and development outside existing quarries.

3. Solid Leasable Minerals

Solid leasable minerals include, but are not limited to, coal, phosphate, oil shale, sodium, and potassium. The Mineral Leasing Act of 1920 and its 1926 and 1927 amendments provide for exploration for and extraction of these minerals.

The only known solid leasable minerals in the area are potassium resources in alunite

mineralization in the west-central portion of the County. Areas with high potential for solid leasable mineral development are shown on Map 5. There is currently no production of the alunite resources in the County and no current or pending solid mineral leases filed with the BLM.

Potash could be produced through the processing of known alunite deposits in the County. The largest alunite deposit in the Country is in the southern Wah Wah Mountains near Blawn Wash. This deposit is estimated at 56 million tons, however, due to the economics of processing, there is currently no production of alunite in this area or anywhere else in the United States. Processing alunite requires a substantial investment in infrastructure, which market conditions have so far rendered unfeasible.

Historically, although potassium sulfate has never been produced from alunite in this area, alunite was mined east of Beaver near Marysvale during World War I as a source of potassium fertilizer, but the operation did not survive post-war economic conditions. There have been no other known successful commercial operations for alunite extraction in this part of the country. During the 1970s, a mining company identified several deposits of alunite in the area, including the Blawn Wash deposit, and developed a mine plan for part of the deposit. In 1977, the BLM issued an environmental statement for the project, but due to market conditions and high investment costs the project was unsuccessful.

After the increase in potash prices in 2008, two companies filed applications for potassium prospecting permits for prospecting known alunite resources on BLM-administered public lands in Iron and Beaver counties. One of the companies planned a drilling program to further explore the Blawn Wash deposit and the Pine Valley deposit north of Bible Springs, but due to a weakened and unstable market, these applications were withdrawn in 2014. Alunite resources with the highest development potential and the best prospects for producing potash, are on State Trust Lands located north of Blawn Mountain. In early 2017, an updated pre-feasibility technical report, which downsized earlier proposed operations to reduce capital costs, now calls for 250,000 tons per year of potassium sulfate and 600,000 tons per year of sulfuric acid to be produced from this area.

Forecast

The current and projected future market value for potassium sulfate could encourage interest in the acquisition of potassium leases on known alunite deposits. Beaver County contains one of the largest known alunite resources in the world and the best portions of this resource are on state-owned lands. Potash extraction from alunite, while technically and economically feasible, requires extensive supporting infrastructure, which currently do not exist in this area. The high capital cost of providing the infrastructure remains the principal hurdle to the development of the resource.

4. Fluid Leasable Minerals

Fluid leasable minerals are comprised of oil and natural gas and geothermal resources. This section describes only oil and gas resources in the county; see the *Energy Resources* section for a discussion of geothermal resources.

Beaver County has 1,292,566 acres of federal oil and gas mineral ownership, 16,039 acres of which underlie state or private surface ownership (1.2 percent) in the split-estate ownership scenario. There are 360,872 acres of state and private land in the county with mineral rights vested.

There has been very limited exploration and development for oil and gas in the county. There have been no areas identified that are commercially capable of producing oil and gas on federal, state, or private land and there are currently no producing oil and gas fields. Although exploration for oil and gas resources has been ongoing since the mid twentieth century, no measurable quantity of oil and gas has ever been produced in the county. However, interest in the region's geology has prompted operators to continue to drill exploratory wells and collect seismic data in hopes of finding economically viable reserves.

A total of 6 wells were drilled in Beaver County between 1974 and 2008 (BLM 2016). No oil and gas (including coalbed natural gas) has ever been produced in the County and none of the wells produced any evidence of oil or gas. All of the wells were plugged and abandoned.

Interest in oil and gas exploration in the local area is currently low compared to other areas in Utah or the West, as evidenced by a low number of exploration authorizations. No competitive bids were placed for seven oil and gas lease parcels offered for sale in Iron County on May 24, 2011. However, a small number of Applications for Permit to Drill ("APDs"), possibly relating to the discovery of oil in the Sevier Frontal play (to the northeast of the planning area), were submitted in 2008. Two of these wells were drilled prior to permit expiration, and both were subsequently plugged and abandoned.

Forecast

Very light to moderate leasing and exploration interest in Beaver County is expected due to the geologic potential for undiscovered resources. Improved technology for finding oil and gas, better understanding of petroleum systems, and higher energy prices and dwindling domestic supplies could promote more industry interest in exploring the area. However, interest in drilling exploratory wells is expected to remain low until there is a discovery. If a new field is discovered, there would be high interest levels for drilling and a widespread intensive exploration effort would ensue.

The Utah Geological Survey estimates that over the next 20 years, Southwest Utah could see drilling of 16 new wildcat wells for oil and gas, and the acquisition of up to 1,500 miles of seismic data (BLM 2011b). A considerable number of seismic surveys have been performed in

this area since the 1970s. Additional future seismic surveys are anticipated when exploration interest in this area returns due to a nearby oil and gas discovery, increased oil and gas demand, or increased interest in wildcat exploration in the oil and gas industry. Because of the absence of areas with high development potential in the Cedar City District planning area, the BLM did not develop a detailed Reasonably Foreseeable Development scenario for oil and gas. Oil and gas development potential in the Basin and Range physiographic province characteristic of the planning area is very low, as evidenced by the corresponding low industry interest in this area to date.

5. Critical Minerals and Rare Earth Elements

Critical Minerals

In 2018, the U.S. Geological Survey (USGS) designated 35 non-fuel minerals or mineral groups as "critical minerals". The basis for the creation of the list was that, "The United States is heavily reliant on imports of certain mineral commodities that are vital to the Nation's security and economic prosperity. This dependency of the United States on foreign sources creates a strategic vulnerability for both its economy and military to adverse foreign government actions, natural disaster, and other events that can disrupt supply of these key minerals." Critical minerals are simply defined as those minerals necessary for economic or national security and which have a supply chain vulnerable to disruption. In 2020, Utah had known sources of 28 of the 35 listed critical minerals and had commercial production of eight critical minerals, including: helium, lithium, beryllium, magnesium metal, potash, rhenium, platinum, and palladium.

On February 24, 2022, the USGS published the 2022 Critical Mineral List which removed helium, uranium, potash, rhenium and strontium. Nickel and zinc were added to the 2022 list, of which, Utah has historically been the ninth largest zinc producer in the country.

The Critical Minerals of Utah report (https://ugspub.nr.utah.gov/publications/circular/c-129.pdf), produced by the Utah Geological Survey (UGS) contains current information and descriptions of each critical mineral produced in Utah as well as known and speculative sources. This report was published in 2020, so some of the listed critical minerals have changed, but the source information is still relevant. As demands, technology and economies change, it is expected there will be changes to the USGS critical minerals list made from time to time.

Rare Earth Elements

The rare earth elements (REE) are a set of seventeen metallic elements, including the fifteen lanthanides on the periodic table, plus scandium and yttrium. Rare earth elements are an essential part of many high-tech devices. The USGS explains: "Rare-earth elements are

necessary components of more than 200 products across a wide range of applications, especially high-tech consumer products, such as cellular telephones, computer hard drives, electric and hybrid vehicles, and flat-screen monitors and televisions. Significant defense applications include electronic displays, guidance systems, lasers, and radar and sonar systems. Although the amount of REE used in a product may not be a significant part of that product by weight, value, or volume, the REE can be necessary for the device to function…."

In 1993, 38 percent of the world production of REEs was in China, 33 percent in the United States, with Australia, Malaysia and India also contributing measurable amounts. However, by 2011, China accounted for more than 97 percent of the world production of REEs. Supplies of REEs have become a political and strategic issue as the Chinese government has restricted the amount they allow to be exported.

Although these elements are vitally important, Utah's geology is not conducive to the formation of significant REE deposits, as confirmed by historical exploration. Although modern re-evaluations of previously deprioritized targets have been performed, it is unlikely that Utah has the potential to become a primary REE producer. At this time, Beaver County is not known to have any locations containing rare earth elements.

II. OBJECTIVES

Beaver County's objectives with regard to mining and mineral/geological resources are as follows:

1. To foster mineral development within the County in a manner that fulfills Beaver County's responsibility to its citizens to protect and expand the tax base and economic activity to provide a high standard of living;

2. To protect and expand the viability of mineral resource development opportunities within the County, including critical minerals and rare earth elements;

3. To support oil and gas leasing on public lands without burdensome stipulations; and

4. To streamline the permitting process for developing mineral resources.

III. POLICIES AND GUIDELINES

1. Beaver County believes that a mining industry is essential to the economic and physical well-being of the County and State. Our policy is to prevent waste; protect

human health and safety; protect the environment; protect access to, and encourage responsible production of our important mineral resources, including critical minerals and rare earth elements, for current and future generations of Americans.

2. Beaver County supports the wise use, conservation and protection of public lands and demands that public lands shall be managed for multiple use, sustained yield.

3. All available and recoverable solid, fluid and gaseous mineral resources in the county shall be seriously considered for contribution or potential contribution to the economy of Beaver County. Portions of Beaver County that are known to have reasonable mineral potential shall 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 land against unnecessary damage and degradation to other significant resource values.

4. Existing federal oil and gas leasing conditions and restrictions shall not be modified, waived, or removed unless the lease conditions or restrictions are no longer necessary or effective.

5. Existing lease restrictions that are no longer necessary or effective shall be modified, waived or removed.

6. Restrictions against surface occupancy shall be eliminated, modified or waived where reasonable.

7. Federal land management agencies shall 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 consistent with Utah Code § 63J-8-104.

8. Beaver County shall foster, encourage and promote the development of oil and natural gas resources in a manner that prevents the waste of those resources consistent with Utah Code § 40-6-1.

9. Applications for permission to drill that meet the standard qualifications, including reasonable and effective mitigation and reclamation requirements, shall be expeditiously processed and granted.

10. Any moratorium that may exist against the issuance of qualified mining patents and oil and gas leases, and any barriers that may exist against developing unpatented mining claims and filing for new claims, shall be carefully evaluated for removal.

11. Transportation and access routes to and across federal lands, including all rights-of-

way vested under R.S. 2477, prescriptive easements and Title V are vital to the economy and to the quality of life in the County and must provide, at a minimum, a network of roads throughout the resource planning area that provides for movement of people, goods and services across public lands.

12. All federal land management plans with mineral development provisions applicable to lands in the county, shall have an environmental impact statement that clearly demonstrates:

    a. That the planning agency has 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;

    b. The planning agency has evaluated any management plan prescription for its impact on the areas baseline mineral and energy potential;

    c. That the development provisions do not unduly restrict access to public lands for mineral exploration and development;

    d. The authorized planning agency has analyzed all proposed mineral lease stipulations and considered adopting the least restrictive necessary to protect against damage to other significant resource values; and

    e. 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.

13. Beaver County calls upon the federal agencies who administer lands within the County to:

    a. Fully cooperate and coordinate with the county 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 in the county;

    c. Allow continued maintenance and necessary 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 of Beaver County as stated in this resolution; and

e. Refrain from implementing a policy that is contrary to the goals and purposes described in this resolution.

2.2 Energy Resources

This section describes the major energy resources found in Beaver County with current and potential energy development.

I. FINDINGS

Beaver County has a responsibility to its citizens to protect and expand the tax base and promote economic activity to raise the standard of living and provide necessary services to citizens and visitors. The development of energy resources boosts economic growth, contributing to the fulfillment of this responsibility. Beaver County has become a primary location for the development of energy resources in the State of Utah with development of wind, solar, biomass, geothermal and hydroelectric power.

1. Wind Energy

There are currently 102 turbines that harness wind energy in Beaver County. 80 of those turbines are located on private land with the remainder located on state and federal land. The eastern edge of the Great Basin, which reaches across Beaver, Iron and Millard counties, has the greatest potential for utility-scale wind power in Utah. Phase I of the Milford Wind Corridor Project is located in Beaver County and produces 204 Megawatts ("MW") of wind energy.

According to studies done by the DOE National Renewable Energy Laboratory, there is high potential for wind energy throughout the central portion of Beaver County, while surrounding areas have moderate potential.

A 2009 study by the Utah Renewable Energy Zones ("UREZ") Task Force showed multiple wind energy zones in Beaver County with sufficient average wind speeds to be developable. Four zones (two large and two small) were determined to have high development potential. *See* Map 6.

Having sustained high average wind speeds in proximity to large power transmission lines is necessary for development of wind energy. Beaver County is situated to take advantage of these development opportunities with its consistent wind speeds and the fortuitous location of its existing transmission infrastructure. Additional hi-capacity transmission lines are already being added to supply this energy to high demand urban markets.

2. Solar Energy

Beginning in 2003, the BLM and Department of Energy ("DOE") initiated a series of Programmatic Environmental Impact Statements ("PEIS") regarding renewable energy development in western states. A solar energy PEIS was completed in 2012 and designated 19 solar energy zones ("SEZ") in six western states. Two of the three SEZs in Utah are located in Beaver County: the Wah Wah Valley SEZ and the Milford Flats South SEZ. *See* Map 7. In addition to the SEZ's, the BLM considers areas outside the SEZ as Variance Areas, or potential exclusion areas for utility-scale solar energy development. A Final Rule was published in the Federal Register clarifying the process for wind and solar development on BLM public lands. In 2009, the UREZ Task Force also conducted a study on solar energy and found that there were many areas in Beaver County suitable for solar energy development. *See* Map 8.

The solar energy sector has eclipsed wind, hydroelectric, geothermal and biomass combined. Beaver County currently has ten solar developments producing 358 MW of electricity, equating to 14% of Utah's total 2616 MW of solar output as of 2022.

Project	Location	Output	Size
Granite Peak	East of Milford	3 MW	18 Ac
Milford 2	East of Milford	3 MW	24 Ac
South Milford	Milford Flat	3.8 MW	24 Ac
Laho	Milford Flat	3 MW	18 Ac
Milford Flat	Milford Flat	3 MW	18 Ac
Greenville	West of Greenville	2.2 MW	13 Ac
Milford I	North of Milford	100 MW	787 Ac
Escalante I	North of Milford	80 MW	628 Ac
Escalante II	North of Milford	80 MW	550 Ac
Escalante III	North of Milford	80 MW	650 Ac

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Potential for solar energy development in Beaver County remains high in areas near large transmission lines that cross the Milford Valley.

3. Geothermal Energy

Geothermal energy is heat (thermal) that comes from within the earth (geo). Water and steam warmed by the earth's heat are used to generate electricity, or can be used directly for heating. Heat is constantly generated within the earth's core and cannot be depleted by human activity. When generating electricity from a geothermal reservoir it is common practice to inject water into hot rock formations where it is heated and then expelled as super-heated water or as steam from nearby production wells. In many areas, this action occurs naturally and can be seen as geysers or hot springs.

There are three main types of geothermal power plants.

- **Dry steam plants** use steam from geothermal wells to directly spin a turbine which drives a generator to produce electricity.
- **Flash plants** bring hot water (above 440°F) to the surface where it "flashes" to steam when pressure is reduced in the surface facility. The steam is then sent directly to a turbine to drive a generator. The remaining water is then reinjected.
- **Binary cycle plants** use hot water to boil an organic fluid. The expanding gas produced is used to spin the turbine to drive the generator. Heat is exchanged without the water directly contacting the working fluid, and the water is then reinjected to be recycled over and over.

Geothermal power is a renewable energy source that is cost-effective, reliable, and sustainable. No fossil fuels are burned and no greenhouse gasses are emitted. Unlike solar and wind energy, geothermal energy is available constantly and production facilities occupy a very small footprint. There are three geothermal electric plants operating in the state of Utah, and all three are located in Beaver County and all three use the binary cycle process. *See* Map 9

The Blundell Geothermal Power Plant at Roosevelt Hot Springs northeast of Milford, is Utah's first geothermal power plant, and has been in continuous operation since 1984. Production wells exceed 520°F with a depth range of 2,100 to 6,000 feet. The Blundell Plant produces 44.8 MW of electricity. PacifiCorp, which operates the Blundell plant, has been drilling exploratory holes with the intent to expand the plant's capacity to 72 MW of electricity.

The Sulphurdale Plant, built near Cove Fort in 1985 by Mother Earth Industries, is a binary-cycle plant using a steam turbine generator. This plant was partially owned by Provo city and the recipient of the power. In 2003, Amp Resources acquired the plant and shut it down with intentions to reconstruct the facility with greater capacity. Enel North America acquired the plant in 2007 and restarted production in 2013 which it has been in continuous operation since that time. The production wells tap a shallow vapor dominated resource at depths ranging from 1,100 to 1,200 feet. The plant currently has the capacity to produce 25 MW. Planned expansions will increase capacity to up to 40 MW.

Cyrq Energy, which operates the geothermal plant at Thermo Hot Springs, located west of Minersville, began operations in March of 2009. This binary plant currently produces 14.5 MW of electricity from 3 production wells, all of which is contracted to the city of Anaheim, California.

UREZ found that the Sevier Thermal Area, located on the east side of the Great Basin, of which the three geothermal power plants are a part, contains an estimated 1,900 MW of potential energy from both "identified" and "undiscovered" sources. The potential for additional production here is high and would be highly beneficial to Beaver County. In April 2022, the BLM completed an EA for the Bailey Mountain Geothermal Exploration Project. This project authorizes Ormat Nevada, Inc. to drill up to 20 geothermal test wells in the vicinity of the Blundell power plant to determine the viability for new commercial geothermal leases in this area.

In February of 2014, the Department of Energy (DOE) announced its intent to fund a subsurface energy laboratory called the Frontier Observatory for Research in Geothermal Energy (FORGE). This effort would promote scientific research into developing energy from deep underground geothermal sources. This transformative program would lead out with engineering focused on Enhanced Geothermal Systems (EGS), or manmade geothermal reservoirs, as an alternative to conventional geothermal resources which occur naturally where cracks and fissures bring steam to the earth's surface. Enhanced Geothermal Systems are deemed to be the future of geothermal energy as they can be engineered and utilized practically anywhere. Five sites were initially identified for this project and on June 14, 2018, the Milford, Utah location was selected as the new FORGE laboratory field site. The University of Utah was originally granted $140 million dollars in funding over the ensuing five years towards developing cutting-edge research into drilling and geothermal energy production technologies as a critical step on America's path to energy security. As of 2022, the FORGE site continues to achieve new milestones in EGS technologies and research.

4. Biomass Energy

Bioenergy is the use of biomass, such as food crops, grassy and wood plants, residues from agriculture or forestry, algae and organic components, to generate electricity. Beaver County's biomass is primarily composed of residues from forest restoration projects that improve wildlife habitat, increase forest and rangeland health and reduces the risk of wildfire. Much of the biomass is made up of pinyon-juniper woodland, the encroachment of which has led to the degradation of habitats throughout Beaver County.

Biomass projects typically take place on federal land where the BLM has entered into stewardship contracts with small businesses, communities and non-profit organizations to take on restoration projects while harvesting biomass. Estimates of existing biomass resources are expressed in tons per acre ("TPA") of yield. The yield level in TPA is divided into three categories of potential: low (0 to 5 TPA), medium (5 to 20 TPA), and high (more than 20 TPA). An assessment of biomass resource potential for the public lands administered by the BLM's Cedar City Field Office showed that 51.8 percent of the land had low potential, 44.4 percent had medium potential and only 3.8 percent had high yield potential. Since there are more and more complex limitations on biomass energy production, the potential for future development in this area is low.

5. Hydroelectric Power

Beaver County has three hydroelectric power stations located on the Beaver River and a small plant located on the Mammoth canal diversion. Beaver City Electric, Light & Water owns these plants, which are operated by Beaver City. These power plants generate revenue for Beaver City while providing affordable energy to the community. The four stations have the capacity to produce 9,200,000 kW of power annually, supplying 50% of the total power consumption of Beaver City. When all stations are running at peak capacity, these plants can produce up to 66% of Beaver City's power needs. Even during seasonal low water flow, the plants are a stable and efficient power source for the community.

These aging power plants do not currently possess the capacity to generate all of Beaver City's electricity needs and must be supplemented by other sources. Because hydroelectric power is cheap, efficient and sustainable, additional developments and/or renovations should be seriously considered. As of 2022, Beaver City has plans in place to replace the lower power plant.

II. OBJECTIVES

Beaver County's objectives with regard to energy resources are as follow:

1. To fulfill its responsibilities to its citizens including:

    a. To protect and expand the tax base and promote economic activity that provides a high standard of living;

    b. To provide the necessary county services for its residents and visitors;

    c. To provide a quality environment for the enjoyment and use of its citizens, including protection of local values and lifestyles;

d. To represent the interests of its residents in coordinating the planning, management and regulatory activities of other local, state and federal agencies; and

e. To protect the private property rights of its citizens including their ability to make choices concerning the development of resources on their land in harmony with community plans and zoning ordinances;

2. To take a more central role in the planning, management, and regulatory activities of federal, state and local agencies;

3. To demand that public land management agencies produce and maintain desirable vegetation for watershed protection, healthy timber, wildlife forage and livestock forage that is necessary to meet present and future needs and future economic growth and community expansion without permanent impairment of the productivity of the land; and

4. To enhance and expand hydroelectric energy production on the Beaver River.

III. POLICIES AND GUIDELINES

1. Beaver County supports the wise use, conservation and protection of public lands and their resources, including well-planned management prescriptions. It is the County's position that public lands be managed for multiple uses, sustained yield, the prevention of natural resource waste and the protection of cultural and historic uses. It is important to the county economy that public lands be properly managed for fish and wildlife, livestock production, timber harvest, recreation, energy production, mineral extraction and the preservation of natural, scientific and historical values.

2. Transportation and access routes to and across federal lands, including all rights-of-way vested under R.S. 2477, prescriptive easements and Title V are vital to the economy and to the quality of life in the Beaver County. Land managers must provide, at a minimum, a network of roads throughout the resource planning area that provides for movement of people, goods and services across public lands.

3. Beaver County supports the development of energy resources on public lands, subject to valid existing rights.

4. However, Beaver County opposes solar energy developments on public lands which displace AUMs. Any commercial solar energy development on public land shall make modifications, as necessary, to retain grazing activity within the facility to retain

permitted AUMs.

5. Beaver County has a policy of No-Net-Loss of grazing annual unit months ("AUMs") on public lands. Any changes in grazing use shall only be the temporary suspension of AUM's due to drought or other natural occurrences and shall be based on monitoring data of at least five (5) years.

6. Beaver County supports the expansion and enhancement of hydroelectric energy production and development, specifically on the Beaver River. Beaver County will explore opportunities to allow for increasing the benefits of hydroelectric power to its communities. Beaver County will also oppose any current or future law banning or limiting hydroelectric energy production.

7. Beaver County will take any and all appropriate actions to protect private property rights and the use of those lands, pursuant to county zoning ordinances.

8. All federal land management plans and actions pertaining to energy development on public lands in the county, shall have an environmental impact statement that clearly demonstrates:

    a. That the planning agency has considered and evaluated all existing permits, rights and cultural uses on those lands selected for utility-scale development or other right of way ("ROW") applications; that mitigation strategies will address the loss of any permitted uses, including potential economic losses to permittees.

    b. The planning agency has evaluated mitigation measures for grazing allotments affected by a proposed energy development; that vegetation treatments are proposed for the affected allotment to enhance forage and protect against AUM loss;

    c. That the development does not unduly restrict access to public lands for historic and permitted uses;

    d. The authorized planning agency has analyzed all structures, water improvements, ROW's, range improvements and other resources prior to approving any proposed energy development; and has endeavored to select the least invasive locations to protect against damage or impairment to improvements and loss to significant resource values.

9. Beaver County calls upon the federal agencies who administer lands within the county to:

    a. Account for all existing rights and permitted uses of the land;

b. Mitigate any loss of forage. The mitigation strategy must include grazing AUMs;

c. Account for range improvements in any scoping or NEPA process;

d. Have all NEPA analysis completed and mitigations approved before any rangeland is taken out of production;

e. Fully cooperate and coordinate with the County 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;

f. Maintain and enhance desired plant communities that benefit watersheds, wildlife, water quality, recreation, and sustainable livestock grazing;

g. Allow continued maintenance and necessary development of roads, power lines, pipeline infrastructure, and other utilities necessary to achieve the goals, purposes and policies described in this section;

h. Refrain from any planning decisions and management actions that will undermine, restrict or diminish the goals, purposes and policies of Beaver County as stated in this resolution; and

i. Refrain from implementing any policy that is contrary to the goals and purposes described in this resolution.

3. AGRICULTURE

3.1 Agriculture

I. FINDINGS

Agriculture, by definition, is the cultivation of plants and animals for the production of food, fiber, fuel and other products. Beaver County has been an agriculture-based economy since the first Mormon settlers arrived in the Beaver Valley in 1856 to farm and raise livestock in the abundant green meadows. For 160 years, the social customs, culture and character of the County have been founded on agriculture and the natural resources that support it. Founded in 1870 by livestock growers, the town of Milford soon became a shipping hub for livestock when the railroad arrived in 1880 enabling cattle and sheep to be quickly shipped to Salt Lake City. The Milford Valley became the crop production center for the area with its broad flat landscape and a supply of water from the Beaver River.

The 2012 Census of Agriculture indicates there are 277 farms or ranches in Beaver County occupying 190,000 acres of private land. The average farm size is 686 acres and the average land value is $1,997 per acre. The average farm is valued at $1,370,000. Of the county's 1,657,656 total acreage, agriculture activity occupies 11.5% of the land. The County had 37,000 acres of cropland, of which 32,000 acres were irrigated and harvested. Alfalfa is the dominant crop with 125,000 tons produced. Corn is the second leading crop with 284,400 bushels of grain and 35,000 tons of silage produced.

Beaver County leads all counties in Utah in total market value of agricultural products at $288.5 million as well as total livestock revenues valued at $266.9 million. This is primarily attributable to the commercial hog production facilities in the County. In cattle production, there were over 21,000 head of cows in the county, of which 13,000 were raised for the beef market. The number of dairy cows has fallen to about 700 in 2012.

Cattle numbers have declined in recent years in Beaver County due in small part to the recent downward trend in beef prices. Additionally, Federal agencies have been reducing AUMs on public land grazing allotments while simultaneously, wild horse populations have surged above appropriate management levels, depleting available forage. Once a mainstay in Beaver County, dairy farms have nearly disappeared in the County. Where there were once dozens of dairies, now only 2 remain operational with only a few hundred head of cows.

The agricultural trends over the past 25 years indicate the total amount of agricultural land has remained relatively stable in Beaver County as very little land is being lost to residential

development. Statewide, farmland is declining as urbanization expands and land values soar. In Beaver County, the number of farms is increasing, but the average size of each farm is diminishing. The amount of irrigated cropland has fluctuated over the years, depending on markets and weather patterns, however, more land is being irrigated with sprinkler systems, and increasing crop yields while conserving precious water resources.

Although Beaver County has only marginal cropland, water is the limiting factor for growing crops. Because of the arid landscape and climate, irrigation is a necessity and finite water resources limit the potential crop production capability of available farmland. Small gains in production will invariably come from investments to incorporate more closed irrigation systems. On the other hand, commercial hog production is well established in Beaver County and further growth and expansion are planned, providing a huge economic benefit to the county.

Although the majority of jobs in Beaver County are government, trade and service related, agriculture continues to play a very significant roll. The 2012 Census of Agriculture indicated that 66% of farmers/ranchers derived their primary living from their agricultural operations. A 2015 report by Headwaters Economics indicated that 15% of the employment in Beaver County was farm or agriculture jobs, compared to only 1.4% nationally.

Grasshoppers and Mormon crickets do considerable damage to agricultural crops and gardens. The Utah Department of Agriculture and Food ("UDAF") in conjunction with U.S. Department of Agriculture ("USDA") Animal and Plant Health Inspection Service ("APHIS") surveys and monitors the yearly populations of these insects. An annual report is published by UDAF showing population trends and locations of infestation problems. APHIS oversees the control of grasshoppers and Mormon crickets on public land.

The legal protection of fertile agricultural lands is important to preserve those lands for continued production from future development and degradation. The Agriculture Protection Act passed by the Utah Legislature was aimed at: (1) protecting landowners from unreasonable restrictions from state and local agencies on farm structures and practices; (2) protect landowners from nuisance lawsuits; (3) serve notice to prospective home buyers of the protected status of farming operations nearby; and (4) protect landowners from zoning changes.

The Utah Farmland Assessment Act ("UFAA"), or "Greenbelt Act," was passed to give property tax relief to those lands and properties associated with agricultural production. This legislation was aimed at agricultural land retention through lower assessed tax rates. These open "green spaces" make communities more desirable and livable and improve air quality while limiting urban sprawl.

Many County zoning ordinances and laws are designed to protect agricultural use of the

land by limiting residential dwellings and developments from infringing on valuable open space prioritized for agriculture and farming. Every residential or commercial development that builds on agricultural land, displaces that land forever from agricultural use. Each residential home built re-allocates a measure of water for domestic use that is ultimately taken away from the water available for agriculture.

II. OBJECTIVES

Beaver County's objectives with regard to agriculture are as follows:

1. To preserve and protect the agricultural lifestyle, heritage, culture and rural character of the County;

2. To actively coordinate with federal and state agencies to foster management goals and decisions that are favorable to the County's agricultural industry;

3. To take action to encourage responsible stewardship of water and rangeland resources to foster a strong agriculture based economy; and

4. To adopt policies and principles that promote local agriculture to increase the state's food security while decreasing its dependence on imported food and produce.

III. POLICIES AND GUIDELINES

1. It is the policy of Beaver County that prime, fertile lands and soils, vital to agricultural production, shall be preserved and protected. Agricultural zoning regulations are important to that cause and shall be judiciously enforced.

2. Beaver County encourages the use of efficient and well-maintained irrigation delivery systems to preserve precious water resources.

3. Beaver County will support and promote efforts to control grasshoppers and Mormon crickets where feasible, and encourages USDA APHIS to continue treating these insects on public lands.

4. Agricultural and residential lands are not natural "historic" habitat for prairie dogs. Utah prairie dogs shall be removed from private lands and relocated on suitable federal lands. No prairie dogs shall be translocated within 5 miles of cultivated agricultural lands or residential areas.

5. Livestock grazing on federal lands shall be preserved in furtherance of Beaver County's no-net-loss of AUMs policy.

6. The UDWR must make efforts to mitigate agricultural damage from wildlife and shall maintain wildlife populations at objective population levels.

7. The use of tools including, but not limited to, livestock grazing, chemical treatments, and mechanical control is critical to protecting ecosystem health from invasive species and noxious weeds.

8. Farms and ranches constitute small business under the Regulatory Flexibility Act and shall be duly identified, analyzed and disclosed in NEPA documents.

9. Beaver County encourages land management agencies to maximize vegetative treatment efforts on public lands. The use of WRI funding to treat rangelands and the resultant forage increases shall be duly apportioned to livestock AUMs.

10. Beaver County opposes grazing buyouts, or any attempt to retire grazing AUMs. Permittee retired AUMs shall be re-allocated to other qualified grazers.

11. Beaver County opposes converting surface water shares to groundwater, which places greater demand on depleted groundwater resources.

12. Beaver County supports wildland fire use on rangelands and encourages prescribed burns where appropriate.

13. Managed livestock grazing is an appropriate management tool for both revegetation and fuel reduction.

14. The custom, culture and heritage of farms, ranches and agriculture shall be analyzed and disclosed in all NEPA reviews and land use plans.

3.2 Livestock and Grazing

I. FINDINGS

Livestock are defined as domesticated animals raised in an agricultural setting to create food, fiber, labor, or other products. Grazing is defined as a method of feeding whereby domestic livestock consume plant material and convert it into meat, milk, and other products. The practice of raising livestock and grazing animals is considered part of agriculture. Livestock and grazing are part of the culture, history and economic base of Beaver County. With over 77% of the land in Beaver County under Federal control, grazing on public land is vital to the agricultural industry of the county.

The first Mormon pioneers to settle in the Beaver area came from Parowan in 1856, bringing with them the livestock they relied on for food, labor and transportation. Parley P. Pratt, a Mormon leader, passing through the area six years earlier, wrote: “This is an excellent place for an extensive settlement.” The grassy meadows and sloughs flanking the Beaver River would provide prime grazing and hay for their livestock. The mountains and desert valleys would provide additional grazing forage to support the agriculture-based settlement. By the 1880’s, large numbers of cattle and sheep were being raised in Beaver County as it became a center for livestock production in southwestern Utah.

Throughout the early settlement period of Utah, as well as the western frontier in general, livestock grazing on federal or “public” land was undertaken without restriction. Cattle and sheep flourished on the verdant mountain grasses and livestock numbers soared. However, with the unregulated grazing came problems. Overgrazing, particularly by large sheep herds, denuded the land in many areas, causing erosion and watershed disasters. There were constant conflicts between livestock owners over the use of the land and who owned the rights to graze where and when. In response to these problems, Congress passed the Taylor Grazing Act in 1934, which led to the creation of grazing districts in which grazing use was apportioned and regulated. The Division of Grazing was created within the Interior Department to administer the grazing districts. This division later became the U.S. Grazing Service and was headquartered in Salt Lake City. In 1946, the Grazing Service was merged with the General Land Office to become the BLM. Similar legislation was later passed under the name Granger-Thye Act (1950) to regulate grazing on the National Forest System lands.

With the passage of the Taylor Grazing Act came new management structure for regulating grazing and protecting natural resources. To control animal movement and enhance grazing activity, fencing and water developments were put in place. Forage surveys were implemented to balance resource demands with range productivity and carrying capacity. The ranchers who utilized the land had a greater vested interest in their stewardship of those lands as grazing rights were created. But by the 1960’s, regulation of public lands began to tighten as ever more restrictive federal policies were enacted and management goals began to change. New laws such as the NEPA, the ESA, NFMA, and FLPMA diverted management attention away from grazing and forage production to the “environmental protection” concerns raised by special interests groups. The result has been endless environmental studies, a backlog of litigation, ongoing bureaucratic delays, heavily prioritized management of riparian areas, sensitive species and special land status designations, and far less emphasis on range improvement activities and forage production. With the passage of FLPMA, BLM’s mission was altered to require overprotection of the public lands rather than utilization. However, FLPMA did not repeal the Taylor Grazing Act.

Today, federal agencies regulate livestock grazing in a manner aimed at achieving and

maintaining health of the land and sustaining resources. To achieve desired conditions, the agencies use forest and rangeland health standards as a guide. Standards describe specific conditions needed for long term sustainability, such as the presence of streambank vegetation and adequate canopy cover. Guidelines are developed to direct management strategies that achieve or maintain healthy lands and ecosystems as defined by the standards. Grazing management strategies designed to attain these standards may include periodic rest, rotation or deferment from specific allotment usage, water developments, and vegetation treatments that increase forage production.

After the passage of the Taylor Grazing Act, the Grazing Service, through advisory boards, created an adjudication process to determine where, when and what type of livestock grazing could occur on public rangelands. To receive an allotment through this process, the stockman had to have (1) "commensurate base property" on which he could graze his livestock when they were not using federal lands, (2) have an economically viable livestock operation and (3) be members of the local community and support the local economic stability of the community.

Current authorized grazing levels were established from 1940 to 1965, during which time the BLM completed livestock forage inventories to establish estimated grazing capacity. These levels have been adjusted over the years to accommodate fluctuations in production capabilities and use by other species. Livestock grazing is regulated by the use of AUMs. This terminology refers to the amount of forage needed to sustain one cow or five sheep for one month. 100 AUM's would equate to 100 cows for one month or 10 cows grazing for 10 months. Since 1940, data from the BLM indicates that grazing AUM's for livestock have been reduced by more than two-thirds, from 2,749,000 down to only 675,000 AUM's in 2009. Almost as dramatic, AUM loss on Forest Service lands over the same time period has been reduced by half. These reductions in AUM's from the federal agencies are a result of burgeoning regulatory restrictions, modified terms and conditions on grazing permits, inflexibility within federal policies and numerous rangeland factors including: uncontrolled pinyon/juniper expansion, noxious weed invasion, altered fire regimes, reduction in the sheep industry, expansion of wildlife populations and the over-population of wild horses, etc. A new modern threat is the effort of special interest groups to eliminate grazing on public lands through aggressive marketing, lobbying, and litigation.

During the 2006 Utah legislative session, in response to these declines in grazing, the Rangeland Improvement Act was passed (HB 145). The bill provided for the establishment of a State Grazing Advisory Board and six regional advisory boards to improve the grassroots voice of both private and public land grazers. A new division was then established within the Utah Department of Agriculture and Food, known as the Utah Grazing Improvement Program ("GIP"). The mission of GIP is to "improve the productivity, health and sustainability of our rangelands and watersheds." The GIP program operates under the basic belief that "well planned and managed livestock grazing is the most important landscape scale tool for maintaining

healthy rangelands, watersheds, and wildlife habitats" and that "healthy rangelands contribute to a healthy livestock industry and productive rural economies."

Grazing is one of the earliest and most important uses of public lands in Beaver County. This activity continues to be an important use on those same lands today. "Livestock Grazing in Utah: History and Status", a 2008 study of grazing in the state of Utah by the governors Public Lands Policy Coordinating Office showed that livestock and livestock products accounted for 93.7% of the total agricultural cash receipts in Beaver County, the highest in the state. This study gave clear evidence of the importance of public land grazing to individual livestock producers and the industry as whole, by showing 1) the number of animals raised by permit holders was much larger than those without permits, 2) ranching operations having permits were more dependent on livestock production that those without, 3) permittee operations commonly involved more than one family while non-permittee operations were single-family businesses, 4) most livestock operations were multi-generational family businesses, especially permittee based operations, 5) livestock producers buy and sell locally, impacting local economies more directly than other business, 6) grazing public lands reduced producers' dependency on hay as a source of feed, 7) livestock grazing has a positive influence on fire suppression, 8) the cattle industry has become the dominant sector in Utah agriculture.

II. OBJECTIVES

Beaver County's objectives with regard to livestock and grazing are as follows:

1. To fulfill Beaver County's responsibility to its citizens to protect and preserve livestock grazing on public lands as an important historic, cultural and economic activity;

2. To maintain the AUM's at current levels and encourage increases as range conditions provide;

3. To improve range conditions through vegetation treatments and proper management, allowing for an appropriate increase in livestock grazing;

4. To have all public lands managed for multiple use and sustained yield as directed by federal law;

5. To encourage the proper use of monitoring systems and insist that agencies refrain from their misuse in issuing non-compliance responses; and

6. To have wild horse populations managed at appropriate management levels as directed by federal law and county policy.

7. All federal agency resource management planning on public lands within Beaver County, must involve active participation from the County and grazing permittees as contributing members;

8. Have all Federal policies and management plans acknowledge and consider the cultural, economic, and environmental importance of the livestock industry to the county and its citizens;

9. Protect AUM's within the county from the effects of wildlife populations that exceed appropriate management levels;

10. Uphold the preference for domestic grazing over alternate forage uses in established grazing districts while upholding practices that optimize and expand forage availability;

11. Protect AUM's from displacement by solar energy developments on public lands;

12. Oppose the culture of "sue and settle" as a means to limit access of public lands, slow down range improvement projects and drain limited resources from land management agencies by NGO's;

13. Protect surface and groundwater resources for livestock use; and

14. Have suspended AUM's completely restored before new species are introduced or wildlife management objectives are increased.

III. POLICIES AND GUIDELINES

1. Environment:

   a. It is the County's policy that rangelands should be classified according to their productive potential. Ecological sites are the most widely accepted basis for this and shall be used as the basis for interpreting monitoring data, management planning and assessing rangeland health.

   b. It is the County's policy that land managers shall give high priority to completion of soil surveys where lacking. Soil surveys are very useful as a basis for identifying and mapping ecological sites, predicting erosion, identifying adapted species, etc.

   c. Any adjustments to stocking rates must be based on monitoring of actual stocking, utilization, and trends in range vegetation and soil. Livestock carrying capacity is not a biological constant. Therefore, the "stock and monitor"

approach (synonymous with adaptive management) shall be pursued.

d. Turnout dates on seasonal ranges must be flexible and determined as part of a year round plan to meet the needs of the rangeland, livestock and other uses, not rigid "range readiness" requirements.

e. Federal agencies shall manage public lands for multiple use and sustained yield, including maximizing forage for grazing. Livestock grazing shall be considered an integral part of the multiple-use concept.

f. Noxious and invasive species shall be controlled or eradicated.

g. Locally led planning efforts, such as resource management plans, should be used to ensure all resources and public land uses are protected.

h. Soils and range site data should be used to create site-specific objectives in resource management plans.

i. Land managers shall maintain and enhance desired plant communities that benefit watersheds, water quality, wildlife, livestock, and achieve rangeland health standards.

j. Seed mixes for all reclamation efforts must be beneficial to both livestock and wildlife and developed on a site-specific basis.

k. Temporary fences should be removed as soon as they are eligible for removal, unless they are converted and utilized as range improvements in consultation with permittees.

l. Permittees shall be given a clear explanation of the standards and guidelines used in the assessment of rangeland health, and shall have meaningful involvement in reviewing monitoring data and assessing rangeland health.

m. Adaption of livestock grazing management to meet management objectives, policies or guidelines for threatened or endangered species must be based on sound scientific information and relevant to the local area.

2. Monitoring:

a. Proper resource monitoring systems shall be developed and implemented for forage utilization on all allotments, as agreed to by permittees.

b. Utilization and stubble height measurements are management tools useful for grazing management, analyzing grazing patterns, interpreting cause and effect

relationships and helping interpret monitoring data. They are not, however, management objectives.

c. Stubble height measurements may be used as "trigger indicators" of grazing pressure to help guide livestock pasture moves, as agreed upon by the permittee. However, use of trigger indicators does not mean livestock must be removed immediately to avoid exceeding the stubble height limit, nor shall they be used for issuance of non-compliance rulings in violation of the terms and conditions of the Term Grazing Permit or Annual Operating Instructions.

d. Utilization and/or stubble height "standards" are not management objectives and shall not be used in land use or resource management plans.

e. If stubble height measurements are used as a guideline in grazing plans or AOIs, they must be clear and detailed in specifying the location, time, method, and species of plants on which measurements will be based; specific directions shall be given on whether one key species, several key species or all forage plants are measured; the selection of designated monitoring areas must be agreed to by permittees. All ground rules for measurements must be clearly spelled out.

f. Attributes measured in monitoring systems must have a known relationship to desired conditions and management objectives and be capable of objective observation or measurement.

g. Monitoring methods chosen shall be appropriate to the type of vegetation to be measured, seasonal application and effectiveness of use.

h. Unless random sampling is used, monitoring site locations shall be agreed upon by permittees.

i. The interpretation of data from range monitoring systems should be carried out only by those agency personnel with adequate training and familiarity with the local forage production characteristics.

j. Monitoring data must be repeatable. By definition, monitoring is comparing data collected at two or more times to detect changes as a measure of external influence. Data is unusable unless the collection methodology can be repeated.

k. When range monitoring data is collected from "key areas" or important ecological sites, chosen to represent the effects of grazing, the information shall not be extrapolated to represent the allotment as a whole. Stubble height measurements collected within an allotment shall not be used for establishing range trends, to assess rangeland health or to influence management actions.

l. Monitoring systems shall be developed to separate resource use by species (e.g., wild horses, wildlife, or livestock) to inform management decisions. If a resource problem is occurring, the source of the problem must be positively identified in order to tailor a proper management response.

m. Federal Agencies shall accept monitoring data submitted by permittees or USDA officials in the absence of department data.

3. Rangeland Improvement Projects:

a. Vegetation treatments shall be applied to encroaching and undesirable species in range projects such as, but not limited to, pinyon/juniper, Russian olive, Halogeton and Rabbit Brush.

b. Federal agencies shall restore and enhance forest and rangelands to a condition that supports the suspended, existing and potential increase of AUMs for those lands.

c. Utilize native and non-native seed mixtures in vegetation treatments that are appropriate to management objectives, are adapted to the site conditions and are highly resistant to and/or competitive with invasive and noxious weeds.

d. Agencies shall coordinate with permittees to identify and prioritize where range improvement funds are spent, based on allotment category and need.

e. Range improvements must be kept functional or maintained in a timely manner, whether by the grazing permittee or the responsible agency.

f. Rangelands burned in wildfires shall be reseeded within 12 months.

g. Encourage the development of a Programmatic Categorical Exclusion for the allowance of specific range improvements to be installed in a timely manner.

h. Beaver County opposes any acquisition of water rights by the BLM or USFS in the course of authorizing range improvements.

4. Permits/AUMs:

a. Beaver County strongly advocates no-net-loss of AUMs.

b. Adaptive grazing programs shall be created that allow permittees to respond to changes in forage availability and climate variability such as on/off dates,

extended shoulder dates, intensity, duration, pasture rest and rotation schedules.

c. It is the County's policy that all term grazing permit renewals, including allotment improvements, will be processed in a timely manner.

d. Categorical Exclusions for term grazing permit renewals should be used when (1) renewal of the permit is under substantially the same terms and conditions as the existing permit; (2) monitoring data shows that the allotment is at or making substantial progress toward meeting rangeland health standards; and (3) no extraordinary circumstances exist such as conflicting uses, threatened species, special status lands, etc.

e. Permanent retirement of any grazing allotment is unacceptable.

f. Suspended AUMs shall not be retired, or taken during permit renewals.

g. Suspended AUM's shall be restored as range conditions allow, being assessed on a yearly basis until fully restored.

h. Vacant allotments should be prioritized for NEPA analysis to provide availability for livestock grazing.

i. Adaptive management practices for grazing should be developed in term grazing permits to allow for fuel load reductions, particularly in cheatgrass infestations or other heavy understory.

j. Rested or other available allotments should be temporarily assigned to permittees whose grazing permits have been lost to fire or other resource disasters. Only established AUM's may be used.

k. Beaver County has a policy preference for domestic grazing over alternate forage uses in established grazing districts.

5. Reduction in AUMs:

a. Beaver County's policy is that there shall be no-net-loss in AUMs. Grazing reductions or suspended AUM's caused by degraded range conditions shall be restored as expeditiously as resource conditions allow.

b. Livestock grazing should be returned to pre-fire levels when post-fire monitoring data shows objectives have been met, or the site potential has been achieved.

c. Changes in class of livestock and permit transfers should be completed without reductions in AUMs and in a timely manner.

d. Reductions in domestic livestock grazing AUM's to provide additional forage for another species over its population objective (i.e., wild horses above appropriate management levels ("AMLs")) will not be allowed.

e. AUMs on federal lands shall not be reduced unless documented resource conditions show failure to meet rangeland health standards for 5 consecutive years.

f. Beaver County opposes solar developments on public lands, which threaten AUM reduction. In furtherance of the "no-net-loss of AUM's" policy, species specific AUM's shall be retained within commercial solar facilities.

6. It is the policy of Beaver County that the guiding principle for managing livestock is adaptive management, i.e. clearly defining objectives, developing strategies to achieve objectives, consistent monitoring, and adjustment as needed. This approach provides flexibility in allotment rotations, on/off dates, duration, intensity, etc.

7. Beaver County formally recognizes the historic significance of livestock grazing and its value as a cultural resource. Livestock trailing rights are recognized as integral to the viability of the livestock industry and shall be protected.

8. Wild horses shall be managed in strict conformance with existing laws. Populations shall be limited to established AML's, anything over AML is considered excess.

9. Beaver County encourages vegetation treatments and habitat enhancement projects on the Mountain Home allotment for wild horse use, in order to reduce grazing conflicts on adjoining active allotments.

10. Pursuant to the Endangered Species Act (Sec 4(b)(2)) any agency declaring critical habitat must take into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat, including impacts to grazing.

11. Beaver County calls upon the federal agencies who administer lands in the county to:

a. Fully cooperate and coordinate with the County 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 plan to the maximum extent allowed under federal law;

b. Follow existing laws and policies pertaining to wild horse management on lands they administer;

c. Refrain from any "sue and settle" agreements with other non-governmental

organizations without consulting the Beaver County Commission;

d. Refrain from any planning decisions and management actions that will undermine, restrict or diminish the goals, purposes and policies of Beaver County as stated in this resolution; and

e. Coordinate with the County as a cooperating agency on all applicable land use plans and NEPA analysis.

12. Land managers shall take actions and make decisions that are designed to achieve the following conditions:

a. Range/Watershed Condition: Upland rangelands shall have vegetation cover and composition which will insure sustained productivity considering site potential and historical impacts; Range and watershed health is determined based on best available science and experience without reference to intended uses; Assessment of range/watershed condition is based on establishing the kind and amount of vegetation that will furnish soil protection and useful vegetation production considering the potential of the site, not necessarily restoring "natural" conditions.

b. Water quality: Water quality meets State standards that reflect appropriate uses and local potential to meet standards.

c. Noxious Weeds: Noxious and invasive weed infestations are detected early and controlled by chemical, mechanical, or biological means.

d. Desert Shrub: Desert shrub types (greasewood, blackbrush, salt desert shrub, etc.) are managed to maintain a dominance of shrubs with a good understory of perennial grasses and forbs (depending on site potential). Invasive annuals are absent or of minor extent.

e. Big Sagebrush: Big sagebrush (Basin, Wyoming and Mountain Big Sagebrush) are managed to maintain a good understory of perennial grasses and forbs with an overstory of big sagebrush and browse shrubs (on appropriate/designated sites). Invasive annuals are absent or of minor importance. Prescribed grazing and periodic brush treatments are used to prevent loss of the perennial understory and complete dominance of mature sagebrush. Landscapes exhibit a diverse mix of sagebrush communities ranging from almost all perennial grass and forbs to moderately dense stands of sagebrush, depending on treatments applied and the time since treatment. Sites having the potential to support productive sagebrush/grass communities have pinyon/juniper completely removed or reduced to a minor component depending on site-specific management objectives.

f. Pinyon-Juniper: Pinyon and juniper (PJ) is eliminated or reduced on any site that has the potential to support grassland, sagebrush grassland, or other vegetation types more useful in terms of watershed condition and resource outputs, unless it has been determined, on a site specific basis that PJ does not jeopardize watershed

condition and add to the combined resource outputs and values on the site. On sites where PJ occurs that do not have potential for good perennial grass and shrub cover, or where technology is lacking to establish such cover by reasonable efforts, PJ stands are maintained in an open canopy state when possible to prevent catastrophic wildfire and stand replacement with invasive annuals.

g. Aspen: Aspen stands have a good understory of forage plants for livestock and wildlife; encroachment of coniferous trees is controlled.

h. Ponderosa Pine: Ponderosa pine stands are maintained in an open condition that will support a good understory of perennial grasses and browse plants and periodic low intensity fire. Encroachment of shrubs or excessive density of pine reproduction that can support stand replacing crown fires is prevented.

i. Mixed Conifer: Mixed conifer stands are prevented from invading other forest types or mountain grasslands.

j. Riparian: Riparian areas are managed to prevent excessive erosion and deposition of sediment and impaired water quality that results, with recognition that these processes may have begun in the past due to natural and/or human caused factors and may continue far into the future regardless of the management applied.

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3.3 Water Rights & Irrigation

I. FINDINGS

Water Rights:

Utah is one of the driest states in the nation, and water is one of Beaver County's most precious natural resources. Water in Beaver County is a scarce resource, and needs to be developed to the maximum extent possible to promote productive and enjoyable harmony between man and his environment. Beaver County's water supplies have been carefully managed through established law, and developing any significant new supplies may be difficult and costly.

As set forth in Section 73-1-1 of the Utah Code, all waters of the state are owned exclusively by the state in trust for its citizens. These waters are subject to appropriation for beneficial use; and are essential to the future prosperity of the County and the quality of life within the county. As set forth in Section 73-1-3, this beneficial use shall be the basis, the measure and the limit of all rights to the use of water in the state. A "water right" is a right to divert water from its natural source to use it beneficially. The defining elements of a typical water right will include:

- A defined nature and extent of beneficial use;
- A priority date;

- A defined quantity of water allowed for diversion;
- A specified point of diversion and source of water; and
- A specified place of beneficial use.

The State of Utah will consider issuance of a water right after analysis of several factors, including the following:

- The availability of unappropriated water at the source;
- The proposed appropriation will not impair existing water rights;
- The proposed appropriation of water is physically and economically feasible at the location;
- The proposed appropriation is not monopolistic or based on speculation;
- Whether the proposed appropriation is in the public interest and promotes public welfare; and
- Whether the proposed appropriation will adversely affect the natural stream environment or public recreation.

The State of Utah has the right to develop and use its entitlement to interstate rivers for the benefit of all citizens. All water rights desired by the federal government must be obtained through the state water appropriation system.

Irrigation:

Agriculture is part of Beaver County's culture and heritage, and is vital to community and socioeconomic stability. Beaver County contains approximately 139,000 acres in farms or ranches, with an average size of 544 acres. The County also has about 52,000 acres in cropland, of which 36,000 are irrigated. Today, crops are mostly irrigated with sprinkler systems, though historically they were irrigated using the original "flooding" irrigation method. In 2010, the U.S. Geological Survey indicated 44.4 million gallons of water were being pumped from groundwater sources for irrigation per day. 33.4 million gallons a day were from surface water sources, or flood irrigated. The sprinkler systems irrigated 24,000 acres, but only 9,000 acres were flood irrigated. Irrigation is a necessary component of agriculture, however, water must be protected and conserved through land management practices and irrigation delivery systems must be more efficient.

II. OBJECTIVES

Beaver County's objectives with regard to water rights and irrigation are as follows:

1. To retain adequate water to meet its diverse current and future needs;

2. To demand that federal, state, and local entities come to a definitive resolution of federal reserved water rights consistent with the provisions of this RMP.

3. To demand that the State of Utah resolve issues regarding ownership of water rights on federal lands for wildlife, livestock, and other authorized purposes;

4. To demand that land managers recognize Beaver County as the primary headwaters of the Beaver River and actions in Beaver County impact numerous activities downstream;

5. To ensure that the flow of current and future irrigation waters across federal lands are unimpeded and efficient;

6. To ensure that appropriate irrigation related resources are added to the County's list of historic and cultural resources and landmarks;

7. To stop the encroachment of pinyon-juniper woodlands, undesirable riparian vegetation, and cheatgrass, all of which negatively impact water quality, quantity, and irrigation resources in Beaver County and for downstream users; and

8. To oppose plans and/or policies on federal lands that limit development of, or access to, water and irrigation resources.

III. POLICIES AND GUIDELINES

1. Beaver County will coordinate with federal, state, and local entities on a definitive resolution of federal reserved water rights consistent with the provisions of this plan. Beaver County also desires that the State of Utah resolve issues regarding ownership of water rights on federal lands for wildlife, livestock, and other authorized purposes.

2. Utah State Water Laws of Prior Appropriation Doctrine and Beneficial Use are recognized as the legal basis for perfecting all water rights for the use of all water within Beaver County.

3. Privately held water rights shall be protected from federal and/or state encroachment or coerced acquisition. Beaver County opposes any movement toward nationalization or federal control of Utah water rights and water resources.

4. State water right filings held by individuals, culinary water districts, or corporations are a private property right that may be sold, exchanged, or held separately from the land by any entity.

5. Any proposed sale, lease or exchange of water rights involving a public land management agency shall address the interests of Beaver County and such sale must include appropriate mitigation.

6. Water development must be prioritized over other multiple use/sustained yield activities unless otherwise approved by the Beaver County Commission.

7. Water related issues shall be coordinated with Beaver County and managed consistent with Beaver County's RMP to the maximum extent allowed by law. Issues associated with federal reserved water rights should be resolved in accordance with law and consistent with this RMP.

8. Irrigation should be preserved, improved, and enhanced, and federal land managers should support the improvement of irrigation on private lands through appropriate actions on federal lands.

9. Land managers implement avoidance, minimization and mitigation techniques and best management practices to support irrigation while allowing appropriate multiple use/sustained yield activities to proceed.

10. All federal agency actions shall recognize legal canal and ditch easements and rights-of-way.

11. Many artificial riparian areas or wetlands are created by fugitive water from irrigation systems. Creation or maintenance of an artificial wetland is contrary to the intent of conservation; Beaver County does not accept or recognize these artificial wetlands or riparian zones in environmental assessments or NEPA studies.

12. Beaver County will cooperate and coordinate with water companies, irrigation companies, conservation districts, state agencies, federal agencies and other partners to manage and develop current and future irrigation and water resources.

13. NEPA analysis for projects that impact irrigation resources shall include detailed socio-economic impacts to irrigators, especially small farmers, water companies and municipalities. Provisions of the Regulatory Flexibility Act will serve as a model for such analysis.

14. Consistent with ecologic site descriptions and based on a 10 year rolling average, land mangers shall restore a sufficient amount of Class II and Class III pinyon-juniper woodlands to desirable native and/or non-native sagebrush or grassland communities in order to protect, preserve, improve, and enhance irrigation resources in Beaver County.

3.4 Noxious Weeds

I. FINDINGS

Utah Code Title 4, Chapter 17 (the "Utah Noxious Weed Act") provides for the control of noxious weeds in Utah. Utah Administrative Code R68-9, effective January 1, 2017, designates the weeds named below, as "noxious" for the State of Utah. A "Noxious Weed" is as any plant deemed to be especially injurious to public health, crops, livestock, land, or other property. Pursuant to Utah Code §§ 4-2-2(k) and 4-17-3, the Commissioner of Agriculture and Food may designate weeds as noxious and undertake control and containment actions.

Class 1A: Declared noxious and invasive weeds found in surrounding states, which are not known to exist in Utah, but pose a significant risk of invasion to the state and should be considered as a very high priority.

Common crupina	Crupina vulgaris
African rue	Peganum harmala
Small bugloss	Anchusa arvensis
Mediterranean sage	Salvia aethiopis
Spring millet	Milium vernale
Syrian beancaper	Zygophyllum fabago
Ventenata (North Africa grass)	Ventenata dubia
Plumeless thistle	Carduus acanthoides
Malta starthistle	Centaurea melitensis

Class 1B: Early Detection Rapid Response (EDRR): Declared noxious, non-native invasive weeds in the State of Utah with very limited distribution, but pose a serious threat to the state and should be considered as a very high priority.

Camelthorn	Alhagi maurorum
Garlic mustard	Alliaria petiolata
Purple starthistle	Centaurea calcitrapa
Goatsrue	Galega officinalis
African mustard	Brassica tournefortii
Giant reed	Arundo donax
Japanese knotweed	Polygonum cuspidatum
Blueweed (Vipers bugloss)	Echium vulgare
Elongated mustard	Brassica elongata
Common St. Johnswort	Hypericum perforatum
Oxeye daisy	Leucanthemum vulgare
Cutleaf vipergrass	Scorzonera laciniata

Class 2: Control. Declared noxious, non-native invasive weeds, found in the State of Utah, that pose a threat and should be considered a high priority. Class 2 weeds are widely distributed throughout state but are considered controllable.

Leafy spurge	Euphorbia esula
Medusahead	Taeniatherum caput-medusae
Rush skeletonweed	Chondrilla juncea
Spotted knapweed	Centaurea stoebe
Purple loosestrife	Lythrum salicaria
Squarrose knapweed	Centaurea virgata
Dyers woad	Isatis tinctoria
Yellow starthistle	Centaurea solstitialis
Yellow toadflax	Linaria vulgaris
Diffuse knapweed	Centaurea diffusa
Black henbane	Hyoscyamus niger
Dalmation toadflax	Linaria dalmatica

Class 3: Containment. Declared noxious non-native invasive weeds to the State of Utah. Class 3 weeds are widely distributed throughout the State and may be considered beyond eradication. County efforts should be directed at controlling expansion as these weeds pose a threat to the agricultural industry and agricultural products.

Russian knapweed	Acroptilon repens
Houndstongue	Cynoglossum officianale
Perennial pepperweed	Lepidium latifolium (Tall whitetop)
Phragmites (Common reed)	Phragmites australis ssp.
Saltcedar (Tamarisk)	Tamarix ramosissima
Hoary cress	Cardaria spp.
Canada thistle	Cirsium arvense
Poison hemlock	Conium maculatum
Musk thistle	Carduus nutans
Quackgrass	Elymus repens
Jointed goatgrass	Aegilops cylindrica
Bermudagrass	Cynodon dactylon
Perennial Sorghum (Johnson grass)	Sorghum halepense and Sorghum almum
Scotch thistle	Onopordum acanthium
Field bindweed (Wild Morning-glory)	Convolvulus spp.
Puncturevine (Goats head)	Tribulus terrestris

Class 4: Prohibited. Declared noxious and invasive weeds, not native to the State of Utah, that pose a threat to the state through the retail sale or propagation in the nursery and greenhouse

industry. Prohibited noxious weeds are annual, biennial, or perennial plants that the commissioner designates as having the potential or are known to be detrimental to human or animal health, the environment, public roads, crops, or other property.

Cogongrass (Japanese blood grass)	Imperata cylindrica
Myrtle spurge	Euphorbia myrsinites
Dames Rocket	Hesperis matronalis
Scotch broom	Cytisus scoparius
Russian olive	Elaeagnus angustifolia

Utah Administrative Rule R68-9-2 states, "[e]ach county in Utah may have different priorities regarding specific State designated Noxious Weeds and is therefore able to reprioritize these weeds for their own needs." Each county may also declare a "County Noxious Weed" in addition to the State list.

Weeds Beaver County Has Designated as Noxious

Bull Thistle	Cirsium vulgare

Utah Code § 4-17-4 provides for a "County Weed Control Board" appointed by the county legislative body of 3 to 5 members, and that 2 of those members be farmers or ranchers whose primary source of income is from agriculture. Members are appointed to four-year terms of office. Pursuant to Utah Code § 4-17-5, this county weed control board is given responsibility, under direction of the county legislative body, for formulation and implementation of a county-wide coordinated noxious weed control program designed to prevent and control noxious weeds in the county. Utah Code § 4-17-6 further provides for a "Weed Control Supervisor" to carry out the directives of the weed control board and to implement the weed control program within the county.

Utah Administrative Code R68-9-5 requires that: "[t]he Board of County Commissioners of each county, with the aid of their county Weed Board and their County Weed Supervisor, shall submit an 'Annual Progress Report of County Noxious Weed Control Program' to the Commissioner of Agriculture and Food by January 15 of each year, covering the activities of the previous calendar year."

Utah Administrative Rule R68-9-6 requires the County Weed Board to post "General Notice to Control Noxious Weeds" in at least three public places within the county and be published in one or more newspapers of general circulation throughout the county, on or before May 1 of each year. Such public notice shall state that it is the duty of every property owner to control and prevent the spread of noxious weeds on any land in his possession or control.

Utah Administrative Code R68-9-6 also directs the County Weed Board, after

determining that weed control measures are required to control noxious weeds on a particular property, to cause an "Individual Notice to Control Noxious Weeds" to be served upon the owner or person in possession, giving specific instructions on when and how the noxious weeds are to be controlled within a specified period of time. The individual notice shall also inform the property owner or operator of legal action which may be taken against him if he fails to comply with the notice.

Pursuant to the Federal Noxious Weed Act (7 U.S.C. § 2814), federal agencies have the authority and responsibility to manage undesirable plants and noxious weeds on federal and public lands. Each federal agency has a designated weed specialist and weed control program.

Noxious weeds are a significant problem in Beaver County and have been the focus of considerable effort for many years. Scotch thistle, which is prevalent throughout much of the County, has been identified as a primary problem. Hoary cress is also widely spread across the County including in many alfalfa crops. Saltcedar and Russian olive have invaded most waterways. Houndstongue, Black Henbane, Canada thistle, Musk Thistle, Spotted Knapweed, Perennial Pepperweed, Puncturevine and Poison Hemlock have all invaded Beaver County and obtained strong footholds. Russian Knapweed, Squarrose Knapweed and Diffuse Knapweed have been found in small isolated locations and are being treated with the expectation of eradication. Recently, the new invader Cutleaf Vipergrass was discovered in the Pine Creek area and control measures are being prescribed. The highest concentration of weeds in the County are centralized around the Beaver valley, being dispersed by major transportation routes and stream irrigation among other factors.

Large utility projects, including transmission lines and gas pipeline disturbances, are especially vulnerable to noxious weed infestations. Noxious weeds are introduced through vehicles transporting seeds from outside locations. Disturbance to the soil and destruction of native plant communities leaves the site susceptible to invasion from invasive plants. When projects are finished, required vegetation seedings are applied and forgotten, but are frequently unsuccessful due to low soil moisture or other conditions. These sites may become infested with noxious weeds or undesirable monocultures like halogeton, white horehound or rabbit brush. Disturbed sites must be monitored for several years until desired vegetation has successfully reestablished.

Wild fire and prescribed fire treatment areas are highly vulnerable to noxious weed invasion. The heat from fire tends to stimulate seed germination of many noxious weeds while sterilizing many desirable plant seeds. Locations where fire has spread across the landscape need extra attention from land managers to monitor and control invasive noxious weeds.

Beaver County has struggled to maintain an active weed board through the years where active board participation is vitally needed. Another problem is coordinating among countless private land owners and federal land management agencies that manage public land interspersed

with private property ownership. Cooperative Weed Management Areas ("CWMA") were first introduced in neighboring states, and have been advocated in Utah to address the management hurdles that come with cross-jurisdictional collaboration. A Beaver County CWMA was formed in 2006 between Beaver County and various federal land management agencies. These partnerships were very helpful in coordinating efforts to combat weeds in the years following its inception. However, following personnel changes in key positions within the group, this working group has since fallen into inactivity.

II. OBJECTIVES

Beaver County's objectives with regard to noxious weeds are as follows:

1. To fulfill its responsibility to its citizens to protect lands, crops and livestock from the harmful and costly invasion of noxious weeds by preventing their introduction, establishment and spreading;

2. To maintain an active and functioning County Weed Control Board which shall formulate a weed control program or a plan prioritizing control efforts of noxious weeds in the County, post General Notices to control noxious weeds, and when appropriate, issue individual notices to control noxious weeds;

3. To increase public education on the imminent dangers, legal responsibilities and effective methods of controlling noxious weeds;

4. To seek and maintain CWMA's, which are integral to the coordination and collaboration of planning, financing, and orchestrating weed control activities and projects in the local area among partnering local, state and federal agencies;

5. To promote integrated pest management principles to prevent, contain and control noxious weed problems including mapping, biocontrol and early detection, rapid response;

6. To obtain sources of funding to contribute to the County's efforts in weed control, including state and federal grants; and

7. To ensure that all large-scale utility projects and other significant habitat disturbing activities implement bonding and/or permitting measures that require weed detection, chemical control mechanisms, post project habitat restoration and on-going monitoring.

III. POLICIES AND GUIDELINES

1. Beaver County shall organize and maintain a County Weed Control Board.

2. Beaver County shall appoint a Weed Control Supervisor to implement the weed control program.

3. Beaver County shall encourage and support the creation of CWMA's for collaboration in weed control efforts.

4. The Beaver County Weed Control Board and Weed Control Supervisor shall utilize Integrated Pest Management principles in the weed control program.

5. Promote noxious weed awareness through public outreach and education.

6. All large-scale utility projects shall have bonding measures and/or permitting that require noxious weed control, post project rehabilitation, including seeding with appropriate native and non-native grasses, and 3 years of monitoring afterwards to prevent establishment of undesirable monocultures. Restoration efforts must utilize native and non-native grasses and forage plants while preventing establishment of noxious weeds as well as undesirable invasive plants such as Halogeton, White Horehound and Rabbit brush.

7. Beaver County calls upon the federal agencies who administer lands within the county to:

    a. Fully cooperate and coordinate with the county 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. Follow existing laws and rules pertaining to noxious weed control on lands they administer;

    c. Coordinate with the County Weed Board and participate in applicable CWMA's;

    d. Maintain and enhance desired plant communities that benefit watersheds, water quality, wildlife, livestock, recreation, and are weed free;

    e. Utilize native and non-native seed mixtures in vegetation treatments that are appropriate to management objectives, are adapted to the site conditions and are highly resistant to and/or competitive to invasive and noxious weeds;

    f. Prioritize wild fire and prescribed burn areas for reseeding and noxious weed monitoring;

    g. Support federal, state and local weed associations, partnerships and coalitions;

    h. Refrain from any planning decisions and management actions that will

undermine, restrict or diminish the goals, purposes and policies of Beaver County as stated in this resolution; and

i. Refrain from implementing a policy that is contrary to the goals and purposes described in this resolution.

4. WATER RESOURCES

Water is one of the most important natural resources in Beaver County. More than 77% of Beaver County is federal land, and of the remaining 23%, only 12.6% is private land, most of which is concentrated in valley bottoms and along watercourses. Consequently, almost all surface water and the majority of watersheds are located on federal land. Beaver County is home to 5 major sub-basin watersheds: Beaver Bottoms-Upper Beaver, Hamlin-Snake Valleys, Pine Valley, Sevier Lake and a small portion of Escalante Desert. The Beaver Bottoms-Upper Beaver and Sevier Lake watersheds develop surface waters that flow north and eventually terminate at Sevier Lake in Millard County. The Sevier, Pine Valley and Hamlin-Snake Valley watersheds are associated with the Basin and Range physiographic region. The Beaver Bottoms-Upper Beaver receives the highest annual precipitation in the County creating numerous perennial streams.

The Beaver River and its tributaries are the major sources of surface water in Beaver County. The Beaver River is fed mainly by snowmelt and groundwater discharge from nearby mountains and is augmented by rainfall, especially during the late summer monsoon season. The Beaver River starts in the Tushar Mountains and flows westerly for about 30 miles as a perennial stream through the Beaver Valley to the Escalante Desert. The river turns north and continues for about 80 miles as an ephemeral wash past Milford into Millard county, where it joins the Sevier River and empties into Sevier Lake. The Beaver River watershed drains about 2,466 square miles, the majority being desert. The Rocky Ford Dam obstructs the river in its lower reaches, forming Minersville Reservoir. This reservoir is used for irrigation for Minersville and the Milford Flat. According to the U.S. Geological Survey's National Water Information System, there were roughly 32,000 acres irrigated in the county in 2010.

Rainfall in Beaver County is not adequate for most commonly grown crops, and is generally the limiting factor for vegetative cover on state and federal lands. Supplemental irrigation is required to obtain acceptable crop yields, and most irrigation water is diverted from the rivers and streams and stored in ponds and reservoirs. Minersville Reservoir, the most prominent storage facility, provides substantial irrigation resources in the area. In addition, many smaller reservoirs have been built in the Tushar Mountains for storage and water regulation.

Beaver County is in a closed basin, meaning none of the water ever flows into an ocean. Instead, streams drain into ephemeral washes and playas on valley floors, or infiltrate the stream channel. The few major rivers and streams in the area are mostly supported by snow runoff from mountain ranges in the Fishlake National Forest. Most streams east of Interstate 15 are diverted and dewatered for municipal and agricultural uses as soon as they leave public lands. Numerous

smaller streams drain from BLM-administered lands in the southern and western portions of the planning area.

Streams are mostly ephemeral and are fed either by groundwater, precipitation in the form of rain or snow, or a combination of the two. Streams also are fed by seasonal precipitation during summer monsoons that can bring localized and often intense thunderstorms from mid-July through mid- September. Streams not utilized for municipal and agricultural purposes typically drain into ephemeral washes and playas on valley floors, or are lost to infiltration into the stream channel.

Springs are fed by groundwater that reaches the surface naturally. When a spring produces enough output, it forms a stream. Rivers, streams, and springs in the County generally support a riparian or small wetland component, given that the duration of available surface or subsurface water allows for the establishment of wetland vegetation. There are numerous small springs widely scattered across the planning area, generally located on valley margins or mountain blocks. Springs are typically categorized as being lotic (flowing) or lentic (static). Small streams can be associated with lotic springs. These small springs and seeps are extremely important for their riparian values, as wildlife habitat, and as water sources for wildlife.

4.1 Hydrology

Hydrology is the science that encompasses the occurrence, distribution, movement and properties of the waters of the earth and their relationship with the environment within each phase of the hydrologic cycle. The water cycle is a continuous process by which water is purified by evaporation and transported from the earth's surface to the atmosphere and back. All the physical, chemical and biological processes involving water as it travels its various paths in the atmosphere, over and beneath the earth's surface and through growing plants, are part of this hydrologic cycle. There are many pathways the water may take in this continuous cycle, whether falling as rain or snow, frozen for millennia in glaciers, percolating through soil into underground aquafers, flowing from wells or springs, traveling to the ocean by river, transpired by plants, or evaporating from the earth's surface, whether long or short, it is all part of the cycle.

The supply of water available for our use is limited by nature. Although there is plenty of water on earth, it is not always in the right place, at the right time and of the right quality. The challenge becomes, how do we use and store the water so necessary for our daily life while solving water quality concerns as those uses we derive from it frequently lower its quality or purity.

I. FINDINGS

Beaver County is an arid environment. Even in mountainous areas of the County which receive relatively higher volumes of precipitation, water is in limited supply. Generally, eastern Beaver County contains higher elevation mountains and receives more annual precipitation than the western portion of the County. Typically, mountain and forested areas have sufficient vegetative cover and ground litter to allow for the collection of precipitation, especially during the spring when snowmelt occurs gradually. However, where encroaching pinyon and juniper have been allowed to invade and replace historic sagebrush and grassland ecosystems, vegetative cover is lost and consequently, precipitation evaporates more quickly.

The western portion of the county is characterized by sparse vegetation, sandier soils, and desert-like conditions. Intense late summer rain storms often result in flash flood conditions with attendant sediment transport and erosion. Many, if not most, of the watercourses are ephemeral washes with little or no riparian vegetation. Over the past several years, storm runoff intensity appears to have increased. There has been little to no human development in the area, but banks are not stabilized, and streambeds are often subject to downcutting. As a result, sediment transport is at unacceptable levels and is impacting water quality. Further, many of the watercourses in dryer portions of the County are infested with invasive weeds, which replace desirable vegetation and dominate limited water resources.

The utility of all lands in the county, whether public or private, are fully dependent on water flows from watersheds or underground sources for their productivity. The rivers and streams flowing form watersheds on public lands supply important water for municipal, industrial, agricultural and recreational use. As set forth in Utah Code 63-38d-401 (5)(c), "the waters of the state are the property of the citizens of the state, subject to appropriation for beneficial use, and are essential to the future prosperity of the state and the quality of life within the state."

The U.S. Geological Survey publishes a National Water Information System that provides data on water usage by county. Based on the latest data from 2010, 5,520 of Beaver County's 6,629 residents (83%) were served by municipal or public water systems. Those public water systems delivered an average of 2.38 million gallons of water per day. Domestic use was rated at 272 gallons per person per day. Industrial use was rated at .81 million gallons per day, down from 1.41 million gallons per day in 2005 and 1.82 million gallons per day in 2000.

The Utah Division of Natural Resources ("DNR") manages a program called the Watershed Restoration Initiative ("WRI"). This partnership based program focuses on three ecosystem values: (1) wildlife and biological diversity; (2) water quality and yield; and (3) opportunities for sustainable uses of natural resources. WRI is a bottoms-up initiative where

project planning, review, and ranking occur at a local level. Regional teams elect their own leaders, establish focus areas, review, score and rank project proposals, and assist members in implementing projects. Through WRI funding and matching funds from contributing partners, state and private organizations and individuals have assisted federal agencies in treating millions of acres across the state of Utah.

II. OBJECTIVES

Beaver County's objectives with regard to hydrology are as follows:

1. To demand that land management agencies significantly increase implementation of projects that improve vegetative cover, streambank stabilization, water detention, and eradication of undesirable invasive species;

2. To ensure that vegetative resources be managed in a condition that will provide sufficient cover and litter to protect the soil surface from excessive wind and water erosion, reduce bare ground, promote infiltration, detain surface flow, and reduce soil moisture loss by evaporation. This includes making provisions for a) increasing the percentage of vegetated ground; b) reducing the percentage of undesirable, invasive or noxious vegetation in relation to desired plant communities; and c) restoring or enhancing of perennial, intermittent and ephemeral watercourses to properly functioning condition;

3. To demand that land managers to prioritize structural and non-structural projects and best management practices that are designed to reduce stormwater volume, peak flows, and/or nonpoint source pollution through evapotranspiration, infiltration, detention, hydrograph extension, and filtration;

4. To demand that land managers implement structural and non-structural perennial, intermittent and ephemeral stream stabilization projects that reduce stream sedimentation and erosion while enhancing riparian areas, wetlands, and vegetation for wildlife and livestock; and

5. To demand that land managers coordinate programmatic agreements, best management practices, and prioritization schedules for improving hydrologic functions and conditions within Beaver County.

III. POLICIES AND GUIDELINES

1. Section 63J-8-104 of the Utah Code states that federal land management agencies shall manage the watershed on federal lands to achieve and maintain water resources at the highest reasonably sustainable levels as follows:

a. Adhere to the policies, goals, and management practices set forth in Subsection 63J-4-401(6)(m) of the Utah Code;

b. Deter unauthorized cross-country off highway vehicle ("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

c. Keep open any road in the subject lands that historically has been open to OHV use as identified on respective county road maps.

2. Federal land managers shall implement projects to increase native and non-native vegetative ground cover percentages to acceptable levels.

3. Watersheds shall be managed to preserve the quality and quantity of water for current and future uses.

4. Any proposed agency action must include an analysis of the effects on water quality, stream flow, amount of water yields, and timing of those yields. Any proposed action or non-action that results in a decrease in water quality, quantity or flow, or changes the timing of flows in negative way shall be opposed.

5. Any proposed agency action must be analyzed for impacts to water resource and management facilities, such as dams, reservoirs, delivery systems, culinary systems, and monitoring facilities, etc., located on or downstream from land covered by the proposal.

6. Livestock grazing and other multiple uses are compatible with watershed management.

7. Wild & Scenic Rivers and Wilderness designations limit the development and use of important water resources; Beaver County is opposed to any such designations.

8. Beaver County supports the wise use and conservation of important water resources and encourages new storage facilities, improved delivery systems, proper treatment measures and enhanced protection of water resources.

9. Enhanced programmatic agreements and best management practices associated with prescribed and wildland fire should be implemented to protect hydrologic functions and conditions in Beaver County.

10. Adequate access to water facilities, reservoirs, water lines, developments and other important structures must be protected and maintained.

11. Unless otherwise approved by Beaver County and consistent with ecologic site conditions, the following minimum objectives are established when lands experience prescribed or wildland fire:

    a. Retain sufficient ground cover after the burn with recruitment to adequate ground cover before the first rainy season following the burn;

    b. Do not reduce perennial and intermittent channel shading more than necessary, or by an amount that will take more than three years to recover;

    c. "Burn" and/or "feeder" piles will not be made in channels or swales within the area occupied when the bank full width is doubled;

    d. Burned piles within riparian areas will be left "messy" in order to retain sediment on site;

    e. Ignitions will not occur within 15 feet of riparian areas;

    f. Any firelines created during burning operations will follow *The Five-D System for Effective Fireline Waterbars* (Hauge et al., 1979);

    g. Firelines that need to cross-riparian areas will do so perpendicular to the channel and should not have more than 40 feet of hydrologic connectivity;

    h. Cupped fire lines should have water gaps every 20 feet to allow captured water to exit; and

    i. Existing disturbance areas, such as roads and trails, should be used to the extent possible as fire lines.

12. Unless consistent with ecologic site conditions and approved by Beaver County, the following minimum objectives are established when lands experience mechanical treatments:

    a. Retain adequate ground cover or pre-treatment level ground cover over the treatment area;

b. Mechanical equipment should not cross live streams or those channels supporting riparian vegetation except at designated crossing sites. Every effort to use existing crossings should be made;

c. Crossings at watercourses should be as close to perpendicular to the channel as possible to limit the area of disturbance;

d. Hydrologic connectivity of crossings should be limited to 20 feet on either side of the stream course wherever possible;

e. Any sediment or debris pushed into the channel to facilitate a crossing shall be removed as soon as is practical. The disturbed area will be rehabilitated to reduce erosion within the channel. Such rehabilitative efforts may include adding mulch, slash or debris from the project area to reduce flow and erosion potential;

f. Mechanical treatments should occur on the contour as much as practical;

g. Mechanical equipment should be limited to areas where slopes are less than 35%. Stretches of 100 feet or less on slopes of up to 40% may be treated to achieve desired objectives; and

h. Mechanical equipment should not operate when the soil has high moisture content, or when equipment is creating ruts deeper than nine inches in muddy soil.

13. Unless otherwise approved by Beaver County and consistent with ecologic site conditions, the following minimum objectives are established when lands are treated:

a. No sediment or slash will be introduced into stream channels. Inadvertently introduced material shall be removed, except where greater damage would occur during removal than would exist if the material remained untouched;

b. Roads, paths, ways, and trails shall be maintained, restored, or improved to a condition equal to or better than that which existed at the start of the project;

c. Project related damage to roads and their drainage features shall be repaired before the next rain or the close of the construction season, whichever is sooner;

d. Fueling of drip torches and other equipment shall not occur within riparian areas.

4.2 Surface Waters

I. FINDINGS

Surface water can be generally described as a river, stream, waterbody, reservoir, lake, pond, or spring. Rivers and streams in natural channels are classified as being perennial, intermittent, or ephemeral. Important rivers and streams in Beaver County include the Beaver River, North Creek, South Creek, Indian Creek, and their tributaries. These streams are fed mainly by snowmelt and groundwater discharge from nearby mountains, and are augmented by rainfall, especially during the late summer monsoon season. Rainfall in Beaver County is not adequate for the most commonly grown crops, and is generally the limiting factor for vegetative cover on state and federal lands. Minersville Reservoir is the major irrigation reservoir in the area. Many smaller reservoirs have been built in the area, but they are used mainly for water regulation, rather than large-scale storage.

Over the past 50 years, ecological conditions associated with many of Beaver County's surface waters have declined. The declines are particularly pronounced on federal lands where pinyon-juniper woodlands have been allowed to encroach on more desirable sagebrush and grassland communities, where seeding maintenance and vegetation projects have been neglected and where undesirable riparian vegetation has not been controlled. Often, these conditions occur in sandier soils where sparse vegetative cover is inadequate to prevent soil erosion accompanying intense precipitation events.

Land managers often incorrectly cite human influences as the primary cause for the ecologic decline. However, much of the decline is attributable to the loss of historic sagebrush and grassland vegetative communities, especially in lower elevations with sandier soils and in site specific areas to wild horses that have not been managed according to law. In fact, modification and pollution of surface-water, wetlands, riparian habitats, seeps, and springs are more influenced by vegetative cover, prescribed fire, and wildland fire than by mitigated impacts from residential, commercial and urban development, roadway and bridge construction, oil and gas development, livestock grazing, hydroelectric, wind and solar energy development, geothermal exploration and plant development, pipeline and transmission line construction, and other human activities.

Most human use of the water from rivers, streams, and waterbodies in Beaver County is for agricultural purposes. Historically, numerous small springs, seeps and mesic areas were widely scattered across the County, often located on valley margins or mountain blocks, but extended throughout various landforms. The small springs and seeps were extremely important for their riparian values, as wildlife habitat, and as drinking water for domestic livestock and wildlife.

Many of these springs have dried over the last several decades as a result of encroaching pinyon-juniper woodlands and invasion of undesirable riparian vegetation. Where pinyon-juniper woodlands in the region have been restored to sagebrush and grassland communities, the springs and seeps are returning and providing water for a variety of wildlife. When needed, the water resources are protected from livestock and wildlife trampling by exclosures and off stream watering practices.

Watersheds on public lands often supply water to communities in Beaver County. Surface water is generally used for irrigation purposes, but watershed health and surface water quality and quantity can also impact groundwater resources that are used for municipal domestic water supply. Actions on public lands in these watersheds are likely to affect such factors as water quality and quantity, erosion rates, and groundwater recharge. There is currently a high degree of interest regarding surface water and other water resources.

II. OBJECTIVES

Beaver County's objectives with regard to surface waters are as follows:

1. To demand that federal, state and local entities to cooperate and coordinate surface water management to optimize water quantity, quality, and beneficial use;

2. To re-evaluate surface waters in Beaver County to verify that their designated beneficial use is consistent with hydrologic and environmental conditions;

3. To classify upland soil loss due to lack of desired vegetative ground cover as the primary source of nonpoint pollution in Beaver County;

4. To demand that land managers preserve, enhance, improve, or optimize surface water resources through active management, especially watershed restoration and an increase in desirable native and non-native vegetative ground cover;

5. To ensure that the regulatory control of surface waters under the Clean Water Act be recognized and implemented; and

6. To ensure that adequate ground cover be retained after prescribed or wildland fire with recruitment to a suitable amount of ground cover before the first rainy season following the burn.

III. POLICIES AND GUIDELINES

1. Land managers need to recognize authorities granted to local governments under the Clean Water Act in managing surface waters within their jurisdictions. Federal agencies are subject to and must comply with state, tribal, interstate, and local requirements respecting the control and abatement of water pollution. *See* 33 U.S.C. § 1323. The CWA's regulations (40 C.F.R. part 131, *et seq.*) describe state responsibilities for developing, reviewing, revising, and approving water quality standards, which may be more stringent than those required by federal regulation, and include designation of uses of waters, establishment of water quality criteria, and adoption of an anti-degradation policy.

2. Land managers need to comply with the cooperation and coordination requirements of federal laws, regulations, rules, and manuals (e.g. BLM Manual 7240 and Forest Service Manual 2532) regarding state and local direction of water resource management issues.

3. Until such time as state and federal agencies can coordinate surface water management plans with Beaver County, the provisions of this plan must control maintenance, mitigation, enhancement, and improvement of surface water resources in Beaver County.

4. Consistent with federal, state, and local water quality programs, federal actions shall include at least one alternative that incorporates a science-based watershed approach for water quality protection and restoration, including assessment methods, monitoring and reduction of non-point pollution through vegetative restoration.

5. Priorities for improving water quality in the Beaver River watershed are: 1) enhance desirable upland and riparian vegetative cover; 2) eliminate undesirable riparian vegetation; and 3) enhance channel bank vegetation, riparian forest buffers and herbaceous cover, streambank protection, and channel stabilization.

6. In priority wildlife management areas, new water developments shall be allowed if it is demonstrated, among other benefits, that the improved water resources will benefit the prioritized species.

7. Until such time as total maximum daily loads are determined for individual perennial, intermittent, and ephemeral streams in Beaver County, land managers shall control non-point source pollution, including sediment, by: a) optimizing desirable upland, riparian, aquatic, and wetland vegetation; b) restoring invasive pinyon-juniper woodlands to desirable sagebrush semi-desert grasslands, based on a suitable timeframe ; c) eliminating noxious weeds and undesirable riparian vegetation; and d) using desirable non-native

biological equivalents when soil retention and vegetative performance is better than native species.

4.3 Ditches and Canals

I. FINDINGS

Beaver County's development of canals and ditches paralleled that of other communities in Utah. Ditches and irrigation canals were dug in and around agricultural interests near communities and in outlying valleys. The small amount of private land and the rugged, remote nature of many of the federal lands limited the extent to which ditches and canals could be constructed. However, natural conveyance systems such as riverbeds, creeks and streams, were used to transport water from natural sources and storage facilities to locations where water was regulated and allowed to enter the developed distribution system. Most populated areas of Beaver County and associated agricultural activities had ditches and canals constructed early in the community's development, and they remained relatively unchanged for approximately 100 years. During these years, ditches and canals served dual purposes of conveying irrigation water and providing an outlet for dispersing flood waters resulting from monsoon storms and heavy spring runoff common to the area.

In the latter third of the 20th century, improved techniques and construction methods led to the conversion of earth-lined ditches to lined canals and pipelines. Although more efficient in the use of water, the developments resulted in many historic ditches falling into disrepair and the loss of flood control capabilities. Many of the larger conveyance networks have remained operational and continue to provide service, while many of the smaller facilities associated with individual farms and irrigation companies have been replaced by pipelines.

In Utah, like most parts of the arid West, water often must be conveyed a long distance between the source and the place of use. Accordingly, there are numerous ditches, canals, and pipelines that cross one party's private property in order to convey water to another private party. The party receiving water from the ditch, canal, or pipeline generally has an easement, either by prescription or by an express grant of easement. Whether prescriptive or express, the easement includes the right to maintain the ditch, canal, or pipeline.

In Utah, there have been several situations where ditches or canals have failed. These failures have not only caused property and infrastructure damage, but injury and loss of life. U.C.A. 73-5-7 authorizes the State Engineer to inspect canals and ditches and order necessary repairs to protect public safety. The State Engineer is also required to inventory and maintain a database of all open, human made water conveyance systems prior to July 1, 2017. Section 73-10-33 of the Utah Code requires ditch or canal operators to prepare a management plan which

includes a map of facilities and slope instability locations, shows proof of liability insurance, has a plan for maintenance and emergency response measures, provides financial sourcing and determines the potential effects of storm water flows. The State Engineer's inventory is incorporated by reference.

II. OBJECTIVES

Beaver County's objectives with regard to canals and ditches are as follows:

1. To ensure that ditches and canals be maintained to perform dual functions of water conveyance and flood control;

2. To ensure that appropriate authorizations to be executed to preserve the function of ditches and canals on federal lands;

3. To recognize ditches and canals as important historic and current cultural resources; and

4. To preserve and enhance ditches and canals to benefit man and his environment and to permit the unimpeded flow of water.

III. POLICIES AND GUIDELINES

1. Beaver County supports efforts by irrigation companies, water conservancy districts, and others to protect, facilitate, and improve the efficient supply of water.

2. Private ditches and canals may be used for flood control when the need exists.

3. All federal agency actions shall recognize legal canal and ditch easements and ROWs.

4.4 Rivers and Streams

I. FINDINGS

Beaver County is bisected by numerous small rivers, streams, and tributaries flowing from the mountainous sections of the County. These streams are fed by springs and snow melt.

The Beaver River flows generally from east to west and has its origins in the Tushar Mountains within the Fishlake National Forest. Major contributions of the Beaver River are

withdrawn for irrigation and storage purposes along the southeastern portion of its course. The Beaver River becomes an ephemeral stream in the northern portion of its route prior to entering Millard County. Additional streams in the area include Indian Creek, Pine Creek, South Creek, and the north and south forks of North Creek.

The Hamlin Valley, Pine Valley and Wah Wah Valley sub-basins in western Beaver County are part of the Great Salt Lake Basin, the largest and least populated basin in Utah. The lack of human population in this area is due to the scarcity of water resources. It is composed of salty playa bottoms, and includes some of the most arid lands in the western United States. Only a few small streams are present in this area of Beaver County, whose waters generally infiltrate the streambed before ever reaching the valley floor.

The Beaver River watershed is fed from mountain snowmelt and runoff, and late summer thundershowers. Rivers and streams make up a very small percentage of the land base, but are influenced by conditions in their much larger watersheds. There are no known point sources that discharge directly into Beaver County's rivers and streams.

Pollution in Beaver County's rivers and streams is primarily a result of erosional sediments from insufficient or undesirable vegetative ground cover. Discharge from human developments is controlled by either implementation of stormwater regulations applied to municipalities and communities or implementation of best management practices on sparsely placed developed uses of federal lands.

II. OBJECTIVES

Beaver County's objectives with regard to rivers and streams are as follows:

1. To more aggressively manage vegetation in its rivers, streams and associated watersheds, to optimize and protect water resources;

2. To reclassify impaired waters in the Beaver River to include only those tributaries with native targeted fish populations and conditions suitable for cold-water fisheries;

3. To replace class II and Class III pinyon-juniper woodlands with desirable vegetative communities to reduce erosion and impacts on the County's rivers and streams;

4. To control undesirable riparian vegetation and aquatic noxious plants in all of Beaver County's public land rivers and streams and their associated riparian zones, especially in impaired waters of the Beaver River Watershed;

5. To seek additional structural improvements, such as dams, reservoirs, and impoundments, as well as non-structural improvements must be constructed to improve the efficiency of Beaver County's rivers and streams;

6. To demand that land managers to improve desirable vegetative cover to reduce stream sedimentation and protect water resources; and

7. To demand that land managers and landowners continue efforts to reduce nutrient loading in streams and water bodies.

III. POLICIES AND GUIDELINES

1. The beneficial use of Beaver County's rivers and streams should be maximized through protection and development of water quantity and quality, and through more aggressive vegetative management in watersheds and other areas impacting rivers and streams.

2. Land managers should be consistent with Beaver County's plans, programs, and policies for resources impacting rivers and streams, including actions for vegetation, water quality, pinyon-juniper reduction, fish and wildlife, livestock grazing, special status species, soil resources, and others, to the maximum extent allowed by law.

3. Wild, scenic, and recreational river evaluations and designations should be consistent with Beaver County's criteria, plans, programs, and policies.

4. Law enforcement and emergency medical services, solid waste collection services, human waste collection services, and the general public must be given increased access to Beaver County's rivers and streams—especially those on public lands.

5. Beavers should be transplanted only to areas approved by the Beaver County Commission, where such transplantation will not detrimentally impede the free flow of water.

6. Land managers shall recognize Beaver County's jurisdictional role over rivers and streams, and shall comply with the County's plans, programs and policies to the maximum extent allowed by law.

7. Demand that the restoration of native plant communities and the eradication of invasive and noxious plant species, especially Tamarisk, are the top priority of state and federal land managers in planning and decision making regarding rivers and streams in Beaver County.

8. Waters in Beaver County should meet the water quality standards set forth in state and federal law, as applicable.

9. Beaver County recognizes the "Recreational Use of Public Water on Private Property" law (H.B. 141) as passed by the 2010 Utah Legislature. Beaver County also respects and defends the private property rights of those landowners whose property lies beneath or adjacent to the water, against trespass or vandalism.

4.5 Flood Plains and River Terraces

I. FINDINGS

Historically, towns in rural Utah have been built in close proximity to rivers and their floodplains, where water was readily available for irrigation and landforms were conducive to agriculture. Beaver County is no exception, as communities in the County have been located near rivers. Early on, pioneers recognized the problems associated with locating homes and structures too close to flood prone rivers, but in recent years an increased desire for recreational homes and riverfront property has resulted in added pressure to make floodplains available for development.

In cooperation with local government, the Federal Emergency Management Agency ("FEMA") manages development in flood prone areas through the National Flood Insurance Program ("NFIP"). The program typically focuses on the delineation of the 100-year flood zone, also known as the Special Flood Hazard Area. Where a detailed study of a waterway has been done, the 100-year floodplain will also include the floodway, the critical portion of the floodplain which includes the stream channel and any adjacent areas that must be kept free of encroachments that might block flood flows or restrict storage of flood waters.

Communities in Beaver County generally participate with FEMA in managing floodplains, and often adopt more stringent requirements for human development in the floodplain. However, maps are not always accurate, and alterations of the watershed upstream of the point in question can potentially affect the ability of the watershed to handle water, potentially affecting the levels of periodic floods. Additionally, the maps are rarely revisited, and are frequently ineffective at accurately predicting areas of flooding or flood levels. Notwithstanding, developments in floodplains and on river terraces on private lands should be adequately managed through local planning and zoning ordinances and local building codes.

Impacts to floodplains and river terraces on developed state and federal lands are similar to controls used in community and private settings. Best management practices are employed to mitigate any detrimental effects, so limited human developments associated with authorized multiple use activities have little to no effect on floodplains and river terraces.

Large expanses of undeveloped federal land in Beaver County are not afforded similar protection. Passive land management, conversion of historical vegetative communities to noxious and invasive plant communities, increased bare ground, altered fire regimes, and other factors have resulted in modified watersheds and degraded upland conditions. Some estimates indicated uplands comprise as much as 95% of the federal lands not occupied by water bodies in Beaver County. Degradation in dominant uplands, largely as a result of encroaching conifers, has resulted in increased surface flows and expanding flooding in remote floodplains. Sparsely vegetated sandy soils have responded with increased erosion, downcutting of primary channels and steepening of banks. These unstable conditions are characteristic of formative floodplains that have not reached equilibrium.

Impacts associated with upland induced, unstable floodplains are exacerbated by natural hydrologic cycles typical of the Colorado Plateau. Flooding generally occurs from two distinct events: spring runoff from melting snowpacks, and intense summer thundershowers. While either event can trigger flooding, the dynamics of each are different. Snowmelt is a relatively predictable occurrence dependent on the amounts of winter snowpack and the timing of rising spring temperatures. Large accumulations of snowpack melting in the spring contribute to some localized flooding, usually in the larger drainage basins. In contrast, summer cloudbursts cause site specific and localized flooding events in otherwise dry washes and canyons. While both types of events can have profound impacts on the floodplains and hydrologic systems, thunderstorms often occur in soils that are more susceptible to erosion and create incised channels without functioning floodplains.

Wildland and prescribed fire are secondary causes of flooding. When vegetation is burned, soils are exposed to erosion. Debris flows below fire scars are a considerable risk until vegetation is reestablished. Planning for revegetation through seeding and other mitigation efforts after fires are addressed in resources management documents and in agency practices.

For the most part, flooding is a natural process that supports channel maintenance, ecological processes, and riparian vegetation. However, flooding in areas without properly functioning floodplains has the opposite effect of widening banks and decreasing the hydrologic grade.

II. OBJECTIVES

Beaver County's objectives with regard to flood plains and river terraces are as follows:

1. To restore floodplains, especially on undeveloped federal lands, to properly functioning conditions;

2. To engage in coordinated, strategic planning to restore uplands, floodplains, native plants and vegetation, and to improve rangeland health;

3. To recognize the role of upland watershed management and incorporate them in floodplain management and restoration activities;

4. To make structural and non-structural improvements to degraded uplands to: (a) replace Class II and Class III pinyon-juniper woodlands with desirable historic vegetative communities; (b) reduce runoff; and (c) reduce the amount of bare ground;

5. To install check dams be installed to arrest downcutting and to restore natural stream grade;

6. To make the analysis and approval processes for floodplain restoration as categorical exclusions under NEPA. Corps of Engineers and other federal agency should be reduced to the minimum required under law;

7. To implement active management and restoration projects on federal lands to restore sinuosity, vegetation, and floodplain function which mimic the natural hydrologic system; and

8. To demand that land managers restore a desirable amount of non-functioning floodplains to properly functioning condition.

III. POLICIES AND GUIDELINES

1. Long term hydrologic function should be prioritized over short term ground disturbance.

2. A coordinated, strategic plan recognizing the condition of Beaver County's floodplains, especially on undeveloped federal land, does not exist. Land managers shall include a coordinated floodplain restoration and improvement program in agency resource management plans during the next regular planning cycle, or prior to January 2021, whichever occurs first.

3. Land managers shall prioritize management actions on activities that improve the productivity of resources and resource uses under their management control. Restoration of invasive conifers to desirable vegetative communities, maintenance of seedings, vegetation projects to reduce bare ground, appropriate use of prescribed fire and response to wildfire, structural projects to restore floodplains to historical topographic and

ecological conditions, and other pro-active solutions shall be implemented prior to prescriptive actions associated with climate change.

4. Land managers, especially of undeveloped federal lands, shall implement an active program of structural and non-structural improvements to deficient floodplains, river terraces and associated watersheds— including uplands— to protect a) harmony between man and his environment, b) resources and resource uses, c) enjoyment of resources by current and future generations, d) rangeland health, e) water quality, and f) the County's custom, culture, heritage, and socio-economic stability.

5. Where land managers are unable to restore a desirable amount of non-functioning floodplain due to associated substandard upland conditions, floodplain restoration may be postponed for up to three years.

6. Active floodplain management and restoration, especially on undeveloped federal lands, must be implemented to restore sinuosity, vegetation, and floodplain function. These implementations should mimic natural hydrologic conditions on an adequate amount of the non-functioning floodplains prior to 2040.

7. Analysis and approval processes for floodplain restoration shall be simplified to the maximum extent allowed by law, and shall be authorized as categorical exclusions under NEPA wherever possible. Corps of Engineers and other federal agency involvement shall be eliminated or reduced to the minimum required under law.

4.6 Dry Washes and Ephemeral Streams

I. FINDINGS

For the purposes of this Resource Management Plan, dry washes and ephemeral streams are defined as: *a watercourse or portion of a watercourse which flows briefly in direct response to precipitation in the immediate vicinity, and whose channel is dry for significant periods of time throughout the year.* Riparian areas are defined as: *the strip of vegetation along an ephemeral, intermittent, or perennial stream, which is of distinct composition and density from the surrounding uplands.*

Dry washes and ephemeral streams are the defining characteristic of many public land watersheds in Beaver County, especially in the western portions of the County, outside high

precipitation forests and densely vegetated lands. Individual washes and ephemeral stream segments are not generally examined in isolation for landscape level planning purposes. However, site-specific projects often rely on the impacts associated with individual watercourses.

Dry washes and ephemeral streams are found across the Earth's land surface in arid and semiarid regions that are commonly referred to as "drylands." Approximately one-third of the Earth's land surface is classified as arid or semi-arid, including significant portions of Beaver County. These lands are characterized by low and highly variable annual precipitation, where evapotranspiration exceeds precipitation. Riparian ecosystems associate with dry washes and ephemeral streams, occupying a very small portion of the landscape. Yet, they may exert substantial influence on hydrologic, geomorphic, and ecological processes of a watershed.

Dry washes and ephemeral streams are unique in that they lack permanent flow except in response to rainfall events, but may perform the same critical hydrologic functions as perennial streams. Although arid and semi-arid region streams perform the same functions as perennial streams, their hydrology and sediment transport characteristics cannot be reliably predicted. This is due to a much higher degree of spatial and temporal variability in hydrologic processes, and also in the resulting erosion and sedimentation processes than are higher than near perennial streams. Desert environments typically produce more runoff and erosion per unit area than do temperate regions for a given intensity of rainfall due to sparse vegetation cover and poorly developed soils with little organic matter. The variability of flood magnitudes is also much greater for dry washes and ephemeral stream channels as compared to that of perennial stream systems.

Floods in dry washes and ephemeral streams often occur as flash floods, single-peak events, multiple-peak events, and seasonal floods. The highly variable stream flow in ephemeral and dry washes most often occurs as a flash flood, lasting only minutes or hours. Flash floods may occur any time of the year in response to a short-duration high-intensity precipitation event, and after the watershed has received enough precipitation to generate runoff.

Water flowing in normally dry stream channels is subject to two key forces: (1) gravity that moves the water downslope; and (2) friction between the water and channel boundaries that resists the downslope movement. These two forces determine, to a large degree, the ability of the water to modify the channel geometry and transport debris. In addition, channel roughness, slope, and depth determine the velocity of the flowing water. Channel slopes in Beaver County are often large, so when flows do occur they have high velocities and consequently significant energy and erosive power. Dissipation of energy in channels can occur due to vegetation, curvature, obstructions, and the size, character and configuration of material in the bed and banks.

As noted previously, although ephemeral streams do not flow at all times, they still perform the major functions of a stream: the transportation of water, nutrients, and sediment. However, unlike perennial streams that continuously move sediment through the watershed, sediment movement in non-perennial stream channels generally occurs as a pulse in response to runoff generated by the short duration, high intensity thunderstorms that are typical of the area. These thunderstorms often result in flash floods and yield rapidly rising runoff. Normally dry channels tend to have deep sediments that are mostly sands and gravels, with widely scattered shrubs that are resistant to violent floodwaters. The unconsolidated sediments can be easily mobilized during flows, unlike the clay bedded, vegetated or armored channels in perennial streams. These deep sediments cause large bed and bank losses in the downstream direction, resulting in reduced flow volume and velocity over the length of the stream, and subsequent deposition of bed load materials and coarser suspended sediments. In simple terms, dry washes and ephemeral streams are usually erosive and unstable.

Generally in Beaver County, dry washes and ephemeral streams do not exhibit dominant riparian vegetation characteristics. Often there is little differentiation between upland vegetation and bank vegetation. Structural, biologic and ecological functions do not exist, and banks and streambeds are prone to erosion.

Vegetation in arid and semi-arid regions is largely controlled by the availability of water, with flood disturbance and soil conditions further shaping plant distribution patterns. Depending on attributes of the particular dry watercourse, the highest density of vegetation may occur along the streambank or within the channel bed. By providing channel and streambank roughness through standing or downed material, vegetation can influence flow velocities, flow depths, bank and floodplain erosion, and sediment transport and deposition, and can be a major factor contributing both to channel stability or instability.

Vegetation along the streambank stabilizes the soil through the reinforcing nature of its roots, and prevents erosion. In dry washes and ephemeral stream channels, vegetation may establish on sand bars, and subsequently initiate the formation of various depositional features such as small current shadows, bars, benches, ridges, or islands. Spatially extensive assemblages of any plant species have the potential to alter geomorphology and geomorphic processes through disturbance of sedimentary deposits, alteration of nutrient or fire cycles, and patterns of succession.

The goal of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters, and to prevent pollution of those waters. Historically, major desert washes have sometimes been considered to be jurisdictional under the CWA. However, as a result of Supreme Court decisions, the definition of the nation’s waters or

jurisdictional waters of the United States under the CWA has required additional clarification, specifically with respect to tributaries that are "not relatively permanent" (i.e. dry washes and ephemeral streams). Recent guidance from the U.S. EPA and Army Corps of Engineers requires that a significant nexus exist between dry washes or ephemeral stream and a traditional navigable water of the United States for the dry washes or ephemeral streams to be jurisdictional under the CWA. This significant nexus evaluation must consider flow characteristics and functions of the tributary to determine if it has a significant effect on the chemical, physical, and biological integrity of downstream traditional navigable waters.

II. OBJECTIVES

Beaver County's objectives with regard to dry washes and ephemeral streams are as follows:

1. To restore dry washes and ephemeral streams, especially on undeveloped federal lands, to properly functioning conditions;

2. To make structural and non-structural improvements to degraded dry washes and ephemeral streams;

3. To recognize the role of upland watershed management be recognized and incorporated in dry wash and ephemeral stream restoration;

4. To make structural and non-structural improvements to degraded uplands to a) replace Class II and Class III pinyon-juniper woodlands with desirable historic vegetative communities, b) reduce runoff, and c) reduce the amount of bare ground;

5. To install check dams to arrest downcutting, and to restore natural stream grade in dry washes and ephemeral streams;

6. To make the analysis and approval processes for dry wash and ephemeral stream restoration categorical exclusions under NEPA; and

7. To demand that land managers restore to properly functioning condition a desirable amount of non-functioning dry washes and ephemeral streams per year.

III. POLICIES & GUIDELINES

1. Coordinate with federal and state entities on strategic plans to restore dry washes and ephemeral streams, and to improve rangeland health.

2. Corps of Engineers and other federal agency involvement must be reduced to the minimum required under law. Dry washes and ephemeral streams must be recognized as outside of the Corps of Engineers jurisdiction.

4.7 Groundwater

I. FINDINGS

Groundwater is Beaver County's principal reserve of fresh water, and represents much of its potential future water supply. Groundwater on federal lands is a major contributor to flow in many streams and rivers, and it has a strong influence on the health and diversity of plant and animal species in forests, rangelands, grasslands, riparian areas, lakes, wetlands, and springs. It also provides drinking water for all of the public water systems, and is connected to many of the private water systems in Beaver County.

As of 2010, the U.S. Geological Survey indicated 1100 residents of Beaver County utilized self-supplied culinary water from groundwater sources. These wells supplied approximately 190,000 gallons of water per day, or about 171 gallons per person per day. The municipalities in Beaver County provide nearly 2.4 million gallons of culinary water per day, all of which comes from groundwater sources, either from springs or wells.

Awareness of groundwater's importance, the need for safe drinking water, and requirements to maintain healthy ecosystems are increasing. Many of the concerns about groundwater resources on private and public lands center around dependability of long term supply, depletion of groundwater storage, reductions in streamflow, potential loss of groundwater-dependent ecosystems, and changes in groundwater quality. The effects of human activities common to more populated areas, land subsidence, and saltwater intrusion are not applicable to Beaver County. Contamination from landfills, septic tanks, leaky underground gas tanks, and from overuse of fertilizers and pesticides is prevented and controlled through various federal, state, and local regulatory mechanisms.

Groundwater wells in the County are utilized primarily for culinary water and crop irrigation. With virtually no oil and gas development in Beaver County, there are no concerns over potential groundwater contamination from those sources. However, E. Coli and other bacterial contaminants were discovered in Milford Flat wells in the fall of 1998. The sewer lagoons from the valley's hog farms were suspected of being the source of the contamination. The Utah Department of Environmental Quality began a year-long study, finding: (1) There was

no compelling data to support the contention that ground water was contaminated; (2) there was no data to support the contention that the bacteria originated in the Circle 4 sewer lagoons; (3) there was no data to suspect the Beaver River as the source; (4) data did not indicate septic seepage as the source; and (5) data strongly suggested the bacterium stemmed from pipes in the well apparatus.

The Utah State Engineer manages potential drawdown of groundwater resources. As of March 19, 1997, Most of the Sevier River Basin was closed to all new appropriations. All new groundwater development is to be based on the acquisition and changing of existing valid water rights, from surface sources like direct flow and reservoir storage, to underground sources. As of January 1, 2017, areas of western Beaver County are "Open" status, signifying unappropriated water is available in the aquifer system.

Ground water is a valuable commodity, and its use is increasingly important. Federal lands contain substantial ground water resources, for which stewardship and protection are mandated by various congressional acts. Many other natural resources rely on ground water, and could be damaged or destroyed if that water were depleted or contaminated. Generally, groundwater resources in Beaver County are relatively deep and have little impact on surface resources. However, overuse of ground water may impact streams, wetlands, riparian areas, forest stands, meadows, grasslands, seeps, springs, and livestock and wildlife watering holes on a site-specific basis. Reduced water-table levels near the earth's surface can impact biota that depend on ground water, particularly in riparian and wetland ecosystems.

Groundwater quality is highly variable, and is dependent on the location of the aquifer formation, potential pollutants, and the recharge mechanism. Groundwater quality is classified by the Utah Water Quality Board based primarily on the amount of total dissolved solids ("TDS"). Lower amounts of TDSs indicate higher water quality. Potential pollution from private lands has been reduced in recent years with greater knowledge, conversion of flood to sprinkler irrigation, and added emphasis on groundwater quality. Limited development and pollution sources on federal lands suggests a low risk, except for wildland and prescribed fire, which still have the potential to affect groundwater and primary sources of culinary water in the County.

II. OBJECTIVES

Beaver County's objectives with regard to groundwater are as follows:

1. To preserve, improve, and develop groundwater resources for the use of man while supporting multiple use/sustained yield principles;

2. To develop inventories of the quantity and quality of ground water on federal land to provide the information necessary to appraise their value, and to provide for appropriate stewardship of ground water resources, especially in landscape level planning;

3. To demand that land managers ensure that adequate groundwater resources are available for authorized purposes, and to support local communities;

4. To demand that land managers prevent or minimize adverse impacts to groundwater resources through appropriate vegetative treatments that optimize forest and rangeland health;

5. To recognize humans as a subset of groundwater dependent fauna, and development of resources for their use should be given priority;

6. To demand that land managers optimize forest and rangeland health and vegetative cover as a means of preserving and protecting groundwater resources;

7. To recognize that watersheds that are the source of supply for community and culinary water systems, and wishes that they be managed for resistance and resilience to fire; and

8. To establish the following minimum standards when lands experience prescribed or wildland fire:

    a. Retain adequate ground cover after the burn with recruitment to a suitable amount of ground cover before the first rainy season following the burn;

    b. Do not reduce perennial and intermittent channel shading to a less than desirable amount of the natural range of variability or by an amount that will take more than three years to recover;

    c. “Burn” and/or “feeder” piles will not be made in channels or swales within the area occupied when the bank full width is doubled;

    d. Burned piles within riparian areas will be left “messy” in order to retain sediment on site;

    e. Ignitions will not occur within 15 feet of riparian areas;

    f. Any firelines created during burning operations will follow *The Five-D System for Effective Fireline Waterbars* (Hauge et al., 1979);

g. Fire lines that need to cross riparian areas will do so perpendicular to the channel and should not have more than 40 feet of hydrologic connectivity;

h. Cupped fire lines should have water gaps every 20 feet to allow captured water to exit; and

i. Existing disturbance areas, such as roads and trails, should be used to the extent possible as fire lines.

III. POLICIES AND GUIDELINES

1. Land managers must comply with federal, state, and local requirements for wellhead protection and sole source aquifer use. Managers also must ensure all public water systems on their lands comply with applicable groundwater regulations.

2. Land managers must protect ecological processes and biodiversity of groundwater dependent ecosystems by a) maintaining natural patterns of recharge and discharge by minimizing disruption to ground water levels that are critical for ecosystems; b) not polluting or causing significant changes in ground water quality; and c) rehabilitating degraded ground water systems where possible.

3. Land managers must manage groundwater dependent ecosystems under principles of multiple use/sustained yield, while emphasizing protection and improvement of soil, water, and vegetation.

4. Based on site-specific characteristics of water, geology, flora, and fauna, land managers must identify, inventory, and determine boundaries of groundwater dependent ecosystems as part of land use planning processes.

4.8 Wetlands

I. FINDINGS

A wetland is a land area that is saturated with water, permanently or seasonally, such that it takes on the characteristics of a distinct ecosystem. Wetlands have been defined in many different ways by different entities, however, the U.S. Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA) jointly define wetlands as: “Those areas that are

inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that do under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." This definition of wetlands is the most relevant to local land managers and planners because the Corps and the EPA are the agencies that have legal jurisdiction over wetlands, including those wetlands on private property.

Prolonged saturation with water leads to chemical changes in wetland soils, which in turn affect the kinds of plants that can grow in wetlands. Some wetlands are easy to recognize because the water sits on the land surface for much of the year. Other wetlands exist due to saturation of the soil by groundwater and can be difficult to identify. Generally, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance.

According to the National Wetlands Priority Conservation Plan ("NWPCP") of the USFWS (1989), wetlands are considered to be lands in transition zones between aquatic and terrestrial systems where the land is covered by shallow water or the water table is usually near or at the ground surface. Wetlands are critical components of healthy regional ecosystems. They provide essential habitat for many species of fish and wildlife, as well as important resting places for migrating birds. They can also control floods and erosion, purify wastewater and recharge groundwater. The NWPCP is intended to assist public agencies and the private sector with identifying wetlands warranting priority consideration for protection.

Under Section 404 of the Clean Water Act, the Corps is the legal authority designated to issue permits for all activities that involve wetlands, including: placement of fill or dredge material in a wetland, ditching activities, levee, dam or dike construction, mechanized land clearing, land leveling and road construction.

The U. S. Fish and Wildlife Service provides a wetlands interactive map of the United States, including Beaver County. The National Wetlands Inventory map (available at http://www.fws.gov/wetlands/) provides County staff and the public with the general location of areas with wetland characteristics.

Beaver County has very limited water resources due to its arid climate. Nearly all of the surface water in the county is used for municipal and agricultural purposes. The National Wetlands Inventory map identifies many so-called wetlands in the county that rarely have water or saturated soils typical of a wetland feature. Many of these mapped wetland locations are historic and indicative of conditions prior to modern settlement and diversion for beneficial purposes. Nevertheless, activities affecting these wetland areas are regulated by the U.S. Army Corps of Engineers.

II. OBJECTIVES

Beaver County's objectives with regard to wetlands are as follows:

1. To protect precious water resources, including legitimate wetland areas for water purification, groundwater recharge, flood control, and wildlife habitat; and

2. To prioritize private property rights and to strengthen those rights by pursuing legislation that will change, undo, or overhaul burdensome federal regulations and policies that lack merit or local application.

III. POLICIES AND GUIDELINES

1. Beaver County believes that protection of natural wetlands, as defined in the Clean Water Act, benefits the environment and is ecologically prudent.

2. The U.S. Army Corps of Engineers, as the permitting authority for development of wetland areas, shall be judicious and cautious in weighing the benefits of wetland preservation against the development needs of Beaver County and its citizens; those development sites subject to permitting, must meet the criteria for soils, vegetation and hydrology pursuant to the Clean Water Act (Sec 404) to be considered a wetland.

3. Beaver County opposes the wetland delineations as currently mapped by the National Wetlands Inventory map, where those areas that have been without surface water or saturated soils for multiple years and do not conform to the definition of wetlands should be removed from such maps and exempted from wetlands policy restrictions.

4. Beaver County supports only those true wetland areas that have natural water sources that inundate or saturate the soil on an annual basis and actually function as wetlands.

5. Land managers shall not make restrictive plans, actions or management policies for areas as wetlands unless they conform to the definition of wetlands as given by the EPA and U.S. Army Corps of Engineers.

4.9 Water Quality

I. FINDINGS

Beaver County contains some of the most sparsely populated lands in Utah and has very limited industrial and municipal development. 77% of the land is under federal ownership, and only 13% is held by private interests. Consequently, population growth and the development of urban/urbanized areas and industries which have major influences on water quality do not exist. Point source discharges are controlled by state and local regulations; and overall water quality is within established standards. Industrial and municipal discharges are almost entirely limited to municipalities. Containment structures (lagoons) are located in Beaver City, Minersville and Milford. Other communities rely on private wastewater systems. No point source discharge issues are known to exist in Beaver County. However, private lagoons exist for large agricultural industries.

Nonpoint source discharges are also characteristic of rural, sparsely populated areas. Relatively few perennial streams and water bodies exist in Beaver County. Several water resources in the County have been identified on the state's list of 303(d) impaired waters including: Beaver River, Minersville Reservoir, Puffer Lake, Kents Lake, and LeBaron Reservoir. Points of concern include total phosphorous, noxious aquatic plants (algae), riparian habitat modification, dissolved oxygen, and temperature. TMDL reports, which include water quality data and implementation plans typically carried out by various federal, state, and local governments and private cooperators, have been prepared for these waters. Sedimentation and nutrient loading are common problems in Beaver County's impaired waters.

In addition to point and nonpoint pollution sources that are commonly recognized as impacting perennial waterbodies, Beaver County is also impacted by pollution from ephemeral streams. Stormwater runoff is generated from rain and snowmelt events that flow over land and do not soak into the ground. The runoff picks up pollutants like organic debris and dirt/sediment that can harm rivers, streams, and lakes. Concentrated flows also cause damage to ephemeral streambanks and dry washes, threatening rangeland health and stability. Although detailed empirical data is not available, runoff intensity has notably increased over the past few decades. Larger and more damaging runoff events have taken place, and sediment and debris flows have increased proportionally. Together, they can cause changes in hydrology and water quality that result in habitat modification and loss, increased flooding, decreased aquatic biological diversity, and increased sedimentation and erosion. The benefits of effective stormwater runoff control and management of ephemeral watercourses include: protection of wetlands, riparian and aquatic ecosystems, improved quality of receiving waterbodies, conservation of soil resources, and improved range/land forest health.

To protect water quality and associated resources from point and nonpoint pollution, stormwater controls, known as best management practices ("BMPs"), have been implemented by various agencies. These BMPs filter out pollutants and/or prevent pollution by controlling it at its source. The State of Utah and local governments are authorized under the Clean Water Act to implement permitting and management actions, including BMPs to protect water quality and water resources.

Another form of non-point source pollution is hydrologic modification. This term refers to activities that affect the natural pathways of surface water and streambank erosion. Although these activities do not appear to be forms of pollution, they nevertheless are considered to be part of the non-point source pollution problem. Many rivers and streams have natural flood control areas, such as oxbows, adjacent wetlands, and riparian zones. When these areas are modified or removed, significant changes in the ecological functions of surrounding lands are likely to occur. Channel modifications, even when occurring naturally, frequently degrade instream and riparian habitat for fish and wildlife. Other impacts include erosion and the reduction of the system's ability to filter pollutants. Similarly, upland vegetative modifications, especially adjacent to riparian areas and wetlands can change surface hydrology and reduce natural buffers.

II. OBJECTIVES

Beaver County's objectives with regard to water quality are as follows:

1. To take an active role in water quality management by developing plans, regulations, ordinances, and best management practices surrounding water quality issues;

2. To ensure that any NEPA analysis includes a specific and cumulative impact analysis of Class II and Class III pinyon-juniper woodlands on water quality;

3. To ensure that management of water bodies in Beaver County are coordinated, re-evaluated and are consistent with this plan;

4. To demand that land managers actively manage water bodies in a manner that provides for increased forage production that reduces sedimentation in, and hydrologic modification of, Beaver County's perennial, intermittent, and ephemeral water resources;

5. To ensure that soils in Beaver County, consistent with ecologic site descriptions, produce a suitable amount of their potential by 2025 and show increasing improvement of their potential by 2050;

6. To demand that land managers recognize that storm water management approaches that rely solely on peak flow storage have not usually targeted pollution reduction and only treat sediments after they have entered the watercourse. Upland vegetative productivity

and cover also need to be enhanced and optimized with appropriate native and non-native seed mixes;

7. To demand that, consistent to the maximum extent allowed by law, land managers: (a) reduce impacts to water quality by complying with the provisions of Beaver County's Resource Management Plan; or (b) as approved by Beaver County, develop and implement a cooperative and coordinated water quality management plan prior to the first day of their 2020 fiscal year; and

8. To develop policies, goals, objectives and best management practices for forest and rangelands to reduce sediment and debris in the County's watercourses.

III. POLICIES AND GUIDELINES

1. Beaver County will cooperate and coordinate with the State of Utah to review and revise Total Maximum Daily Loads ("TMDLs") for hydrologic units listed on the 303(d) list of impaired streams.

2. Beaver County will coordinate with the Utah Division of Water Quality to re-evaluate and refine beneficial use designations of Beaver County's water bodies.

3. It is the policy of Beaver County that water-quality testing guidelines should be established by the State of Utah and not by the federal government. At a minimum, testing requirements should be modified to fit local necessity and circumstances.

4. Beaver County supports expanded livestock grazing adaptive management including extended on/off dates, intense seasonal grazing to control invasive species and vegetation based use criteria. Unless coordinated with and approved by Beaver County, livestock grazing restrictions shall not be implemented until water quality prioritizations and provisions outlined in this plan are completed.

5. Land managers shall control water runoff from disturbed or developed sites and shall control soil erosion from undeveloped sites through implementation of provisions contained in the CRMP. With concurrence of the Beaver County Commission, land managers may implement alternate provisions that have been coordinated with the County and are demonstrated to advance the findings, policies, goals, and objectives of the CRMP.

6. Surface disturbing activities within withdrawn Drinking Water Source Protection Zones may be allowed if the disturbance does not degrade water resources and best management practices are implemented.

7. Proper disposal, other beneficial use and appropriate surface discharge of produced water from new activities on public land is allowed if mitigation measures and/or best management practices are implemented to address impacts from the produced water.

8. Beaver County supports an integrated approach to stormwater management without negatively impacting existing resource levels and uses. Based on existing conditions, current technology, acreages in need of improvement, effectiveness of potential actions, and other factors, Beaver County adopts the following prioritization to improve water quality:

    a. Optimization of upland vegetative cover through restoration, improvement and enhancement of desirable native and non-native vegetative communities, including restoration of Class II and Class III to sagebrush / semi-desert grasslands, especially in areas of accelerated erosion;

    b. Development, enhancement and expansion of detention areas, lakes, ponds, wetlands, riparian areas, grade structures, and mesic conditions to slow stormwater and reduce erosion;

    c. Maintenance of existing biologic soil communities where it is scientifically and statistically demonstrated their positive impact on water quality exceeds benefits from optimizing vegetative cover by more than 20%;

    d. Modification of existing Best Management Practices for oil & gas leasing, mining, timber harvesting, recreation, OHV use, roads, travel designations, livestock grazing and other multiple use/sustained yield activities.

5. RECREATION AND TOURISM

I. FINDINGS

Recreation and tourism resulting from Beaver County's unique character, history, and culture plays a critical role in the local economy. The importance of this sector continues to increase with the growing number of tourists attracted to National Parks and Recreation Areas in and around Beaver County. According to the Utah Department of Workforce Services, leisure and hospitality jobs had a 17.4% non-agricultural industry share in 2015, ranking 13th out of Utah's 29 counties. According to the Utah State Tax Commission, in 2015, travel-related tax revenues totaled approximately $343,178. As with most counties in Utah, recreational and tourism activity fluctuates by season, with visitation high during summer months and lower during winter months. However, Beaver County can increase recreation and tourism during "off-seasons," and in general, by increasing public awareness of recreational opportunities and other attractions that Beaver County has to offer.

Beaver County offers many world-class outdoor recreation opportunities. The majestic Tushar Mountain Range marks the eastern boundary of Beaver County. The range includes two of the highest mountains in the state, Delano Peak (12,173 feet) and Mount Belknap (12,139 feet). In addition to breathtaking hiking and backpacking trails, Beaver County has mountain biking opportunities, including a mountain traversing bike race each summer. Horse riding and packing trails and ATV trails are numerous and popular. The Tushar Mountains do not just offer summer activities, skiing, snowmobiling and ice fishing are very popular winter activities enjoyed by many locals and visitors. The large granite rock formations of the Mineral Mountains provides an adventurous wonderland for exploring as well as highly technical climbing and rappelling opportunities for more advanced climbers. Frisco Peak has been the destination for hang gliders who are bold enough to launch off the steep precipice into the rising desert thermals.

Beaver County is also known for its high quality hunting and fishing opportunities. Beaver County is home to many huntable species including big game, waterfowl, and predators. The trophy-class elk and deer found in Beaver County are highly sought after and a prized resource. Minersville Reservoir is managed to produce trophy-sized trout, wipers and smallmouth bass. The high mountain lakes and streams of the Tushar Mountains have Rainbow, Brown, Cutthroat, and Tiger trout varieties.

Beaver County is also a hotspot for "rockhounders" who are drawn to Beaver County's plentiful deposits of desirable minerals. Many geological tourists travel to the Mineral Mountains, a short distance from Milford and Minersville, to find deposits of smoky quartz, feldspar and many other prized gems.

People come to Beaver County from all over the country to ride on the Paiute ATV trail. This world-class trail system traverses several counties in southwestern Utah, including Beaver County. There are many other popular OHV riding areas scattered across the county for exploring as well. The Mineral Mountains are a fascinating location to explore on OHV's and draw many riders here each year.

As nearly 80% of all land in Beaver County is federally owned and/or managed, many recreational activities that provide a significant economic stimulus to Beaver County are reliant on reasonable access to public lands for recreational purposes. When public lands are managed strictly for the purpose of preservation, and not for multiple uses, Beaver County suffers real and direct economic harm.

In addition to classic outdoor recreation options, Beaver County also offers attractions of the historic variety. Beaver County has a diverse history that includes Native American inhabitants, famous explorers, western outlaws, Mormon settlers, military personnel, and mineral prospectors. The famous outlaw Butch Cassidy was born in Beaver and Philo T. Farnsworth, the inventor of the television, was born in Manderfield. Visitors to Beaver city can visit the Historic Territorial Courthouse and see the Philo T. Farnsworth statue and Farnsworth family cabin.

Tourists can also explore Beaver County's numerous ghost towns. The most infamous of these sites is Frisco, which in the late 19th century was one of the wildest mining camps in the west. Frisco once had 21 saloons, gambling halls, a red light district, and frequent shootouts.

Beaver County has many exciting and unique recreational and tourist attractions that are not well known, even among Utahns. Recreational activities in Beaver County are not limited to summer months and tourism should remain strong during all seasons. Increased land access and advertising will increase tourism in the County and will strengthen the local economy.

II. OBJECTIVES

Beaver County's objectives with regard to recreation and tourism are as follows:

1. To draw more visitors to the County and to raise awareness of the diverse recreational opportunities within the County; and

2. To ensure that public lands are managed in a manner that provides for multiple uses including recreational activities such as OHV use.

III. POLICIES AND GUIDELINES

1. It is the policy of Beaver County to support outdoor recreation on public lands as part of a balanced plan of economic growth and quality of life.

2. Beaver County, through its Tourism and Outdoor Recreation department, in conjunction with the travel council, will work to increase recreational opportunities and marketing.

3. Public land management agencies must manage public lands in a manner that allows for multiple use; singular uses, including recreational activities, shall not be used to dictate land management policies or decisions.

4. Public land agencies shall not discriminate against one kind of recreational activity in favor of another.

5. Public land agencies, including the BLM and USFS must coordinate and consult closely with Beaver County in any decision-making affecting recreational resources within the county. Public land agencies must provide for early and meaningful involvement of Beaver County, especially with regard to special designations that may limit recreational opportunities on public lands.

6. Beaver County will encourage private sector development of recreational facilities and services using development incentives where feasible and appropriate.

7. Beaver County will seek partnerships with public land agencies and stakeholders with the purpose of improving and maintaining trails (hiking, cycling, OHV) within the County.

8. Beaver County will take all necessary actions to protect access to public lands. This includes historic rights to access federal lands with the regard to recreational activities.

9. Wildlife hunting, trapping, and fishing should continue at levels determined by the Utah Wildlife Board and the Utah Division of Wildlife Resources in consultation with Beaver County.

6. FIRE MANAGEMENT

I. FINDINGS

Wildland fire plays an integral role in forest and rangeland systems in Beaver County. Both wildfires and prescribed fires help maintain healthy ecosystems and vegetation. In a properly functioning ecosystem, frequent low intensity fires would remove dead and old-age vegetation. However, limitations on logging and grazing practices over the past several decades as well as the invasion of exotic and noxious species, have resulted in more dense and less diverse wildlands and the accumulation of large amounts of woody debris and increased fuel load. These conditions have created the severe wildfires that Utah has experienced over the past several years. These unusually intense wildfires threaten the wellbeing of the land, citizens, and property. It is vital to maintain appropriate fire management policies and plans.

Every year, hundreds of wildfires burn on private, state, and federal land in Utah. Fires occurring on federal and tribal lands are managed by the USFS, BLM, NPS, USFWS, and the Bureau of Indian Affairs. Over the past few decades, the federal government has implemented multiple policies designed to more quickly and effectively manage wildland fires. In 2000, the National Fire Plan ("NFP") was developed to ensure that fire managers meet sufficient preparedness standards, establish long and short term restoration efforts, reduce fuels in high risk area, and to identify plans to maintain ecosystem health by eliminating harmful and invasive insect and plant species. The Healthy Forests Restoration Act ("HFRA"), which became law in 2003, sped up the reduction of hazardous fuel by allowing timber harvests on National Forest land and streamlining the permitting process by including a list of categorical exclusions from the environmental impact assessment process. Both the NFP and HFRA mandated coordination with state and local governments.

However, litigation concerning environmental rules and regulations has hindered the effectiveness of these federal policies and programs. The litigation and other efforts to neuter the effectiveness of federal programs have contributed to continued long-term buildup of volatile fuels and post-fire restoration efforts that allow for the spread of invasive and harmful species.

Wildfires that occur on state and private lands that are not inside city limits are managed by the Utah Division of Forestry, Fire & State Lands, and are coordinated through County Fire Wardens. County Fire Wardens work with federal agencies and local fire departments to coordinate suppression efforts. Beaver County has three fire stations, one each in the incorporated areas of Beaver, Milford, and Minersville. The fire departments are administered through Special Service District #1 (Beaver), serving the east side of Beaver County, and Special Service District #2 (Milford & Minersville), serving the western half of the

County.

The Districts have been actively engaged in applying fire preventative measures set forth in the 2006 Utah Wildland-Urban Interface (WUI) Code. These measures include removing ladder fuels, creating firebreaks, and applying set-backs to appropriate levels for surrounding cover. Wildland-urban interface refers to the transition zone between unoccupied land and human development prone to wildfire. Over the last twenty-five years, tens of thousands of homes and cabins have been built in Utah's wildlands. Approximately 137,000 acres of Utah wildland has been developed for housing. This trend is likely to continue at an accelerated rate. According to a Profile of Development and the Wildland-Urban Interface produced using Headwaters Economics' Economic Profile System, as of 2010, Beaver County ranked 11th out of 29 counties in Utah in current risk of wild fire in wildland-urban interface areas. Given the increased threat to individuals and property, additional policies, programs, and actions are needed.

Beaver County finds that land managers have not sufficiently utilized certain strategies in managing wildland fire on public lands. Undesirable shrub cover has been allowed to linger in high-risk areas. Reducing shrub cover in dense strands or maintaining open stands of shrubs with a good understory of perennial grasses, forbs, and low shrubs can reduce the damaging effects of wildfire, make wildfire control more effective, and help reduce invasion of noxious weeds. Dense strands of shrubs (e.g. sagebrush, pinyon-juniper) may have a lower risk of burning than grasslands but the intensity of fires is increased due to higher amounts of fuel that increase temperature and duration of fires. Although most grasses and many shrubs are adapted to periodic fire, extreme fire intensity can kill even these plants, leaving the burned site barren and subject to invasion by noxious weeds that can spread rapidly into unoccupied land.

Historically, livestock grazing has no doubt been a factor in reducing incidences of wildfire. However, livestock grazing has not been widely used by land management agencies as a primary tool in fire management. This is due, in part, to litigation concerning federal programs designed to increase grazing as a fire preventive tool. However, studies have shown that grazing at 30-80% utilization can provide fuel reductions that are sustainable while maintaining the ecological integrity of the land. Similarly, local timber industry has not had sufficient access to public land for the purpose of clearing out standing dead timber. Not only would these activities benefit the Beaver County economy, but they would also decrease the risk of wildfire.

II. OBJECTIVES

Beaver County's objectives with regard to fire management are as follows:

1. To fulfill its responsibility to protect the health, safety and welfare of its citizens and visitors by ensuring that prescribed wildland fire is properly used in a manner that is beneficial to Beaver County;

2. To actively coordinate with federal, state, and local agencies in implementing fire management plans and policies; and

3. To demand that land managers utilize all available means of reducing forest fuel such as grazing and timber harvesting.

III. POLICIES AND GUIDELINES

1. It is the policy of Beaver County to continue cooperating with the Utah Division of Forestry, Fire and State Lands to address wildfire issues in Beaver County.

2. Beaver County supports all efforts to reduce the potential for resource damage associated with wildfires on public lands.

3. Fire-damaged areas on public lands within Beaver County shall be re-vegetated with seedings as soon as possible following a fire event.

4. Land managers must coordinate with Beaver County in all decision making and actions related to fire and fuels management affecting Beaver County including providing the County with information related to prescribed burns, in conformity with federal law.

5. Prescribed burns should be avoided on weekends and holidays when Beaver County anticipates an influx of tourists.

6. Beaver County will create a local interdisciplinary working group to assist with the implementation of the Federal Wildland Fire Management Policy that includes at least one member from the County.

7. The use of tools including, but not limited to, livestock grazing, chemical, and other mechanical control is critical to protecting ecosystem health from invasive species after fire events.

8. The reduction of fuels through silviculture and livestock grazing is a necessary practice.

9. Long-tem (i.e. 20 years) timber harvest leases, based on local market value, are important to allow private industry to take the financial risk and make an investment in the infrastructure necessary to maintain the timber industry and forest health in the County.

10. Increased timber harvests should be analyzed in the next forest plan update to improve the economic viability of logging in the County and improve forest condition.

11. Treat insect outbreaks as emergencies. Forest insect management should focus on altering stand condition that factor-in insects and include all methods to reduce or prevent insect infestations including, but not limited to, salvage and sanitation cutting, spraying, biological control, prescribed burning, etc. to prevent widespread tree mortality.

12. Beaver County supports prescribed wildland fire use on rangelands and encourages prescribed burns where appropriate.

13. Managed livestock grazing is an effective management tool for both revegetation and fuel reduction.

14. Livestock grazing should be returned to pre-fire levels when post-fire monitoring data shows objectives have been met, or have been achieved to the extent possible based on site potential.

15. Adaptive management practices for grazing shall be developed and included in term grazing permits to allow for flexible forage utilization and fuel load reduction on allotments with dense understory foliage or in areas with heavy cheatgrass infestations.

16. The development of measurable, achievable objectives should be used in all Emergency Stabilization and Rehabilitation (ESR) plans and management decisions, based on site potential.

17. Vacant grazing allotments should be assigned to permittees affected by fire or other resource concerns as quickly as possible to minimize the economic disruption to permittees.

18. The removal of pinyon-juniper infestations throughout Beaver County is necessary to decrease wildfire potential and improve upland habitat conditions.

19. Post-fire monitoring should be completed as soon as allowed by the fire closure decision to determine if reseeding objectives have been met. If objectives have not been met, land managers should complete a determination regarding the likelihood of the objective being met without additional resources and continued closure.

20. State and local agencies will participate in identification of geographic-based or criteria-based areas where restorative actions are needed on private, state and federal lands.

21. Beaver County will provide and promote the education of communities and property owners in the wildland-urban interface regarding fuels mitigation, creating defensible

space and fuel breaks and meeting other standards in the current Utah WUI Code.

22. Beaver County will enforce WUI code standards for subject lands in the county.

23. Federal land management agencies are responsible to reduce the risk of harmful wildland fires on federal lands adjacent to wildland-urban interface areas.

7. LAND ACCESS

7.1 Land Access

I. FINDINGS

Access to public lands has always been crucial and necessary in Beaver County. Over 77% of the county (over 1,265,500 acres) is under federal land ownership. Access to land, water and natural resources is critical to the residents of this county for their livelihoods, recreation and way of life. The economy of Beaver County is likewise tied to public lands and access to the available natural resources. Local municipalities rely on water from public land watersheds to sustain those communities. Ranchers, miners, hunters, hikers, outdoor enthusiasts and many others rely on access to public lands and the opportunities found there.

However, access to public lands continues to dwindle as increasingly more roads are closed by federal agencies and greater pressure is applied by special interest groups to place wilderness designations on existing lands. Travel management planning processes that result in road closures or efforts to manage for wilderness suitability or other restricted use designations will severely impact or halt land access and natural resource use and harm local economic viability.

Travel throughout Beaver County occurs in many forms. Motorized travel includes both on-highway and OHVs. OHVs include motorcycles, three-wheelers, all-terrain vehicles ("ATVs"), side-by-side vehicles and snowmobiles. Non-motorized travel includes hiking, backpacking, cycling, skiing, and equestrian travel. The BLM and USFS have undertaken travel planning processes in recent years. These plans address motorized and non-motorized vehicle use and road closures for each agency.

Commonly known as R.S. 2477, rights-of-way for travel across federal lands were recognized by Congress in 1866 with what may be the shortest statute on record: "the right-of-way for the construction of highways across public lands not otherwise reserved for public purposes is hereby granted." This statute was repealed in 1976 with the passage of FLPMA, but the existing rights remained in place. Beaver County maintains approximately 623 miles of class "B" roads across public lands with varying levels of use and surface treatments. In addition, there are over 750 miles of roads in Beaver County that have been identified, reviewed, documented and inventoried for inclusion in the county road system as qualifying for RS 2477 right-of-way claim status. Many additional roads exist in the county road system that may, or may not qualify, pursuant to further review and evaluation.

The BLM must follow numerous federal laws regarding management of transportation and travel on public lands. For example, the Wilderness Act of 1964 prohibits motor vehicles

in wilderness areas except in emergency situations. FLPMA is the overarching document that pertains to all of the BLM's management responsibilities. FLPMA directs the BLM, with regard to travel on public lands, to balance public access and multiple uses with the protection and preservation of the quality of the lands and its resources to be able to be enjoyed by the pubic for many years to come. Travel management and road access on BLM lands are determined through the land use management planning process. NEPA dictates that certain federal projects and land use decisions (including decisions related to opening and closing BLM roads) must go through an environmental review process. The BLM's Cedar City Field Office is currently (2017) undertaking a travel management planning process to review all roads in the planning area, identifying which will remain open and which should be closed. Various management alternatives will be presented for public comment prior to a final Record of Decision.

In 2005, the Forest Service issued a Travel Management Rule requiring national forests to designate open roads. All prior legal motorized use on non-designated routes became illegal. *See* 36 C.F.R. Parts 212, 251, 261, and 295. The Fishlake National Forest finalized its motorized travel plan and OHV route designation project in December 2006, and the plan was implemented in 2007. The old travel plan relied on an "open unless signed or mapped closed" enforcement scheme which was deemed too complicated to interpret and difficult to administer. New user created routes proliferated without closed signs to halt further use, which exacerbated conditions, particularly in sensitive resource areas. The management of Forest Service roads and trails under the new Motorized Travel Plan switches to an explicit designated use only system where travel is limited to only those roads and trails signed and mapped as open and for specific uses and/or vehicle type. Multiple roads and numerous trails were closed and decommissioned from use after this action.

II. OBJECTIVES

Beaver County's objectives with regard to land access are as follows:

1. To protect Beaver County citizen's vested rights of access to all publicly owned areas of the County through its duly appointed planning and zoning commissions and full board of county commissioners.

III. POLICIES AND GUIDELINES

1. Public rights-of-way established under RS 2477 are not negotiable and cannot be subjugated or taken by any state or federal agency. They are vested property rights duly recognized in federal and state law.

2. RS 2477 is a property right claim of the public for transportation routes that cannot be

given or taken away by any federal agency. Beaver County acknowledges that in 1866, Congress granted access across federal land not otherwise reserved. The evidence of acceptance of that grant is the Beaver County Transportation Map, renderings of historic documents, and the public's continued presence on and use of these routes.

3. RS 2477 rights-of-way may include, and are not limited to, horse paths, cattle trails, irrigation canals, waterways, ditches, pipelines or other means of water transmission and their attendant access for maintenance, wagon roads, jeep trails, logging roads, homestead roads, mine to market roads and all other ways established and held consistent with Utah Code § 72-5-104 and in use prior to October 22, 1976.

4. Title V grants to local county governments or the States are in perpetuity. Nothing in Title V gives the Secretary of the Interior authority to arbitrarily close a road or a corridor once it is granted except by cooperation and coordination with the government entity holding the grant. In applying for a right-of-way, or other use of lands under Title V of FLPMA, consistent with Utah Code § 72-3-108, Beaver County does not relinquish its right to the land, its use or property ownership under RS 2477 or any other law, regulation or Act.

5. All rights of Beaver County and the State of Utah in and to such roads, ways and routes may be revoked only in compliance with Utah Code § 72-5-105 and by formal action of the Board of County Commissioners of Beaver County to abandon such route as a public way, pursuant to Utah Code § 72-3-108.

6. All necessary action will be taken to protect access to public land. It is the policy of Beaver County to use reasonable administrative and legal measures to protect and preserve valid existing rights-of-ways granted by Congress under R.S. 2477 and to support and work in conjunction with the State of Utah to redress cases where those rights are not recognized or are impaired.

7. The historic right to access federal lands in the pursuit of mining, energy development, ranching, farming, logging, recreational activities, motorized vehicle use, hunting and other historic uses, and those roads used by law enforcement and emergency medical services in the protection of residents and visitors, is critical to the health, safety and economic viability of Beaver County.

8. Beaver County will identify and inventory public access roads and will engage in meaningful participation with federal and state land management agencies in all decision making processes.

9. Beaver County has undertaken efforts over the past several years to identify and map the location of all Class B and Class D roads that are legitimately part of the County's

transportation system. This map is expressly adopted and incorporated into this policy as the county road system. This map includes, but is not limited to all roads claimed by Beaver County pursuant to R.S. 2477 for roads across BLM lands. It is expected that the BLM will conform the travel management planning provisions of the Resource Management Plan to be consistent with this map, as required by FLPMA in Section 1712(c)(9). It is also expected that when such mapping is completed for areas under the stewardship of the U.S. Forest Service, that the Forest Service will conform the transportation provisions of its forest plans to be consistent with such map.

10. Transportation and access routes to and across federal lands, including all rights-of-way vested under R.S. 2477, are vital to the economy and to the quality of life in the County, and must provide at a minimum, a network of roads throughout the resource 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 county, including livestock operations and improvements, solid, fluid, and gaseous mineral operations, recreational opportunities, search and rescue needs, public safety needs, and access to wood products;

    c. Access to federal lands for people with disabilities and the elderly; and

    d. Access to State lands and School and Institutional Trust Lands, to accomplish the purposes of those lands.

11. The access and transportation needs of the County shall be considered, evaluated and analyzed in the land use planning process. No roads, trails, rights-of-way, easements or other traditional access for the transportation of people, products, recreation, energy or livestock may be closed, abandoned, withdrawn, or have a change or use without full public disclosure and analysis.

12. Access to all water related facilities such as dams, reservoirs, delivery systems, monitoring facilities, livestock water and handling facilities, etc., must be maintained. This access must be economically feasible with respect to the method and timing of such access.

13. Beaver County supports administrative access for permittees on closed or restricted roads when necessary for allotment access; Public land agencies shall accommodate livestock permit holders, resource developers and managers who have legitimate need to enter specific areas on public lands.

14. Beaver County opposes any additional evaluation of national forest system lands as

"roadless" or "un-roaded" beyond the forest service's second roadless area review evaluation and opposes efforts by agencies to specially manage those areas in a way that:

a. Closes or decommissions existing roads unless multiple parallel roads exist running to the same destination and state and local governments consent to close or decommission the extraneous roads;

b. Permanently bans travel on an existing roads;

c. Excludes or diminishes traditional multiple-use activities, including grazing and proper forest harvesting;

d. 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

e. Prohibits development of additional roads reasonably necessary to pursue traditional multiple-use activities.

15. Beaver County calls upon the federal agencies who administer lands within the County to:

a. Keep open to motorized travel any road in the subject lands that is part of Beaver County's duly adopted transportation system;

b. Provide that R.S. 2477 rights-of-way be fully recognized by the BLM;

c. Provide that a county road may be temporarily closed or permanently abandoned, only by authorized statutory action of the county or state;

d. Provide that the BLM and the USFS recognize and not unduly interfere with the County's ability to maintain and repair roads and, where reasonably necessary, make improvements to the roads; and

e. Recognize that additional roads and trails may be needed in the subject lands from time to time, to facilitate reasonable access to important resources and to allow for planned growth and economic development.

7.2 Wilderness and Other Special Land Designations

This section describes the findings, objectives, policies and guidelines regarding special designations of land within Beaver County. Federal land designations are described as follows:

Wilderness Areas are tracts of federally owned land that Congress has designated for special protection and management due to their wilderness characteristics. *See* 16 U.S.C. §1131(a)-(b). Congress provides only broad guidelines and no detailed standards for making such a designation. The land must be "an area where the earth and its community of life are untrammeled by man," meaning there are no man made habitats and or "permanent improvements." *See* 16 U.S.C. § 1131(c). Wilderness Areas must also: (1) be "affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;" (2) possess "outstanding opportunities for solitude or a primitive and unconfined type of recreation;" (3) contain at least 5,000 acres of land "or is of sufficient size as to make practicable its preservation and use in an unimpaired condition;" and (4) "may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value." *Id*.

The Wilderness Act of 1964 established the National Wilderness Preservation System, to be managed by the USFS, National Park Service ("NPS"), and the USFWS. At the passage of the act, USFS lands previously deemed as "wilderness" or "wild" were given protection as Wilderness Areas ("WA"). Further, the Secretary of Agriculture was given 10 years to inventory Forest Service lands for areas classified as primitive, to determine their suitability or non-suitability as wilderness, and present those findings to the President. The President would then make recommendations to Congress for designation as wilderness areas in the Wilderness Preservation System. *See* 16 U.S.C. §1131 and 1132.

The passage of FLPMA in 1976 added the BLM as a wilderness management agency to the Wilderness Act. Under Sec. 603(a), the Secretary of Interior was given 15 years to inventory all BLM roadless areas of 5000 acres or more for lands containing wilderness characteristics as defined in the Wilderness Act. The lands identified under the Section 603 review were designated as Wilderness Study Areas ("WSA"). This designation will remain in place until the WSA is designated as a Wilderness Area or Congress releases the land from WSA status.

Additionally, the Section 603 review required the U.S. Geological Survey and U.S. Bureau of Mines to inventory all areas identified with wilderness characteristics for mineral values. Pursuant to this provision in FLPMA, all mining, livestock grazing and mineral leasing would continue in the manner and degree at the time of the acts passage in 1976. In other

words, despite future wilderness designation, these activities were grandfathered in wherever identified, even if they impair wilderness characteristics. *See Rocky Mountain Oil and Gas Association v. Watt,* 696 F.2d 734 (10th Cir. 1982).

In the early 1990's, Secretary of the Interior Bruce Babbitt, ordered an additional review and inventory of BLM land to identify areas that contained some wilderness characteristics. This "re-inventory", as it became known, was less stringent and driven by political motivation. Numerous lawsuits were filed over this action with the courts finding that the wilderness recommendation process had ended and that no additional recommendations could be forwarded to Congress. However, the courts also ruled that federal agencies could continue to inventory resources, including wilderness characteristics as part of a land use planning process under Section 201 of FLPMA. These lands have been designated as "Lands with Wilderness Characteristics" ("LWC").

Similarly, in January of 2001, the Roadless Area Conservation Rule was adopted into regulation by the USFS. These lands were labeled *Inventoried Roadless Areas* ("IRA"). The identification of IRA's went beyond the acreage deemed suitable for proposal to Congress for designation as wilderness and ignored earlier court rulings over re-inventory action. The new rule imposed management restrictions on IRA's that contradicted the multiple use and sustained yield management that previously applied to these areas. Roads were closed, timber harvesting halted and traditional use was impaired. The USFS has managed these areas in an overly restrictive manner, similar to wilderness, without Congress ever designating it for inclusion in the Wilderness Preservation System.

FLPMA states that, in creating and revising land use plans, agencies must "give priority to designation and protection of areas of critical environmental concern." 43 U.S.C. § 1712(c)(3). However, in order to designate land as an *Area of Critical Environmental Concern* ("ACEC"), the agency must show that "special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable 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." 43 U.S.C. § 1702(a). *See also* Section 7.4 of this plan.

Other special designations include *National Parks, National Monuments, and National Conservation Areas*. None of these special designated areas exist in Beaver County.

I. FINDINGS

During the 1970s, both the USFS and the BLM conducted reviews and inventoried federal land across the country, including Beaver County, as required by statute. The USFS

submitted their recommendations for Wilderness Area designation in 1974. The BLM submitted their recommendations in 1991. The USFS did not recommended any land for Wilderness Area designation in their original review. As of January 2017, Congress has not designated any land in Beaver County as a Wilderness Area.

However, during the initial inventory conducted by the BLM in the 1980's, approximately 11,047 acres of land in Beaver County was classified as WSA. These include the White Rocks Range WSA (*See* Map 10) and the Wah Wah Mountains WSA (*See* Map 11).

The White Rocks WSA does not meet the requirements necessary for consideration as a Wilderness Area and Congress should release it from WSA classification. The White Rocks WSA only encompasses 3,767 acres, failing to meet the statutory requirement of 5,000 acres. Further, the land is not untouched by man. The area encompassed many roads and right of ways that were ignored by the BLM. The land also includes multiple water resource developments including springs, riparian enclosures, stock dams and linear water line disturbances.

The Wah Wah WSA does not contain a sense of solitude as it is situated next to Highway 21, which emits noise from vehicle traffic. Additionally, other roads run alongside and through the WSA showing that man's impact is clearly established.

The USFS designated 70,900 acres of land within the Fishlake National Forest located in Beaver County as Inventoried Roadless Area. Like, the two WSAs, the alleged IRA does not meet the statutory criteria to be considered for a wilderness designation. Man's impact is clearly visible throughout the area including roads, right of ways, and water resource developments. *See* Map 12.

In many cases, designation of land as a Wilderness Area or WSA has a negative impact on the local economy, culture and use of that land. Most air pollution in Beaver County comes from biogenic sources. Wilderness designations prevent responsible vegetative treatments that limit pollution from biogenic sources. Wild fire is another major contributor to air pollution in Beaver County. Wilderness designations limit responsible timber harvest and effective fire response that reduces the risk and impact of wild fire.

In addition to air quality concerns, wilderness designations have a negative impact on water resource development. Wilderness designations prevent installation of pipelines, springs, hydro-power operations, and reservoir construction. Wilderness designations impair the public's access to necessary and important water resources.

Finally, restrictions on Wilderness Areas and WSAs prohibit energy development on those lands. Beaver County's economy still relies on energy development within its borders.

There are currently no national parks, national monuments, or national conservation areas within Beaver County. Beaver County finds that there are no areas of land that should be

withdrawn for such a designation.

II. OBJECTIVES

Beaver County's objectives with regard to wilderness and other special designations are as follows:

1. To protect and expand the tax base and increase economic activity in the County; to provide a quality standard of living for the citizens of the County, including protection of local values and customs;

2. To represent the interests of the residents of the County through coordinating with federal land management agencies in planning, management and regulatory activities;

3. To limit wilderness designations within Beaver County to only those lands that clearly and unmistakably fit within the statutory criteria implemented by Congress;

4. To retain land usage and access that is beneficial to the citizens of Beaver County; and

5. To protect the multiple use and sustained yield standard prescribed by FLPMA and NFMA.

III. POLICIES AND GUIDELINES

1. To the extent that they do not exist, pursue agreements with the BLM, USFS or other relevant agencies guaranteeing that Beaver County will be consulted with prior to and during any land review, inventory, or recommendation that may lead to a special designation. Beaver County will demand that federal agencies provide Beaver County with a meaningful voice in the designation process in furtherance of the objectives set forth herein.

2. To the extent that they do not exist, pursue agreements with the BLM, USFS or other relevant agencies guaranteeing that Beaver County will be consulted with prior to and during creation of LWC, WSA, or IRA designations, management policies or procedures.

3. Congress has established clear and precise criteria for lands proposed for wilderness designation. Beaver County insists on holding agencies to those standards when land use planning inventories are undertaken and special designations are proposed.

4. The USFS, BLM, and other relevant federal agencies shall utilize the findings of Beaver County and the State of Utah regarding the character of the land within its

borders and whether that land is appropriate for special designation.

5. Beaver County will work with Utah's Congressional Delegation to draft legislation that calls for the release of those lands that do not clearly and unmistakably fall within the relevant statutory definitions of special designation status.

6. Beaver County shall oppose any and all legislation that may unnecessarily restrict land use related areas with or without special designations that negatively impacts the citizens of Beaver County.

7. The County will identify, manage, and protect existing roads and rights of way held by Beaver County that fall within federally owned land near or within areas with special designations. Ensure that these roads and rights of way are included in the BLM's Cedar City Field Office Resource Management Plan, and Fishlake National Forest's Forest Management Plan.

8. The County will identify and protect existing rights, including water rights, which benefit Beaver County in any area that possess special designations.

9. Pursuant to Section 603 of FLPMA, all existing mining activities, mineral developments and grazing practices in place, prior to any WSA designation in the county, shall continue unabated.

10. Federal agencies must comply with relevant federal and state law in the management of areas with special designations.

11. Beaver County will pursue any and all sources of federal or state financial support that lessens Beaver County's financial burden in providing law enforcement, search and rescue, emergency medical, and solid and human waste collection and disposal services associated with areas with special designations.

12. All land that has not been designated by Congress as a Wilderness Area should be managed in accordance with the policies, guidelines, and principles set forth in this plan. Public land should be managed in a manner that maximizes the benefit to Beaver County citizens. This includes accessibility for mineral development, grazing and recreational activities.

13. It is Beaver County's policy and practice to oppose and terminate all designations and classifications referenced in this section, together with any other designation or classification that has the purpose or effect of reducing traditional multiple use and sustained yield and access to energy and mineral development, motorized travel, grazing, timber and other active vegetation management, or any other traditional multiple use on public lands.

7.3 Wild and Scenic Rivers

I. FINDINGS

The Wild and Scenic Rivers Act of 1968 ("WSRA") (16 U.S.C. §§ 1271 et seq.) established a National Wild and Scenic Rivers System to protect rivers and their immediate environments for the benefit and enjoyment of present and future generations, to preserve selected rivers in their free-flowing condition, and to protect water quality and fulfill other vital conservation purposes. Uses compatible with the management goals of a particular river are allowed for under the WSRA, recognizing expected changes moving forward. The intent of Congress was to create a national system of protected rivers that co-existed with use and appropriate development. Therefore, any future development must ensure the river's free flow and protect its "outstandingly remarkable resources."

Congress, in passing the WSRA, declared that "the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation proposes." Section 5(d)(1) of the act directs federal agencies to consider the potential for national wild, scenic, and recreational river areas in all planning regarding the use and development of water and related resources. The WSRA (16 U.S.C. § 1273 (b)) provides the following standards for classifying, designating and administering certain rivers as wild, scenic or recreational:

(1) Wild river areas: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, and watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) Scenic river areas: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) Recreational river areas: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Section 1274(d)(1) provides for comprehensive management plans to be developed by the Federal agency charged with administration of the specific river segment, which shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary to achieve the purposes of the Act. This includes establishing boundaries for management of the river, which shall include an average of not more than 320

acres of land per mile on both sides of the river, or generally accepted as lands within one-quarter mile from the high water mark.

Wild and Scenic River designations have long lasting effects, both positive and negative, on the future use of the stream, water resource and surrounding lands. Some of the potential effects of wild and scenic river designations include:

- No new dams can be constructed on the designated rivers;
- The nation's premiere rivers are preserved indefinitely;
- The only water resource development projects allowed are those projects that have no direct or adverse effects on the free flow, water quality, or outstandingly remarkable values for which the river was designated; and
- Mining and mineral leasing will be further limited in areas near designated rivers, subject to existing rights and management goals and regulations.

The USFS conducted an environmental analysis in 2007 to evaluate the suitability of 86 river segments on the National Forests in Utah for recommendation for inclusion in the National Wild and Scenic Rivers System. The area affected by this study included National Forest System lands on the Ashley, Dixie, Fishlake, Manti-La Sal, and Uinta-Wasatch-Cache National Forests in Utah. The river segments selected on the Fishlake National Forest included Salina Creek in Sevier County, Fish Creek in Sevier and Piute Counties, Corn Creek in Millard County, and Pine Creek/Bullion Falls in Piute County. No river segments were recommended for streams in Beaver County.

However, within the BLM's draft RMP (2016) for the Cedar City Field Office, Birch Creek in Beaver County was identified in the list of alternatives for inclusion as a candidate for a wild and scenic river designation. No other streams on BLM lands in Beaver County were proposed for Wild and Scenic River designation.

II. OBJECTIVES

Beaver County's objectives with regard to wild and scenic rivers are as follows:

1. To have meaningful involvement in federal land management planning involving water and stream designations to protect local interests. In addition, local municipalities, water companies, ditch and irrigation companies and other water users are encouraged to participate as well;

2. To participate as a cooperating agency in all applicable federal agency actions affecting the county to ensure that reasonable and practical management solutions affecting water

and stream designations are obtained;

3. To ensure environmental protections be balanced with local values and economic needs;

4. To prevent needless prohibitions on future uses of any designated stream that may impact water resource needs of county residents. Beaver County will seek to limit the adverse effects on economic growth and prosperity that may be hampered by a Wild and Scenic River designation;

5. To limit the adverse effects of land management decisions on federal lands that stray from the policy of multiple use and sustained yield;

6. To increase clarity and transparency in defining impacts to local communities, water users and citizens; and

7. To prevent Wild and Scenic River designations on streams and water courses that are necessary for municipal and agricultural needs or that lack outstanding and remarkable features or are already protected by other federal actions.

III. POLICIES AND GUIDELINES

1. Pursuant to Section 1276(c), Federal agencies must pursue the study of any potential river designation in close cooperation with the affected State and local government; including Beaver County.

2. Pursuant to Section 63J-4-401 of the Utah Code, it is the policy of Beaver County that support for the addition of a river segment to the Wild and Scenic Rivers System shall be withheld until:

    a. It is clearly demonstrated that water is present and flowing at all times. Dry washes or stream segments below dams and other controls, and other stream segments that have been physically altered by human activity should not be considered, even in the eligibility stage;

    b. It is clearly demonstrated that the required water-related value is considered outstandingly remarkable within a region of comparison consisting of one of three physiographic provinces in the state, and that the rationale and justification for the conclusions shall be disclosed;

    c. 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) of Section 63J-4-401;

d. 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;

e. 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;

f. 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;

g. 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;

h. 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 Fully disclaims the use of the recommendation as a reason or rationale for an evaluation of impacts by proposals for projects upstream, downstream, or within the recommended segment;

i. It is clearly demonstrated that the agency with management authority over the river segment commits to not use any 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) of Section 63J-4-401; and

j. 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:

i. 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

ii. Local, state, regional, or interstate water compacts to which the state or

any county is a party.

3. The conclusions of all studies related to potential additions to the National Wild and Scenic Rivers System, 16 U.S.C. §§ 1271 et seq., shall be 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.

4. Beaver County insists that minor streams (e.g. Birch Creek) do not merit special designation, as they are not preeminent rivers meeting regional or national designation standards, as intended by the law.

5. Any proposed stream designations for inclusion in the Wild and Scenic Rivers System must show unequivocally that they contain outstandingly remarkable values on a regional scale.

6. Wild and Scenic River designations shall not be implemented when streams and riparian areas have existing protective measures in place under federal land management regulations.

7. Federal agencies shall not manage streams or watercourses as if they were wild and scenic rivers without congressional designation.

7.4 Areas of Critical Environmental Concern (ACECs)

INTRODUCTION

ACECs are specifically designated areas where special management attention is required to protect relevant and important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes from irreparable damage, or to protect life and safety from natural hazards. As of January 2016, there are no ACECs in Beaver County. ACECs are being proposed by the BLM on limited areas of public lands where special management attention is assumed to be needed to protect or preserve outstanding, sensitive resources that were subject to imminent, irreparable damage from a verifiable threat. The ACEC proposals incorrectly considered excessively large parcels of land where the purported resources are described in the most general terms and where resources could not be specifically mapped, identified or accurately described. Efforts have also been made to disguise wilderness proposals as ACECs contrary to settlement agreements reached between the State of Utah and the United States government and inconsistent with federal planning regulations and local land use plans.

The FLPMA defines an ACEC as an area within the public lands where special management attention is required to protect and prevent irreparable 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. Other than these broad statements in the law there is very little objective criteria for establishing an ACEC. To date, agency determinations have been speculative at best. To some degree, ACECs have been used as an attempt to create wilderness where it did not exist or to implement prescriptive management action on large blocks of public land. The criteria for evaluating areas for protection under federal guidelines gives broad speculation to what is important and relevant resources by using terms loosely defined as “scenic” or “cultural”. These Relevant and Important values must be clearly identifiable, articulated, mapped and distinctly characterized.

I. FINDINGS

FEDERAL RESTRICTIONS ON DESIGNATING ACEC's

Federal law mandates that the BLM "shall manage the public lands under principles of multiple use and sustained yield, in accordance with land use plans ..., except where a tract of land has been dedicated to specific uses according to any other provisions of law it shall be managed in accordance with such law." 43 U.S.C. 1732(a); *see also* 43 U.S.C. 1701(a)(7) ("goals and objectives be established by law as guidelines for public land use planning, and that management be on the basis of multiple use and sustained yield unless otherwise specified by law") and 43 U.S.C. 1712(c)(1) (BLM in developing and revising land use plans "shall - use and observe the principles of multiple use and sustained yield set forth in this and other applicable law").

While the BLM must give priority to the designation and protection of areas of ACECs when developing and revising land use plans, 43 U.S.C. 1712(c)(1), *still Federal law gives the BLM no authority to designate an ACEC* unless it meets the definitional requirements of the Federal Land Policy Management Act of 1976 (FLPMA), 43 U.S.C. 1702(a), which states:

> The term "areas of critical environmental concern" means areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable 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. 43 U.S.C. 1702(a).

The strict statutory criteria for specialized ACEC designation must be read in light of the fact that FLPMA already generally mandates protection of all public lands against "unnecessary or undue degradation:

> In managing the public lands the Secretary [BLM] shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands. 43 U.S.C. 1732(b).

FLPMA's "unnecessary and undue degradation" general protection standard, coupled with FLPMA's "sustained yield" general management standard, mean that an ACEC special designation is valid *only* "where special management attention is required" *above and beyond* application of those general standards. In addition, there are numerous other laws and policies currently in place to protect special resources, i.e., Endangered Species Act (16 U.S.C 1531-1973) along with associated species specific recovery plans, Bald and Golden Eagle Protection Act (16 U.S.C 668-669c), Utah Greater Sage-Grouse Proposed Land Use Amendment and Environmental Impact Statement – 2015, etc. In short, the area must *require* special management attention above and beyond the FLPMA general standards of protection mentioned above, and the protections provided by existing laws, policies and guidelines.

ACEC special designation is appropriate only if required to prevent, not just any damage to relevant values, but damage that is "*irreparable.*" 43 U.S.C. 1702(a). Moreover the values to be protected must be *"important,"* on a regional scale, meaning they possess "qualities of more than just local significance and worth, consequence, meaning, distinctiveness, or cause for concern." 43 CFR 1610.7-2(a)(2).

Moreover, ACEC special designation is appropriate in areas only "when such areas are developed or used or where no development is required." 43 U.S.C. 1702(a).

STATE CODE POLICY RESTRICTIONS ON ACEC DESIGNATIONS ARE CONSISTENT WITH FEDERAL LAW RESTRICTIONS

In support of the foregoing Federal statutory requirements, the State of Utah has adopted the following policy in Utah State Code regarding ACECs: Pursuant to Utah Code 63J-4-401(8)(c), the State does not support a proposed ACEC designation unless it is clearly demonstrated that:

(i) All the definitional requirements of 43 U.S.C. 1702 are met;

(ii) The proposed designation and management prescriptions are limited in geographic size and scope to the minimum necessary to specifically protect and prevent irreparable damage to the relevant and important values identified;

(iii) The proposed area is either already developed or used or no development is required;

(iv) 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;

(v) The regionally important values, resources or processes have been analyzed for *irreparable damage* 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) The proposed designation is consistent with the plans and policies of the state and of the county where the proposed designation is located;

(vii) The proposed designation will not be applied redundantly over existing protections provided by other state and federal laws, and will not be applied where not 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 any determination of irreparable damage has been analyzed and justified for short and long-term horizons; and

(ix) The proposed designation:
(A) Is not a substitute for a wilderness suitability recommendation.
(B) Is not a substitute for managing non-WSA areas inventoried for wilderness characteristics.
(C) Is not an excuse or justification to apply de facto wilderness management standards.

NONE OF THE AREAS IN BEAVER COUNTY MEET THE CRITERIA FOR SPECIAL ACEC DESIGNATION

To Beaver County's knowledge, recent ACEC public nominations in the Beaver County portion of the BLM Cedar City Field Office planning area, made in conjunction with the RMP revision process, include:

- Frisco Charcoal Kilns - 936 acres for Cultural, Historic Mining Town
- Great Basin Core - portion of 550,625 acres for Wildlife (shared with Iron County)
- Mineral Mountains - 81,489 acres for Scenic, Cultural/Wildlife
- Mineral Mountains Obsidian - 23,276 acres for Cultural
- Pine Valley-Utah Prairie Dog (UPD) - portion of 97,667 acres for Wildlife (shared with Iron County)
- Ponderosa Pine - 41,592 acres for Forestry - Ponderosa Pine

- South Central Utah - portion of 273,250 acres for Wildlife (shared with Iron County)

- South Wah Wah - 35,458 acres for Cultural, Scenic and Wildlife

- Beaver River - 3,311 acres for Cultural

- Tushar Slope - portion of 82,284 acres for Cultural (shared with Iron County)

Beaver County approves none of the ACECs nominated in paragraph 8 above, because none of them meet the required criteria.

For all nominated ACECs set forth in paragraph 8 above, Beaver County finds that each such nominated ACEC:

(i) Fails to contain relevant values that are uniquely or substantially important on a regional basis;

(ii) Exceeds the geographic size and scope necessary to specifically protect and prevent irreparable damage to relevant and important values, even if any were identified to exist there;

(iii) Fails to pertain to areas that are either already developed or used or no development is required, for purposes of 43 U.S.C. 1702(a);

(iv) Fails to be demonstrated as required to protect any such values from *irreparable damage*;

(v) Fails to be demonstrated as necessary above and beyond FLPMA's general "undue and unnecessary degradation" and "sustained yield" management standards.

(vi) Is applied redundantly over existing protections provided by other state and federal laws;

(vii) Appears (if nominated by pro-wilderness NGOs) to be merely a substitute for a wilderness suitability recommendation, and/or for managing non-WSA areas inventoried for wilderness characteristics; and/or an excuse to otherwise apply de facto wilderness management standards;

(viii) Otherwise fails to meet all the ACEC definitional requirements of 43

U.S.C. 1702; and

(ix) Is not consistent with this, Beaver County's plan for ACECs.

Beaver County also finds that:

(i) Large blocks of land described with general values (cultural, geologic, scenic, etc.) do not qualify for ACEC consideration. Only those values that are specific, identifiable, and articulable with the associated threats or hazards clearly identified shall be considered for ACEC designation.

(ii) There is no consistent BLM criteria for evaluating relevant important values associated with ACEC consideration. Beaver County has developed criteria for relevant evaluation of important resource concerns, and finds that it is the most accurate and comprehensive criteria available when considering the customs, culture, socioeconomic base and public land usage in Beaver County.

(iii) Agencies that have not included Beaver County in all aspects of the ACEC consideration process (public notice, scoping, comment evaluation, criteria development, relevant important value evaluation, boundary determination, etc.), have failed to include the county as a cooperating agency at the earliest possible date and have not complied with the mandates of FLPMA.

(iv) There are no ACECs within Beaver County as of January 2016 and the designation of ACECs contrary to the criteria established in this plan without concurrence of the Beaver County Commission is inconsistent with the county's plan and violates federal and state law.

II. OBJECTIVES

Beaver County's objectives with regard to ACECs are as follows:

1. To demand that the BLM reject and decline all pending nominated ACECs on public lands in Beaver County, whether set forth in paragraph 8 of the above findings or otherwise, in its 2016 (projected) revised BLM Cedar City Field Office RMP; and

2. To ensure that land areas and resources represented by, and identified in, all other nominated ACECs are managed according to the multiple use and sustained yield

management standard and the undue and unnecessary degradation protection standard of FLPMA, with no special ACEC designations.

III. POLICIES AND GUIDELINES

1. Beaver County supports and adopts as its own policy, all of the Federal law restrictions and State of Utah policy restrictions governing the designation of ACECs.

2. Under those restrictions all pending nominated ACECs on public lands in Beaver County, whether set forth in paragraph 8 of the above findings or otherwise, fail to qualify for designation as valid ACECs by the BLM in its 2016 (projected) revised BLM Cedar City Field Office RMP.

3. Under Beaver County's policy, no showing has been made that any of the nominated areas possess resource values of unique and significant regional importance, or that ACEC special designation is required to prevent irreparable damage to such values, that current laws, policies and guidelines don't already provide.

4. Beaver County specifies the following relevant-important criteria to be used when analyzing areas for ACEC designation:

    a. Important resources are of rare, unique, exemplary and significant quality deserving of special designation, protection and land use restrictions. They must be outstanding, remarkable, one-of-a-kind resources that deserve special management when compared to other similar resources in the region;

    b. Historic/Cultural Resources: An activity, business, district, building, structure, object or site may qualify as a *Relevant/Important Historical/Cultural* resource if it is located within the official boundaries of the county, is approved by the County Commission, has been the subject of a Class 3 inventory or equivalent and at least 95% of the designated area meets one or more of the following minimum criteria:

        i. The resource is of sufficient value that it is a site for public or private facilities that enhance the interpretive opportunities of the public. Parks, museums, monuments, businesses and other permanent designations qualify under this criterion. Examples for comparison within the region include, but are not limited to: Parowan Gap Petroglyph site, Fremont Indian State Park, Old Iron Town Ruins, etc.;

ii. The resource is of sufficient value that it requires paid or volunteer staff to assist with the interpretation and/or protection of the resource. The presence of on-site guides, hosts, rangers, guards, specialists or other staff with a minimum of 500 hours per year qualifies cultural resources for this criterion. Examples in the region include but are not limited to: Mormon Handcart sites, Grand Gulch, Defiance House, etc.;

iii. The resource is of sufficient value that it is the subject of guided or self-guided tours promoted by land management agencies or private businesses and has a minimum visitation of 200 visits per month during a defined peak season to qualify under this criterion. Examples include but are not limited to: Kanarraville Falls, Cedar Mesa, Kane Gulch, Cowboy Cave, etc.;

iv. The resource is of sufficient renown that its location and nature are well known and recognizable throughout the region. Resources that have been the subject of not less than 10 statewide mass media feature articles or programs qualify for this criterion. Examples include: Range Creek, Nine Mile Canyon, Mormon Handcart Sites, Hole-in-the-Rock, etc.; and

v. The Relevant/Important nature of the resource value has been shown and demonstrated, by a preponderance of evidence, to the Beaver County Commission in a public hearing, that special protection is justified and warranted.

c. Scenic Resources: Scenic resources qualify as Relevant/Important if they can be graphically described with identifiable limits and meet all of the following criteria:

i. It is located within the official boundaries of the county;

ii. It is designated as a Class “A” Scenery or equivalent. (See Appendix 2);

iii. It has a Scenic Quality Rating of 28 or greater. (See Appendix 1);

iv. It has a land form rating of 5 or equivalent. (See Appendix 1);

v. It has a color rating of 5 or greater. (See Appendix 1);

vi. It has a scarcity rating of 5 or greater. (See Appendix 1);

vii. It is renowned throughout the region;

viii. It is the primary destination for more than 2,400 visitors per year as verified by actual visitor counts; and

ix. All of the proposed land for designation meets all of the criteria.

d. Fish and Wildlife: Outstandingly remarkable fish and wildlife values are those populations that are rare, special or regionally significant. Although it may include special status species, a special status specie designation in and of itself does not meet the outstandingly remarkable and relevant threshold. The minimum criteria required for this resource value:

i. It is on the threatened or endangered species list and is the only population of the species within the region of comparison;

ii. It is on the threatened or endangered species list and comprises at least 80% of the known population in existence, of the species;

iii. It is documented and shown that the existing federal and state laws, recovery plans, policies and guidelines for protection of the species in question are deemed inadequate and insufficient, and it is determined that unless a special ACEC is granted, the species will be decimated. A thorough analysis must be conducted on existing federal and state laws, recovery plans, policies, etc. to identify where they are failing, and how a special ACEC designation will reverse the trend; and

iv. It is shown and proven by a preponderance of evidence to the Beaver County Commission that an ACEC is necessary and appropriate for the protection of a select species.

e. Natural Systems or Processes: In accordance with the laws that govern nature, i.e. natural orders, laws or processes; Characteristic of nature, the natural growth of animals, plants and organisms; Conforms to the order, laws and methods nature has defined; Existing in nature or created by the forces of nature. Humans, by our very existence are a part of nature and as such, we have an impact on the world around us. This is no different than a colony of ants building an ant hill or a beaver creating a pond by damming a stream. There are a small contingent of people who want to disregard this notion in favor of the belief that any and all anthropogenic activity is unnatural and destructive and anomalous to nature. This

belief completely disregards man's entire existence. Therefore, the natural activities of man to build roads, till the land, dig holes, cut down trees or the myriad of activities mankind is engaged in, is in fact, natural and necessary. The degree to which we are destructive to nature and disrupt natural processes is the point in question. The criterion for creating an ACEC to protect Natural Systems and Processes must meet all of the following requirements:

i. The Natural System or Process must be endemic to the county and its intrinsic value must be regionally significant;

ii. There must be quantifiable evidence that the threat to the Natural Process or System is of a serious nature with irreversible consequences without the protections afforded by an ACEC;

iii. It must be clearly shown that existing state and federal laws, policies and guidelines are insufficient to protect the Natural System or Process or to mitigate the threats to it;

iv. There must be a preponderance of evidence shown to the County Commission that land management protections are necessary and appropriate through the creation of an ACEC to mitigate pending threats to a Natural Process or System;

v. Any ACEC proposal must have clearly defined boundaries that coincide with the actual threats exhibited to a Natural Process or System that have been deemed to cause irreversible harm. A blanket coverage of the entire system/process goes beyond the need and intent of ACECs; and

vi. At least 80% of the statewide occurrence of the natural system or process occurs in the proposed ACEC.

f. Natural Hazards: The occurrences of Natural Hazards that threaten human life and safety are widely varied in how and where they might occur. Natural hazards in this context are much more than precipitous landscape features that exist in remote locations. The need for an ACEC to afford protections from identified hazards must meet the following criterion:

i. The Natural Hazard is of significant size and scope that local resources cannot mitigate it sufficiently, completely or in a timely manner;

ii. The Natural Hazard cannot be mitigated through other measures or efforts of the federal land management agency, county and/or state;

iii. The Natural Hazard has a defined area or mapped location that identifies the problem boundary, origin and/or area of potential effect;

iv. Any ACEC proposal would be limited geographically to the specific area where a change in land management policy would be highly likely to prove beneficial to the safety and welfare of those potentially affected;

v. The hazardous site is a destination of renown within the region, causing individuals or groups of people to seek out and travel to the location without a comprehension of the potential danger;

vi. There is a history of harm or danger to the uninformed public demonstrated by calls to emergency services on more than one occasion from the site in question;

vii. There is a preponderance of evidence presented to the County Commission that a hazard to human safety exists and that an ACEC designation would provide the best protection and mitigate the problem.

7.5 Broadband Access

I. FINDINGS

As high-speed internet connections become an increasingly critical asset for economic development, education, healthcare, public safety, and general quality of life, it is essential to address the development of broadband infrastructure throughout Beaver County. The need for reliable broadband is growing as rapidly as the tech industry and therefore, federal, state and local governments must work with broadband providers collaboratively to prepare for the growing need. Broadband infrastructure needs to be deployed with the capacity to adapt for evolving technologies. Land managers play an important role in streamlining that process.

The Utah Broadband Outreach Center ("Outreach Center") in the Governor's Office of Economic Development provides an up-to-date map displaying residential broadband speeds throughout Utah, including Beaver County (broadband.utah.gov/map). The map indicates where coverage is offered by service providers and can be filtered by individual provider, speed,

technology type, and populated areas. This map can serve as a helpful tool for businesses in scouting locations for various facilities as it provides information concerning broadband availability, utilities, transportation, workforce, recreation, and health care facilities. The Outreach Center can also provide custom mapping upon request.

As the majority of public land in Beaver County is federally owned or managed, federal land management agencies also play a critical role in successful broadband deployment. It is important for these agencies to approach planning in a methodical and efficient way so that underserved county residents gain access to broadband, public lands are minimally disturbed, and service providers can engage in deploying services that benefit the county. However, providers have found it difficult to interact with federal land managers, particularly when it comes to permitting. These issues have resulted in delays that have sometimes lasted more than a year. Giving this authority to transportation agencies would expedite the process by limiting the time consuming and redundant reviews currently performed by federal land management agencies. Further, while some agencies are making progress towards centralizing this information, providers still lack a complete inventory that they and local governments can access for planning purposes. Making this data publicly available will allow providers and communities to undertake meaningful broadband planning efforts.

By expanding coverage into underserved areas, Beaver County can make itself a more desirable location for employers, providing more employment opportunities for the citizen workforce, increasing quality of life, and diversifying the local economy.

II. OBJECTIVES

Beaver County's objectives with regard to broadband access are as follows:

1. To implement best practices that encourage broadband investment that will increase the economic viability of the County;

2. To coordinate with the Outreach Center to identify and utilize opportunities to expand broadband coverage;

3. To make broadband planning a priority in public land decision making and planning; and

4. To streamline permitting to encourage broadband deployment.

III. POLICIES AND GUIDELINES

1. Beaver County recognizes the Outreach Center as a resource in planning efforts as they relate to expanding broadband coverage in Beaver County and strengthening the local economy.

2. Beaver County will implement the following best management practices to encourage broadband investment:

   a. Use the residential and economic development maps available through the Outreach Center to help assess community wide access and identify areas of need;

   b. Set goals to prioritize communities with the lowest business and residential average speeds and work with broadband providers in those areas to determine strategies to improve services. These areas should be evaluated in terms of wired (cable, DSL, fiber), fixed wireless, and mobile broadband coverage;

   c. Implement money and time saving practices such as:

      i. Identify which existing poles and conduits are owned by local governments or other owners and make them easily available to providers when possible.

      ii. Ensure broadband provider access to existing publically owned infrastructure.

      iii. Work with broadband providers to coordinate fiber installation with regular utility and road maintenance by informing them of opportunities where they can install services.

   d. Identify likely corridors to connect underserved areas and powered cellular communications sites to expand mobile service and create a streamlined process to allow providers to install services;

   e. Coordinate with key stakeholders on infrastructure deployment, which can be achieved using the following strategies:

      i. Form a Joint Utility Committee (JUC) where county and city officials, developers and other utilities meet with broadband providers to coordinate planning efforts. For example, providers should be given the opportunity to incorporate broadband infrastructure into future developments as part of the approval process.

      ii. Designate a broadband development liaison to notify providers of opportunities to install services.

      iii. Create a permitting or public works department database to track projects and notify providers of opportunities to access poles, open trenches, and conduits.

      iv. Hold regular meetings with local leaders and telecommunications companies to discuss projects. Public officials should consider asking providers about future areas of development and collaborate on reducing barriers to entry.

v. Maintain open and friendly relationships with providers.

f. Create broadband-friendly policies and planning documents, with considerations including:

i. Zoning laws that encourage deployment, with added requirements for broadband consideration during new construction and new developments.

ii. Codified collaboration between public agencies, private providers, and end users.

iii. Standards of construction that can assist with issues that arise based on unknown variables in the right-of-way.

iv. Streamlined local permitting with predictable timelines, reduced regulatory barriers, and centralized communication between local planning offices.

v. Less expensive rights-of-way fees in areas lacking sufficient broadband in order to incentivize broadband providers into underserved areas.

3. Federal land managers should make data publicly available including locations of federal assets, tower locations, areas that have undergone environmental review under NEPA, and visitation statistics by recreation areas. Federal land managers should maintain an online inventory and map of federal assets that the county can utilize in broadband planning efforts as has been recommended by the U.S. Broadband Opportunity Counsel established by President Obama in 2014.

4. Federal land managers should implement the following best management practices with regard to broadband development:

a. Map and evaluate designated communications sites that can be used for telecommunications infrastructure, and work with providers to identify future communications sites;

b. Prioritize designated communications sites for development based on need in the area;

c. Collaborate with Beaver County, other local governments, and land management agencies to designate broadband corridors that would connect communications sites, communities, cell tower sites, schools, libraries, government facilities and other areas of economic activity; and

d. Actively collaborate with service providers to encourage development in underserved areas by streamlining, accelerating, and consolidating permitting for designated locations. County leaders, with the help of the State of Utah Broadband Outreach Center, can help recruit providers to build infrastructure in these prioritized areas.

5. Federal planning efforts should also consider how to best leverage different existing facilities. Wireless broadband, or "over the top" broadband, in combination with wired connections greatly increase the broadband capacity in any given area. Wireless towers and access points are also a necessary feature for emergency communications on federal lands. Wireless towers must be connected with fiber, making concurrent planning necessary. The following considerations should be made when planning for wireless broadband on public lands:

    a. Plan to integrate fiber and wireless broadband by deploying fiber to the edge of wilderness and special designation areas to maximize coverage;

    b. Plan for inconspicuous wireless tower locations that won't intrude on views or add additional intrusion to views;

    c. Feed fiber to tower locations or future tower locations when deploying fiber for other projects (e.g., highway construction and maintenance, new developments, etc.) to save costs and time.

6. Federal permitting should be streamlined to allow broadband providers access to open conduits. Permit streamlining can be accomplished through the following actions:

    a. Identify areas where permitting could be streamlined, particularly easing permitting restrictions in previously disturbed areas. Proposed fiber installation along existing highways should be permitted on an accelerated pace. These disturbed corridors would face only minor temporary impacts. Such corridors often already have underground and overhead utility lines, making fiber deployment even less impactful;

    b. Allow for state Departments of Transportation to permit the installation of fiber optic lines or empty conduit within the constructed roadway prism (to include the improved surface, shoulder, and immediate constructed drainage) of any federal or state highway, or local road that qualifies and receives maintenance funding under the Federal Highway Administration (FHWA) federal-aid program. These qualifying projects should be exempted from NEPA review or granted categorical exclusions;

    c. Highway easements across federal lands should be defined to include broadband service providers;

    d. Make the Utah Department of Transportation (UDOT) the permitting agency for providers wishing to build or access conduits along the highway;

    e. Increase hiring of staff responsible for telecommunications permitting.

7.6 Utility Corridors

I. FINDINGS

Utility corridors are preferred routes that co-locate multiple linear utility ROWs and are generally adjacent to existing highways or county roads. Utilities in these corridors may include electric transmission and distribution powerlines, gas, water pipelines, and communication lines such as telephone or cable. The existence and continued maintenance of utility corridors and the respective transmission lines is vital to the health, safety, welfare and economic success of all communities. Drivers for development in utility corridors include population growth, residential and commercial development, demand and delivery of energy resources, increased reliability of infrastructure, and improvements to aging infrastructure. As the federal government manages approximately 78% of the land in Beaver County, it is important that federal and other land managers allow for land access for the purpose of building, expanding, and maintaining utility corridors.

Currently, several large high capacity power lines conduct electricity through Beaver County through a corridor running north to south through the Milford Valley and into Iron County. Gas pipelines also transect the Milford Flat diagonally through a corridor from the East side of the Milford Valley heading Southwesterly.

As Beaver County continues to see an influx of large scale energy developments seeking to take advantage of our quality wind, solar and geothermal resources, additional utility corridors will be necessary to access areas with high energy development potential while excluding remaining tracts of land to preserve the existing natural resources. A new utility corridor is especially needed along State Road 21 where there is a high potential for wind, solar, and mineral development in the Wah Wah Valley. The lack of an existing corridor in this area will be a hindrance to future development. Furthermore, project developers have found that siting proposed transmission lines in existing corridors might not always be feasible to achieve the necessary transfer capacity rating from Western Utility Coordinating Council, as placing lines too close to one another can limit transfer capacity of a utility line. As such, new energy corridors that connect into existing substations would serve future population growth and facilitate new renewable energy sources. Allowing for the designation of new utility corridors is consistent with the various federal land management agency's mandates to manage public lands for multiple uses.

II. OBJECTIVES

1. Beaver County will identify and establish utility corridors throughout the County to facilitate future energy development while protecting the health, safety, and welfare of the community and preserving the natural resources within the county.

III. POLICIES AND GUIDELINES

1. The BLM and other land management entities must actively consult and coordinate with Beaver County in all land management planning, decision making, or other activities for the purpose of allowing for construction, expansion, and maintenance of utility corridors.

2. Land managers must, with regard to all planning, decisions, and other activities, take into account existing utility corridors and areas that are suitable for new utility corridors and ensure that those lands remain suitable for this use.

3. Beaver County will recognize existing utility corridors as well as identify and map future utility corridors to service the needs of energy development in the county in the most appropriate and logical locations.

4. Beaver County, by ordinance, has designated a 1000 foot utility corridor, located 500 feet on either side of SR-21 from the TransWest Express powerline to the Millard County Line.

5. Land Management Agencies shall allow new transmissions lines to be placed adjacent to existing lines in recognized utility corridors.

6. All existing utility corridors must be maintained for proper transmission and flow of electricity or other utility source. Land Management Agencies must allow for authorized personnel to adequately access and address all maintenance needs.

7. New utility corridors may be needed in the future where potential energy sources are discovered or developed. Beaver County will strive to accommodate those needs where possible, by identifying appropriate areas for new utility corridors within the county.

8. Beaver County recognizes the gas pipelines across the Milford Flat as a functional utility corridor.

7.7 Pipelines and Infrastructure

I. FINDINGS

Beaver County has a responsibility to its citizens to protect and expand the tax base and promote economic activity to raise the standard of living and provide necessary services to citizens and visitors. The development of Pipelines and Infrastructure boosts economic growth and provides citizens with necessary energy, water and electricity in fulfillment of this responsibility.

1. Electrical Transmission

Electrical transmission infrastructure is used to convey high-voltage electricity from a generation source to load-center substations, where it's transformed into lower-voltage electricity for distribution to end-users. Major components of electrical transmission infrastructure include transformers, towers, foundation materials, and conductors (transmission lines). High-voltage transmission can be either alternating current (AC) or direct current (DC). Alternating current, the most commonly used form of transmission, has the ability to convert to different voltages using a transformer, whereas DC is not easily converted. Typical voltage for transmission ranges from 69 Kilovolt (kV) up to 500 kV.

Electrical transmission systems from individual utility companies are interconnected to the entire electrical network of generation facilities and transmission grids across the western United States. Utah is part of the Western Electricity Coordinating Council in the geographic region called the Western Interconnection, one of three major electric interconnections that operate independently of each other within the United States. The Western Interconnection allows load-balancing throughout the network. That is, power generated by utilities with excess generation capacity can be provided to utilities that cannot meet their peak load demand. The Western Energy Imbalance Market (EIM) is a wholesale energy trading market where bulk power can be purchased and sold (EIM 2021). Because the EIM connects multiple generators in a marketplace, individual utilities can buy electricity to meet peak demand at reasonable rates. Renewable energy generators can also sell excess power capacity through the EIM instead of resorting to curtailment (Larsen 2018).

The Federal Powers Act of 1921 (16 U.S.C. § 12), as amended, provides for federal oversight of the bulk electrical transmission system by the Federal Energy Regulatory Commission (FERC). The Energy Policy Act of 2005 (among other items) enables FERC to facilitate transmission planning to meet the needs of utilities serving retail customers. In 1996, FERC issued Order No. 888, which opened all interstate transmission lines for use by any power generator to transmit power across the bulk transmission grid, provided the power generator pays tariffs to the transmission line utility owners. This is known as the Open Access Transmission Tariff (OATT). The FERC's Order No. 889, sets standards of conduct for power generators utilizing OATT transmissions (Utah Code § 54-17-901).

The majority of electricity generation and bulk energy transmission capacity in Utah is owned by PacifiCorp (note: Rocky Mountain Power is owned by PacifiCorp). According to company statistics, PacifiCorp serves 948,000 customers in Utah across 26 counties (Cox 2021).

Within and across Utah, PacifiCorp's infrastructure provides the majority of electrical transmission capacity. Other transmission infrastructure owners include the IPP, which owns a 500kC DC transmission line that services its California customers. **Map 16** shows the major existing transmission lines in Utah.

The majority of future planned utility transmission infrastructure in Utah will be owned by PacifiCorp. Their 2021 Integrated Resource Plan describes new transmission projects intended to (1) strengthen the backbone of Utah's energy grid for future energy loads, (2) improve interstate energy market connections through the Western EIM, and (3) change generation sources to include greater renewable contingents. PacifiCorp's future projects include the Cross-Tie 500 kV Transmission Project from Clover, Utah to Thirty Mile substation near Ely Nevada. One of the alternatives being analyzed for this line routes through Beaver County.

The TransWest Express Transmission Project, a 732-mile 500 kV DC transmission system connecting Sinclair, Wyoming, to Las Vegas, Nevada, bisects Beaver County. This transmission line will eventually provide 3,000 megawatts of transmission capacity, which will be generated by wind power in Wyoming.

When planning for new utility-scale solar developments, considerations should be made for the inversion of DC power generated from solar arrays prior to connection to the AC bulk power grid. Another consideration in planning transmission-line capacity, is the avoidance of chokepoints or bottlenecks in electrical grids. With current scenarios of high renewable energy buildout in southern Utah, electrical transmission needs may exceed capacity.

Resiliency and redundancy of electrical transmission lines are issues that have been identified and need to be addressed in Utah's electrical grids. Many rural locations in Utah are served by single transmission lines, referred to as "radial transmission lines." Radial transmission lines are the least costly option for providing some remote locations with electrical power, but they also leave those areas vulnerable to utility disruptions because of their lack of redundancy. Additional transmission connections are costly not only because of their construction costs, but also due to the expense and time required to place utility corridors on federal lands. Refer to the Utility Corridor section for more information.

2. Natural Gas Pipelines

Natural gas pipelines are constructed by private utility companies to move natural gas from production areas to end users (54 Utah Code § 13). Gathering pipelines move extracted raw materials from wellheads to processing plants, where natural gas is separated from other gases, hydrocarbon gas liquids, and water. The refined natural gas is then pressurized and added to the mainline transmission system, which consists of large-diameter, high-pressure pipelines.

Compressor stations along the network maintain pressure and move product down the line to storage areas, major industrial consumers, power plants, shipping ports, and distribution companies. From there, distribution transmission systems operate with smaller-diameter lines and lower pressure. Finally, service lines transport natural gas to the end users.

The State of Utah grants local governments the authority to supplement the state and federal laws with its own regulations for oil and gas development. Utah authorizes counties to enact any ordinances necessary to carry out its duties, so long as they are not repugnant to state or federal law (BMP 2021). The Pipeline and Hazardous Materials Safety Administration (PHMSA) exercises authority under the Pipeline Safety Act (49 U.S.C. § 60101) to prescribe minimum safety standards governing the location, design, construction, operation, and maintenance of liquefied natural gas facilities in or affecting interstate and foreign commerce. Whereas FERC serves as the lead federal agency for satisfying compliance with the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321) for liquefied natural gas facilities subject to its jurisdiction (McIntyre 2018).

The Natural Gas Act (15 U.S.C 15B § 717) enabled the federal regulation of companies transporting and distributing natural gas both intrastate and interstate. The Public Law 109–468 (2006), an amendment to the 49 U.S.C § 60101, provides enhanced environmental and safety protection in the transportation and handling of national energy products. This includes the construction and demolition of pipelines for the purpose of transporting oil and gas products.

Natural gas production in Utah is located primarily in Uintah and Grand counties. Multiple interstate pipelines cross through Utah to transport natural gas from principal producing basins in Colorado, Utah, and Wyoming, to consumer markets in other states, including the Kern River gas line that crosses the Milford Flat. **Map 17** shows existing natural gas pipelines in Utah.

The majority of local natural gas transmission infrastructure in Utah is provided by Dominion Energy. The company owns 20,189 miles of transmission and distribution lines and has 1,090,000 customers (Dominion Energy 2020). Dominion Energy produces a large portion of the gas it sells to customers, but it also purchases natural gas from other interstate pipeline companies for delivery to residential, commercial, and industrial customers.

Natural gas can also be produced from renewable sources to create a product known as “renewable natural gas” (RNG). A recent pilot project developed by Dominion Energy and Smithfield Foods (near Milford, Utah) converts methane from pig farms into RNG for distribution to Dominion Energy customers (Bioenergy Insight 2020).

3. Oil Pipelines

Oil pipelines are very similar to natural gas pipelines in that the products are transported through networks of pipes and pump stations from production areas to consumers. First, the raw material (in this case, crude oil) is gathered from wellheads and moved downstream through trunkline pipelines to refineries, which separate the oil into numerous petroleum products. From the refinery, pipelines are used to transport petroleum products to various destinations for local

use or export to other markets. A third product, called hydrocarbon gas liquid (HGL) is a secondary product created during the processing of natural gas. Because HGL is a liquid petroleum product, pumped through pipelines in a manner similar to oil, it is included in this section.

Similar to the natural gas pipelines, the State of Utah grants local governments the authority to supplement the state and federal laws with its own regulations for oil and gas development. The State of Utah authorizes counties to enact any ordinances necessary to carry out their duties, so long as they are not repugnant to state or federal law (BMP 2021). The PHMSA exercises authority under the Pipeline Safety Act (49 U.S.C. § 60101) to prescribe minimum safety standards governing the location, design, construction, operation, and maintenance of liquefied natural gas facilities in or affecting interstate or foreign commerce. Whereas FERC serves as the lead federal agency for satisfying compliance with NEPA (42 U.S.C. § 4321) for liquefied natural gas facilities subject to its jurisdiction (McIntyre 2018).

According to the Utah Geologic Survey (UGS), Utah is consistently one of the top 15 oil-producing states in the United States (Chidsey 2021). In their recent circular, Utah's Energy Landscape, the UGS reported the majority of oil production in Utah is occurring in Duchesne, Uintah, and San Juan Counties. Oil produced from wells in the Uinta Basin and further east in Colorado is transported in oil pipelines and trucks to refineries in Salt Lake City. Crude oil produced in San Juan County is transported in pipelines south to refineries in New Mexico. Crude oil from Canada and Wyoming is delivered through pipelines to Salt Lake City for refining. Pipelines transport some petroleum products refined in Salt Lake City to other parts of Utah and out-of-state markets. The Tesoro pipeline transports products to the northwestern states, while the UNEV line supplies Cedar City and Las Vegas.

4. Hydrogen Pipelines

In contrast to oil and natural gas, which are extracted from the earth, hydrogen is a manufactured product. Hydrogen gas can be manufactured from fossil fuels such as natural gas ("grey hydrogen") or coal ("brown hydrogen"), or it can be created from water using electrolysis. When the electricity used in the electrolysis process is derived from a renewable energy source, the resulting hydrogen is known as "green hydrogen." Hydrogen can also be produced from biomass.

Pipelines and other infrastructure used to transport hydrogen are similar to those used to transport natural gas. Large-diameter pipes are first used in the transmission of high-pressure hydrogen gas. When blended with natural gas (at up to 15 percent hydrogen), existing natural gas pipelines can be used instead of installing separate hydrogen pipelines.

The State of Utah grants local governments the authority to supplement the state and federal laws with its own regulations for oil and gas development. Utah authorizes counties to enact any ordinances necessary to carry out its duties, so long as they are not repugnant to state or federal law (BMP 2021). The PHMSA exercises authority under the Pipeline Safety Act (49 U.S.C. § 60101) to prescribe minimum safety standards governing the location, design, construction, operation, and maintenance of liquefied natural gas facilities in or affecting interstate or foreign commerce. Whereas FERC serves as the lead federal agency for satisfying

compliance with NEPA (42 U.S.C. § 4321) for liquefied natural gas facilities subject to its jurisdiction (McIntyre 2018). The US Department of Transportation (DOT), through PHMSA, has regulated hydrogen pipelines since 1970 via 49 CFR § 192. This code of regulation stipulates that a minimal level of safety standard needs to be met when transporting natural and other gasses. Regulations apply to pipeline construction, material standards, operations, and maintenance of pipeline structures.

Presently, Utah has no pipelines designated for transporting compressed hydrogen because the demand for hydrogen as a fuel source is limited. One anticipated major hydrogen user in Utah is the IPP facility near Delta, which is scheduled for 2025 to begin energy generation from a fuel mixture of 70 percent natural gas and 30 percent hydrogen. Eventually, their energy production will be converted to 100-percent green hydrogen. Related to this IPP development is a utility-scale hydrogen storage project that is intended to supply IPP with green hydrogen that will be generated on site.

Broader use of hydrogen, such as for motor vehicles and freight transport, is uncertain at this time. Wide-spread adoption of hydrogen as a transportation fuel would require a distribution network, either through pipelines or by tanker trucks, to fueling stations throughout the state to alleviate drivers' "range anxiety."

5. Water Pipelines

For the purposes of this planning document, water pipelines consist of substantial infrastructure projects used to transport large quantities of water over long distances through varying terrain and elevations from reservoirs and rivers to major population centers and agricultural users. All water use within the State of Utah is governed by Utah Code, Title 73.

Within the state of Utah, there are several large water pipeline projects. Two of these occur on the Colorado River. The Central Utah Project (CUP) utilizes water allocated to Utah from the Colorado River Compact, to convey and store water for the Uintah Basin and Wasatch Front. The Lake Powell Pipeline Project (LPP) is a proposed pipeline which would convey water from Lake Powell to Washington County. Another project is the Bear River Development Act, which outlines planning and utilization of water allocated to Utah from the Bear River Compact to be developed for future needs in several northern Utah counties. This project authorizes the development of these water allocations to be distributed through pipelines, pump stations and associated facilities to various water conservancy districts including Cache, Jordan Valley, Weber Basin, etc. Finally, the Pine Valley Water Supply Project (PVWS) has been proposed by the Central Iron County Water Conservancy District (CICWCD) to transfer 15,000 acre-feet of groundwater pumped from wells in Pine Valley in Beaver County to Cedar Valley through a 66-mile pipeline. A second water project in Iron County is the Airport Recharge Project, which is intended to pump surface waters into a local aquifer in an attempt to recharge the overdrawn groundwater.

6. Telecommunications

Telecommunications refer to the infrastructure used to transmit and distribute electronic information. In this case, telecommunications refers to broadband infrastructure, such as fiber optic cable, used by service providers to connect consumers to the Internet, which allows large quantities of digital information to be transmitted at high speeds.

Coordination of highway and broadband information is regulated by Utah Code § 63N-3-501 (2020), which dictates the collection and maintenance of broadband data from providers and private or public entities. Utility access to install telecommunication lines along the US interstate highway system, including the right-of-way areas, is regulated by Utah Code § 72-7-108 (2018) and Utah Administrative Rule § 907-64. These regulations facilitate longitudinal access to or use of any part of the right-of-way of a highway on the interstate system.

The placement and relocation of utility facilities that conflict with the construction or maintenance of highways (which applies to any and every facility, utility, or other structure not owned by the State of Utah) falls under the Utility Accommodation Rule (Utah Administrative Rule § 930-7).

The State of Utah is committed to deploying and expanding broadband internet access and making it available across the entire state. To this end, the 2020 Utah Broadband Plan identifies a series of goals to meet this objective. As of June 2021, 94 percent of Utah has access to broadband Internet service with speeds of 100 mbps or faster. Approximately 68 percent of Utah's residents have access to fiber-optic services with a State Broadband Access Ranking of 29th in the nation (BroadbandNow 2021).

The widespread access to high-speed Internet service across rural Utah is due in large part to the UDOT Fiber Program. For the last 20 years, UDOT has been working to install a robust fiber optic network along state highways to connect traffic cameras, digital road signs, weather stations, and other sensors to provide real-time traffic updates. This fiber-optic backbone also provides access for private companies to connect to broadband Internet networks and provide high-speed Internet to their customers. UDOT established a Public Private Partnership with private telecom companies to connect communities while expanding UDOT's Intelligent Transportation System.

Utah's current fiber-optic network consists of approximately 2,564 miles of single mode fiber (SMF or SMFO), 1.6 miles of multimode fiber (MMF or MMFO), and 24 miles of SMF and MMF (UDOT 2021a). A fiber-optic priority assessment revealed that 309 miles of fiber-optic network has been proposed with an additional 317 miles to meet existing needs (UDOT 2021b). Approximately 105 miles of fiber-optic network is in progress, with another 146 miles scheduled for installation (as of November 2021).

7. Transportation Infrastructure

Transportation infrastructure is the backbone network of major roads, highways, railroads, and other infrastructure used to transport goods and services within and across Utah.

For the purposes of this planning document, the roads and highways managed by the Utah Department of Transportation (UDOT) and major railroads are considered. For information on county roads, see section 7.1 Land Access.

The UDOT was established to have the authority and responsibility for planning, research, design, construction, maintenance, security, and safety of state transportation systems (Utah Code § 72). This includes the preparation and adoption of standard plans and specifications for the construction and maintenance of state highways.

The Unified Plan determined a total of $108.5 billion would be needed between 2019 and 2050 to fund the maintenance of current infrastructure, to expand capacity of existing roads, and to build new roads. This estimate also includes funds for upgrading transit and railway infrastructure (UDOT et al. 2021). Funding for the construction and maintenance of major highway infrastructure is provided by federal and state funds, which are generated from fuel taxes, vehicle registrations, and general funds.

8. Other Infrastructure

Other infrastructure includes mechanical wastewater treatment facilities, sewer collection systems, sewage lagoons, and stormwater systems. The vast majority of these systems in Utah are owned and operated by local municipalities and service districts. For information on the process of identifying and permitting the construction of infrastructure on federal land, refer to the Utility Corridor section.

The Federal Water Pollution Control Act of 1972, commonly referred to as The Clean Water Act 40 CFR § 1, Subchapters D, N, and O (Parts 100-140, 401-471, and 501-503), gives the Environmental Protection Agency (EPA) the federal authority to set standards for allowable pollutants for point and nonpoint source discharge into waterways. The Utah Water Quality Act as amended establishes a framework for State oversight of water quality.

There are 41 mechanical water-treatment plants in Utah. These range in capacity from 0.25 million gallons per day (mgd) in Oakley City to 75 mgd at the Central Valley Water Reclamation Facility in Salt Lake City. Statewide, wastewater treatment plants are operating at 65 percent of capacity (WFWQC 2019).

A total of 24 sewer lagoons, which discharge treated effluent into waters of the State of Utah, serve a population of 73,500 people. Another 49 sewer lagoons are non-discharging treatment facilities that use evaporation and percolation to handle wastewater and serve a population of 132,500 people (Krouth 2019).

A 2019 study of existing sewer pipelines across Utah estimated there are 12,202 miles of sewer pipeline in the state with an average age of 35 years. The same study estimates that 7,320 miles of pipeline will need to be relined or replaced by 2060, and an additional 2,567 miles of new pipeline will need to be installed in the same timeframe (Forsgren 2019).

A 2019 study of stormwater pipes across Utah estimated there are 4,673 miles of existing stormwater pipes in the state with an average age of 29 years. The study estimates that 2,395 miles of this pipeline will need to be replaced by 2060, and another 956 miles will need to be installed in the same time period to accommodate new population growth (Forsgren 2019). Water discharged into state waterways from mechanical wastewater treatment plants, sewage lagoons, and stormwater systems are subject to clean-water standards established by the EPA and the Utah Division of Water Quality.

II. OBJECTIVES

1. Beaver County has a responsibility to its citizens, including:

    a. to protect and expand the tax base and promote economic activity that provides a decent standard of living;

    b. to provide the necessary county services for its residents and visitors.

    c. to provide a quality environment for the enjoyment and use of its citizens, including protection of local values and lifestyles.

    d. to represent the interests of its residents in coordinating the planning, management and regulatory activities of other local, state and federal agencies.

    e. to protect the private property rights of its citizens including their ability to make choices concerning the development of resources on their land in harmony with community plans and zoning ordinances.

2. In light of an increasing population and changing world conditions, the need for sufficient and reliable water, energy, and critical resources requires an ongoing investment in infrastructure and the ability to keep pace with ever increasing demands. To ensure Beaver County's ongoing drought resilience, energy security, transportation, broadband and utility needs, we support efforts to build and invest in necessary infrastructure, including pipelines, dams, reservoirs, storage facilities, highways, powerlines, fiber optic cables and other critical infrastructure.

3. Beaver County's objectives, with respect to the creation, replacement, installation, repair and use of important infrastructure:

    a. Provide economic opportunities for local communities by supplying power, fuel,

water, energy and internet service.

b. Develop and allow pipelines and other important infrastructure to meet current and future needs within Beaver County.

c. Ensure that project continuity issues on public lands do not inhibit project implementation.

d. Explore opportunities for above and below-ground water storage projects and be proactive in capitalizing on high water flow years.

e. Improve techniques for aquifer recharge, storage and recovery.

f. Be efficient and timely in delivering water and energy resources through foresight and planning of infrastructure needs.

g. Support new and innovative technologies in infrastructure systems which decrease losses and increase efficiency in resource and energy delivery.

h. Explore and support all opportunities for hydroelectric production, including new technologies. Encourage facility maintenance and avoid decommissioning hydroelectric power facilities.

i. Explore and develop infrastructure systems aimed at recharging depleted underground aquifers. Encourage programs and campaigns that educate and incentivize water conservation.

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8. CULTURAL, HISTORICAL & PALEONTOLOGICAL RESOURCES

I. FINDINGS

Cultural resources are sensitive, irreplaceable objects and sites important to Beaver County's history and heritage. Cultural resources are objects or places that give evidence of human activity, occupation and use, which are important for scientific or historic value and meaning. Cultural resources include locations, sites, structures, objects, relics, artifacts and remains. They offer insight into traditional cultural, social or religious life of specific ethnic or cultural groups. Archaeological resources are a subset of cultural resources and defined as "any material remains of human life or activities that are at least 100 years of age, and that are of archaeological interest."

A paleontological resource is any fossilized remains, traces or imprints of organisms, preserved in or on the earth's crust, which provides information about the history of life on earth.

The National Park Service ("NPS") categorizes cultural resources in the following groups: archeological resources, cultural landscapes, structures, museum objects, or ethnographic resources. The National Historic Preservation Act ("NHPA") further recognizes five types of historic or prehistoric property: districts, sites, buildings, structures, and objects. *See* 54 U.S.C. § 300308. Pursuant to NHPA, these categories are used in the National Register of Historic Places ("NRHP").

Archeological resources are the remains of past human activity and records documenting the analysis of those remains. Archeological resources can be used to shed light on societal organization, human behavior, and the evolution of ideas over time. Examples of archeological resources include stratified layers of household debris, weathered pages of a field notebook, and laboratory records of pollen analysis.

Cultural landscapes are settings humans have created in the natural world including fences, watercourses, buildings, formal gardens, cattle ranches, cemeteries and pilgrimage routes to village squares. They reveal fundamental ties between people and the land – ties based on the need to grow food, form settlements, and engage in recreation.

Structures include dwellings, fences & repositories, roads & bridges, vehicles, tools & machines, signs & monuments that demonstrate human productive ability and artistic sensitivity.

Museum Objects are manifestations and records of behavior and ideas that span the breadth of human experience and depth of natural history. They are evidence of technical development and scientific observation, of personal expression and curiosity about the past, of common enterprise and daily habits. Museum objects may include a butterfly collection, woven fragments of a prehistoric sandal, the walking cane of an American president, a blacksmith's tools, the field notes of a marine biologist, fossilized dinosaur bones, business journals, household furnishings or even love letters bound with a faded ribbon.

Ethnographic resources are basic expressions of human culture and form the basis for continuity of cultural systems and ongoing development of cultural resources. Cultural systems encompass tangible and intangible resources including traditional arts and native languages, religious beliefs and subsistence activities. Ethnographic resources support some of these traditions: special places in the natural world, structures with historic associations, and natural materials. An ethnographic resource might be a riverbank used as a ceremonial or recreation site, a schoolhouse associated with cultural or historic education, sea grass needed to make baskets, a particular tool or method to accomplish a task, or traditional use of a road or area by a particular group of people. Management of ethnographic resources acknowledges that culturally diverse groups have their own ways of viewing the world and a right to maintain their traditions.

In response to legislative requirements including Section 106 of NHPA, formal inventories are conducted in anticipation of site-specific surface disturbing projects. Additionally, academic institutions have performed some research projects. However, detailed inventories have not been conducted on all lands in the County. Intensive cultural resource inventories meeting Utah Class III standards (i.e. 15 meter transect intervals) have only been completed on a small percentage of the lands in Beaver County. It is believed that cultural resource densities range from non-existent to more than 100 sites per square mile in certain locations. Based on Beaver County's size, tens of thousands of cultural resources may exist within the County limits. Additionally, untold ethnographic resources and artifacts exist in Beaver County.

Within Beaver County, a total of 114 cultural resource sites are listed in the State Historic Preservation Office ("SHPO") database. Current SHPO records for Beaver County indicate that 111 buildings & structures, 1 district and 2 archaeological resources are listed in the NRHP. In addition, one cultural resource is nominated for listing and 1,765 resources have been evaluated as being National Register quality.

II. OBJECTIVES

Beaver County's objectives with regard to cultural, historical, or paleontological resources are as follows:

1. To protect and expand the tax base and level of economic activity in order to provide a good standard of living, to provide a quality environment for the enjoyment and use of its citizens including protection of local values and lifestyles, to represent the interests of its residents in coordinating with other local, state and federal agencies concerning planning, management and regulatory activities, and provide necessary county services for its residents and visitors;

2. To protect its cultural resources from damage and removal in a manner that maximizes the resources' intrinsic, scientific, educational and economic value; and

3. To increase research and visitation for the purpose of studying and enjoying cultural resources.

III. POLICIES AND GUIDELINES

1. Beaver County will encourage federal land management agencies to continue to seek out, identify, record and catalogue cultural resources within Beaver County. Ensure that all state and federal laws are complied with upon the discovery and identification of new cultural resources.

2. Beaver County shall oppose the closure of any road, path, way or trail that has not been shown to have negatively impacted existing cultural resources.

3. Where feasible, Beaver County will provide opportunities for the public to study and enjoy cultural resources within the County.

4. To the extent they do not exist, Beaver County will pursue agreements with the BLM, USFS, and other federal agencies that guarantee Beaver County will be consulted with prior to and during any decision making process affecting cultural resources within its borders. Beaver County will demand that federal land management agencies provide Beaver County with a meaningful voice in the decision making process in the furtherance of the objectives set forth herein.

9. FISH & WILDLIFE

This section describes the findings, objectives, policies and guidelines regarding the management of fish and wildlife within Beaver County. Topics addressed within this section include: wildlife, fisheries, predator control, threatened, endangered and sensitive species, and wild horses.

9.1 Fish and Fisheries

I. FINDINGS

As many as 20 species of fish can be found in Beaver County including varieties of bass, chub, and trout. Proper population and fishery management is important to the overall environmental, social, and economic well-being of Beaver County. Beaver County has a responsibility to its citizens to protect and expand the tax base and increase economic activity in order to provide a high standard of living, to provide a quality environment for the enjoyment and use of its citizens (including protection of local values and lifestyles), to represent the interests of its residents in coordinating with other local, state and federal agencies in planning, management and regulatory activities. State and federal agencies have ignored Beaver County in making management plans and decision regarding fish and aquatic habitats that impact Beaver County directly. The lack of consultation with Beaver County has resulted in plans and decisions that do not address the needs and concerns of the county.

Management plans and actions have focused on the negative impact of human surface disturbing activities, even though the overall impact of such activities has been limited. Degradation of fisheries in Beaver County have stemmed from the loss of historic vegetative communities with the encroachment of pinyon-juniper woodlands, Tamarisk and Russian Olive, and failure to control invasive aquatic species.

The encroachment of Tamarisk, or Saltcedar, has invaded streambanks, ditches and riparian areas throughout the Southwest. This deciduous shrub or small tree grows in dense, nearly impenetrable thickets displacing native vegetation such as willows and cottonwood. Tamarisk increases alkalinity in the surrounding soil through its natural processes, effectively altering the ecosystem. Tamarisk collects river sediment that narrows and channelizes streams, creates flooding and limits use of waterways. It provides poor habitat for wild animals and birds and has no food value for wildlife species.

Degradation of fisheries in Beaver County has also occurred as a result of failure to prevent the spread of invasive aquatic species. The discovery of quagga mussels in nearby waters threatens to be a concern to Beaver County's lakes and management actions are required to address this issue. Of greater concern to Beaver County is the parasite known as *Myxobolus*

cerebralis which causes whirling disease in trout, salmon, whitefish, and grayling. While this parasite is rare in Utah, it has been found in two of Beaver County's top fisheries: the Beaver River and Minersville Reservoir. To maintain the quality of local fisheries, it is imperative to eradicate this parasite from county waters.

II. OBJECTIVES

Beaver County's objectives with regard to fish and fisheries are as follows:

1. To become more directly involved in important decision-making concerning the management of fish and fisheries in the county, including the introduction or re-introduction of fish species into Beaver County waters; and

2. To ensure that fish and fisheries are managed in a manner that maximizes the benefit to the environmental, social, and economic needs of its citizens.

III. POLICIES AND GUIDELINES

1. To the extent that they do not exist, Beaver County will pursue agreements with the state and federal agencies guaranteeing that Beaver County will be consulted with prior to and during any decision-making or planning concerning fish or fishery management. The agreements will guarantee that fish or other aquatic species will not be introduced or re-introduced into Beaver County without the express approval of the Beaver County Commission.

2. Beaver County shall support and assist in drafting legislation that requires approval of the Beaver County Commission before a state or federal agency introduces or re-introduces a fish or aquatic species into Beaver County.

3. Beaver County demands that the restoration of native plant communities and the eradication of invasive and noxious plant species, especially Tamarisk, are the top priority of state and federal land managers in planning and decision making regarding habitats affecting fisheries in Beaver County.

4. Beaver County demands that all planning and management decisions prioritize the environmental, social, and economic needs of Beaver County.

5. Waters in Beaver County should meet the water quality standards set forth in state and federal law, as applicable.

6. Beaver County recognizes the "Recreational Use of Public Water on Private Property" law (H.B. 141) as passed by the 2010 Utah Legislature; we also respect and defend the

private property rights of those landowners whose property lies beneath or adjacent to the water, against trespass or vandalism.

7. Beaver County will increase efforts to eradicate invasive aquatic species and organisms, specifically *Myxobolus cerebralis,* which are harmful to fish and fisheries in Beaver County.

9.2 Wildlife

I. FINDINGS

Beaver County is home to a wide variety of wildlife that play an important role in the environmental, social, and economic condition of the county. While it is important to recognize the needs of these different species of wildlife, these needs are secondary to the needs of the citizens of Beaver County. Beaver County has a responsibility to protect and expand the tax base and promote economic activity in order to raise the standard of living and provide necessary services to citizens and visitors, to provide a quality environment for the enjoyment and use of its citizens (including protection of local values and lifestyles), and to represent the interests of its residents in coordinating with other local, state and federal agencies in planning, management and regulatory activities.

Under Utah Code § 23-14-1, the Utah Division of Wildlife Resources ("UDWR") is the wildlife authority for the state of Utah, with all powers, duties rights and responsibilities for wildlife management within the state with the exception of species listed under the federal Endangered Species Act, which are managed by the U.S. Fish and Wildlife Service ("USFWS"), and nuisance wildlife and commercially raised fish and wildlife (coyotes, raccoons, elk and commercial aquaculture) are controlled and regulated by the Utah Department of Agriculture. Under Section 2 of that chapter, a Wildlife Board is appointed to direct policy and enact regulations and rules governing how wildlife is managed in the state. The UDWR is then responsible to implement and enforce those rules and regulations. Public input is gathered through Regional Advisory Councils ("RACs") who provide recommendations to the Wildlife Board on a regular basis. General public input is valuable in determining wildlife management goals, but the input of Beaver County is essential to protect local values, interests and economic vitality. Beaver County has often been ignored by state and federal agencies in the wildlife management process to the detriment of its residents. Livestock grazing rights are often minimized or ignored in wildlife management goals that significantly impact the local economy. Lack of coordination has also led to spurious habitat designations within the county in various planning documents, undermining property rights and hampering effective wildlife management.

Wildlife Management Plans are developed for specific species identifying population, sex

ratios and age objectives and overall guidance and direction for management of the species. The UDWR must then follow that guidance and direction in managing those species. A committee made up of the Wildlife Board, RAC, UDWR, federal agencies and numerous groups and stakeholders develops these plans. The plans are approved for a specific period of time, at which point they are reviewed and updated. Management plans are developed for wild turkey, chukar, greater sage-grouse, mule deer, elk, moose, pronghorn, mountain goat, bighorn sheep, prairie dogs, beaver, otter, black bear, cougar, bobcat and wolf.

Wildlife species found in Beaver County include big game, upland game, migratory birds, raptors, small mammals, predators, and some special designation species discussed in section 1.9.4.

Mule deer are the most abundant big game animal and can be found in a variety of habitats throughout Beaver County. Mule deer feed on forbs, grasses, and shrubs. Shrubs are the primary food source during the fall and winter months. They are generally migratory, moving between high elevation summer and low elevation winter ranges.

Pronghorn are also common in Beaver County on open and flat terrain. Pronghorn feed primarily on forbs during spring and summer months and shrubs during winter.

Rocky Mountain Elk are present in Beaver County year round. Large concentrations are found in the southwestern part of the county on the Indian Peak range and in the Tushar Mountains. Elk are adept at traveling significant distances and will move from one mountain range to another causing population swings that require constant adaptive management.

Bighorn Sheep were once abundant throughout the state as evidenced by their prevalence in ancient rock art, but were nearly extirpated after the arrival of early white settlers. Beaver County has no populations of wild sheep. There are numerous areas suitable as sheep habitat, characterized by rugged mountains with steep talus slopes and remote canyons, but not all suitable habitats are good potential transplant locations due to human encroachment, domestic livestock grazing and other factors. Mineral development in bighorn sheep habitat is also a major cause of habitat loss. Bighorn sheep are considered one of the most sought after and highly prized big game animals in North America and demand for hunting opportunities far exceeds current availability. The UDWR, in accordance with Utah Code 23-14-21, will continue to look for opportunities to transplant sheep to appropriate new locations in the state, which may include Beaver County.

Rocky Mountain Goats are obligate occupants of the highest alpine environments with precipitous cliffs necessary for escape cover. The peaks of the Tushar Mountains in eastern Beaver County are suitable habitat despite this animal not being native to this area. Mountain goats were first transplanted into Beaver County in 1986 with 7 goats. In 1988 17 more were added. This herd has successfully expanded its population to the point it is now used as a seed

herd to start new populations in other areas. In order to properly manage mountain goats, it is critical that biologists have all possible management tools available to them, including the use of aircraft for surveys, research and transplanting projects. Any future wilderness designations around existing populations would likely inhibit these activities.

Upland game birds found in Beaver County include the greater sage-grouse, dusky grouse, mourning dove, ring-necked pheasant, Rio Grande and Merriam's wild turkey, and chukar partridge. Habitat conditions and population fluctuation for these species is dependent on annual climate patterns. Warm, dry spring weather correlates to increases in populations while cold wet weather may depress population numbers.

Beaver County is also part of the flyway pattern of a variety of migratory bird species, including numerous hunt-able species of waterfowl. Human development in Beaver County has not had a significant impact on the migratory routes or habitats of these species, and in fact, human water developments are the primary source of waterfowl habitat in the county.

Beaver County is home to a few species of raptors including hawks, eagles, owls, and falcons. These raptors are protected species. Raptors serve as an indicator of environmental quality because of their position at the top of their respective food chain. There are a variety of suitable raptor habitats throughout Beaver County.

A host of small mammals can be found in Beaver County including furbearer species like the gray fox, kit fox, red fox, bobcat, raccoon, badger, ringtail, spotted skunk, striped skunk, American marten, weasels, mink and beaver. Furbearer populations are managed pursuant to state regulations.

Black bears are native to and common in Beaver County. They live in year-round habitats in the eastern part of the state. Black bear observations usually occur at elevations between 7,000 and 10,000 feet. Black bears are omnivores and hibernate for 5 to 7 months over winter.

Cougars, or mountain lions, are found all over Beaver County, but rarely observed. Their movements typically mirror those of mule deer, their primary prey. Cougar populations are closely monitored and are hunted on a limited basis.

Definitive studies have not been conducted on other wildlife species known to exist in Beaver County. These species include varieties of rodents, bats, amphibians, reptiles, and invertebrates.

Agencies categorize important habitats with terms such as "critical", "crucial" or "priority". Federal law defines "critical habitat" under the Endangered Species Act as "a specific geographical area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection". Critical habitat

may include areas that are not currently occupied but will be necessary for the recovery of the species. “Crucial habitat” has no regulatory or legal meaning, nevertheless, agencies frequently assign this moniker to high value areas used by a species in part or all of its natural life cycle, such as “crucial deer winter range”. If “crucial” habitat is lost, those individuals living in that location may be displaced or die off, but regionally the species is unaffected. “Priority Habitat” is neither critical nor crucial, but agencies have given special management prescriptions to those lands where important species may live, impairing all other uses of that land which may be deemed impactful to the species in question. All these habitat designations have been used in the management of public lands in ways detrimental to other species, the principle of multiple use, granted ROW’s, private property rights, land access and historic use of that land. These prescriptive areas are notoriously imprecise, inaccurately mapped and/or broadly defined which has consequential impacts on nearby uses and assets. Buffer zones are frequently applied to important habitat features that may include areas completely unnecessary, unused or inconsequential to the survival of that species, yet heavily impacting other important uses.

II. OBJECTIVES

Beaver County’s objectives with regard to wildlife are as follows:

1. To be more directly involved in important decision-making concerning the management of wildlife, specifically regarding the introduction or re-introduction of wildlife species into Beaver County; and

2. To ensure that wildlife is managed in a manner that maximizes the benefit to the environmental, social, and economic needs of its citizens. This includes giving livestock grazing priority in the allocation of forage.

III. POLICIES AND GUIDELINES

1. Beaver County will pursue agreements with the state and federal agencies, ensuring that Beaver County will be included in any decision-making or planning process concerning wildlife management within the county.

2. No wildlife species shall be introduced or re-introduced into Beaver County without the express approval of the Board of County Commissioners.

3. Definitions used for wildlife habitat, such as “crucial”, “critical” or “priority” must accurately reflect the precise value and regional importance of such habitat. Habitats which are deemed of such high importance must also be accurately mapped and have ground-truthing to establish the true nature and extent of that habitat.

4. Beaver County will support and assist in drafting legislation that requires approval of

the Beaver County Commission before a state or federal agency introduces or re-introduces a wildlife species into Beaver County.

5. Wildlife management plans shall be site specific when dealing with imperiled species, crucial habitats or when adverse impacts or problems persist.

6. Wildlife habitat and range reseeding projects must employ a mix of desirable native and non-native seeds that optimize forage requirements, range health and productivity.

7. The UDWR shall manage wildlife species at the objective levels set forth in the respective species management plans. If populations are above objective levels, the UDWR shall execute immediate action to reach objective levels within three years.

8. Wildlife population objective levels within Beaver County shall not be adjusted upwards due to increased forage from vegetation treatments without an equivalent or equitable adjustment to AUM numbers in the grazing allotment plans and NEPA analysis on shared public lands.

9. Beaver County supports wildlife management policies and practices that minimize impacts on agriculture and livestock grazing.

10. Land management agencies shall take actions to control and eradicate harmful and invasive noxious weeds and aggressively treat pinyon-juniper encroachment on habitats which benefit wildlife.

11. Beaver County opposes the closures of roads, paths, ways, or trails that have not been shown to have a significant negative impact on wildlife, critical habitat or their natural lifecycle processes.

12. Livestock grazing must be prioritized in the allocation of available forage on public lands.

13. Beaver County supports the responsible use of pesticides that do not negatively impact wildlife.

14. Agencies shall use adaptive management strategies in managing wildlife and their habitats.

15. All agencies shall increase efforts to accurately identify and map the “critical”, “crucial” or “priority” habitats of wildlife in Beaver County, especially for sensitive and endangered species.

16. Beaver County will assist state and federal agencies in data collection to ensure that planning decisions concerning wildlife accurately reflect species and habitat conditions

in Beaver County.

17. Given the importance of wildlife and hunting to the local custom, culture and heritage of Beaver County, hunting shall be preserved and protected as a traditional wildlife management tool.

9.3 Threatened, Endangered, and Sensitive Species

I. FINDINGS

Since the ESA (16 U.S.C. § 1531, *et seq*.) was passed in 1973, there have been over 2000 species listed and given protection under the law while only 28 species have been delisted due to successful recovery efforts. A success rate of a mere 1% over four decades of protections, indicates there needs to be serious reform to the policies employed under the ESA. The USFWS administers the ESA with minimal oversight and no perceivable public accountability. This large federal agency frequently acts with impunity towards property owners whenever threatened species are identified on their land, or worse, classifying that land as critical habitat, thereby halting nearly all future use or development. With scores of examples of bureaucratic strong-arming of landowners, the colloquial adage "shoot, shovel and shut up" has become a preemptive and common reaction to the presence of a threatened species on one's property.

Once a species of plant or animal becomes federally listed, the range of options for managing public lands where that species occur narrows substantially. With the existing avenue to petition the USFWS for listing species believed to be imperiled, the ESA has become a weapon for special interest groups who seek to close roads, halt grazing, end timber harvest, prohibit energy exploration and stop mineral extraction on public lands. This onslaught, under the guise of conservation, sidesteps the normal electoral and public participation processes while manipulating public sentiment through emotional argument rather than sound science. These attempts to place restrictions on public land usage will result in devastating impacts to rural economies.

Designations under the ESA have become indefinite or permanent in many cases, instead of temporary actions in order to build up populations. This results in specific species being listed over certain geographic regions despite having a thriving population overall. Those regions are then subject to ecological imbalance when one protected species is given absolute immunity with no mitigation available. A successful species recovery should be delisted and returned to State management. It is irrational and places an undue burden on rural communities to list a species under the ESA in peripheral regions of its habitat when that

species is abundant and flourishing within its core habitat.

The freedom to manage species in a way that best suits the county is lost once the USFWS issues an affirmative listing decision. In response to stiff regulatory controls, subversive actions to prevent habitat designations have been detrimental to many species recovery efforts. While no studies have been done to show the negative impacts of the ESA, many believe that finding a way to reduce the many grievances and heavy regulatory burdens imposed would provide better widespread and effective protection of endangered species. No one seeks the loss of rare plants or wildlife, but having to deal with the procedural difficulties, diminished flexibility and increased costs associated with species listings under the ESA has had adverse consequences.

The ESA defines endangered as any species that is in danger of extinction throughout all or a significant portion of its range. A threatened species is any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. A candidate species is a species under consideration for official listing.

A sensitive species is a species facing one or more threats to its population or habitats, which needs special management attention to reduce the likelihood of a future threatened or endangered status. The term "sensitive species" is used by the state and land management agencies to denote those species in need of protection or special management attention, but the term is somewhat ubiquitous and may vary in its meaning between agencies and may, or may not, include listed species. "Species of concern" is a more generic term that refers to those species needing management attention, but does not generally include those species listed under the ESA.

Special status species is the term that Beaver County chooses to identify the wildlife and plant species collectively, that the County considers to be threatened, endangered or worthy of special actions to recover or maintain populations. While each species has value and plays an important role in maintaining ecological integrity, the practical reason for protective action is to eliminate the possibility of a species becoming listed under the Endangered Species Act (ESA). Determining Beaver County's Special Status Species is a fundamental first step in addressing special status species management. Sources used to identify the County's Special Status Species List are:

Utah Sensitive Species List The Utah Sensitive Species List was prepared by the Utah Division of Wildlife Resources (UDWR) pursuant to State of Utah Administrative Rule R657-48 and includes "all wildlife species for which there is credible scientific evidence to substantiate a threat to continued population viability." Species on this list are identified as "Wildlife Species of Concern." Included are fish, amphibians, reptiles, birds, mammals and mollusks designated as any of the following:

1. Federal candidate species (as determined by the USFWS);

2. Federal threatened species (as determined by the USFWS);

3. Federal endangered species (as determined by the USFWS);

4. Conservation agreement species (subject to official conservation agreements between the U. S. Government and the State of Utah); and

5. Utah wildlife species of concern (species where the State of Utah has determined that conservation actions be taken to preclude their listing as candidate, threatened or endangered).

The Utah Sensitive Species List and a list of sensitive species in Beaver County can be viewed at dwrcdc.nr.utah.gov/ucdc/ViewReports/sslist.htm. All Utah Sensitive Species that occur in Beaver County are considered to be Beaver County Special Status Species.

Utah Wildlife Action Plan The DWR's Utah Wildlife Action Plan's list identifies "Species of Greatest Conservation Needs." The Wildlife Action Plan analysis focused on three fundamental factors: 1) the likelihood of an ESA listing, 2) the consequences of listing, and 3) the potential for influencing a listing. For a description of how the species of greatest conservation needs were determined see the Wildlife Action Plan (wildlife.utah.gov/Utah.WAP.pdf). All Beaver County species identified in the Wildlife Action Plan are considered to be Beaver County Special Status Species.

Candidate, Threatened and Endangered Species in Beaver County: Candidate, threatened and endangered species listed by the U.S. Fish and Wildlife Service under the ESA as being present in Beaver County. As of January 2017, only the Utah Prairie Dog (Cynomys parvidens) is listed under the ESA as a threatened wildlife species. No candidate or endangered species are found.

Candidate, Threatened and Endangered Plants in Beaver County: Plant species that the USFWS has listed as endangered or threatened or has designated as candidate species that are native to and are known to be present in the County. Beaver County has three ESA listed plant species, Frisco buckwheat, Frisco clover, and Ostler's peppergrass which are all candidate species.

Federal Land Management Agency Sensitive Species The Bureau of Land Management and the U. S. Forest Service maintain sensitive wildlife species and sensitive plant species lists. Additionally, the Forest Service has a list of management indicator species (MIS) that, while not necessarily sensitive or vulnerable, do represent the types of species present in various vegetation

associations, and the Forest Service considers them worthy of special management attention. A comparison of BLM and Forest Service sensitive species for Beaver County indicates that all of these species are also on one of the two State lists described above. Consequently, there is no need to duplicate the State's species by including BLM or Forest Service sensitive species on the County list of special status species.

Conservation Agreement Species Conservation agreement species refers to wildlife and fish species that are the subject of intergovernmental management agreements. In Beaver County, two fish and one bird are listed. All conservation agreement species are included on the Beaver County list of Special Status Species.

Incidental Occurrence It is possible that a species identified in one or another sensitive species list, but not identified as occurring in Beaver County, may be found temporarily in Beaver County as individuals wander or pass through incidentally. These species are not included in the Beaver County List of Special Status Species.

Nonessential Experimental Populations. Under section 10(j) of the ESA, the Secretary may designate a population established outside the species current range as an "experimental population" as an avenue to authorize activities that would otherwise be prohibited. These introductions are classified as either "essential" or "non-essential" based on the perceived importance to the species overall recovery. Regulatory restrictions are not as intrusive for a nonessential experimental population compared to the regulations for non-experimental populations. Introduced and nonessential experimental populations will be included in Beaver County's list of special status species on a case-by-case basis.

To summarize, Beaver County Special Status Species includes:

1. Native wildlife and plant species known to regularly be present in Beaver County that the USFWS has listed as endangered (FWSE), threatened (FWST) or designated as a candidate species (FWSC), except for experimental populations;

2. Native wildlife species identified on Utah Sensitive Species List as "Wildlife Species of Concern" and that the State recognizes as occurring in Beaver County (WSC);
3. Wildlife species classified as conservation agreement species and known to be present in Beaver County (CAS);

4. Wildlife species identified in the Utah Wildlife Action plan as "Species of Greatest Conservation Needs" and that the State recognizes as occurring in Beaver County (USCN); and

5. Wildlife species identified by federal agencies as special status are included in Beaver County's management when identified on Utah's list of Wildlife Species of Concern or Species of Greatest Conservation Needs. They are included in the chart below to facilitate consistency and coordination as BLM Sensitive Species (BLMSS) and Forest Service Sensitive Species (FSSS).

Based on the factors described above, the following species are considered Beaver County Special Status Species:

Common Name	**Scientific Name**	**Status**	**Group**
American Three-toed Woodpecker	Picoides dorsalis	WSC	Bird
American White Pelican	Pelecanus erythrorhynchos	WSC	Bird
Bald Eagle	Haliaeetus leucocephalus	WSC	Bird
Big Free-tailed Bat	Nyctinomops macrotis	WSC	Mammal
Bonneville Cutthroat Trout	Oncorhynus clarkia Utah	CAS	Fish
Burrowing Owl	Athene cunicularia	WSC	Bird
Dark Kangaroo Mouse	Microdipodops megacephalus	WSC	Mammal
Ferruginous Hawk	Buteo regalis	WSC	Bird
Fringed Myotis	Myotis thysanodes	WSC	Mammal
Frisco Buckwheat	Eriogonum soredium	FWSC	Plant
Frisco clover	Trifolium friscanum	FWSC	Plant
Greater Sage-grouse	Centrocercus urophasianus	WSC	Bird
Hamlin Valley Pyrg	Pyrgulopsis hamlinensis	FWSC	Mollusk
Kit Fox	Vulpes macrotis	WSC	Mammal
Least Chub	Iotichthys phlegethontis	WSC	Fish
Long-billed Curlew	Numenius americanus	WSC	Bird
Northern Goshawk	Accipiter gentilis	CAS	Bird
Ostler's Peppergrass	Lepidium ostleri	FWSC	Plant
Pygmy Rabbit	Brachylagus idahoensis	WSC	Mammal
Short-eared Owl	Asio flammeus	WSC	Bird
Southern Leatherside Chub	Lepidomeda aliciae	WSC	Fish
Spotted Bat	Euderma maculatum	WSC	Mammal
Townsend's Big-eared Bat	Corynorhinus townsendi	WSC	Mammal
Utah Prairie-dog	Cynomys parvidens	FWST	Mammal
Western Toad	Bufo boreas	WSC	Amphibian

As seen in the chart above, the current Beaver County Special Status Species list contains 25 species. There are 4 candidate species and one threatened species with no endangered species currently inhabiting Beaver County. Among the many species on this list are a select few that deserve additional attention and specific planning efforts to ensure their viability or to detail the findings that may be of concern to the county. There are also a few species not on the list that deserve special mention as well.

Southwestern Willow Flycatcher: Listed as an endangered species in the state of Utah, and the Yellow-billed Cuckoo, a candidate species, are on the Utah Sensitive Species list but not in Beaver County. These species are often used by special interest groups as rationale to bring suit against timber harvest plans, watershed restoration, or other rangeland vegetation projects. As these species are not known to inhabit Beaver County, such actions are unjustified.

California condor, listed as endangered, was introduced into the Grand Canyon of Arizona as a non-essential experimental population. The USFWS includes Beaver County in its list of counties where the population is "known to or is believed to occur" even though Beaver County is not historic habitat and is far from the introduction site. The Condor is included on the DWR list of Species of Greatest Conservation Needs (as an endangered species), but is not on the Wildlife Species of Concern list. As a non-native species to Beaver County, introduced to a new location not far from the county, any siting or occurrence would realistically be transitory or temporary. Therefore, the California condor is not included on the Beaver County special status species list. The presence of the California condor has impacted neighboring counties in varying ways, including the push to require expensive lead-free ammunition by hunters going afield in condor habitat.

Northern Goshawk, a conservation agreement species, is another species of concern. The goshawk is widespread throughout Utah, including Beaver County, inhabiting mature forests areas. Because of the special status of the bird, forest management prescriptions are severely hampered by their presence. Logging and prescribed fire regiments are severely curtailed wherever Northern goshawks occur, affecting forest health standards and local economies.

Greater Sage-grouse have been the focus of intense scrutiny over the past decade. This grouse inhabits 11 western states and Canada with population estimates of over half a million birds. Yet, because of the general downward population trend and the increasing expansion of civilization into historic habitat necessary for its survival, the sage-grouse was listed as a candidate species by the USFWS. Most of the controversy centers around using the declining sage-grouse population as the nexus for obstructing energy exploration, mining and grazing on public lands by environmental opponents of these activities. Because of the scrutiny placed on this bird by environmentalists and the USFWS, despite the abundant population across the western U.S., States were compelled to take aggressive proactive measures to insure the sage-grouse did not become listed.

On February 14, 2013, the State of Utah adopted an updated Conservation Plan for Greater Sage-grouse. Utah's plan is designed to protect high-quality habitat, enhance impaired habitat and restore converted habitat in Utah, to support a portion of the range-wide population of greater sage-grouse necessary to eliminate threats and negate the need for the listing of the species under the provisions of the federal Endangered Species Act. The plan is designed to

eliminate the threats facing the sage-grouse while balancing the economic and social needs of the residents of Utah through a coordinated effort which provides for incentive-based programs for private, local government and School and Institutional Trust Lands Administration ("SITLA") lands and reasonable and cooperative regulatory programs on other state and federally managed lands. Implementation of the Plan requires a cooperative effort among local, state and federal agencies, working in concert with private interests.

The biological pillars of sage-grouse conservation include protection of habitat which provides for the year-round life-cycle needs of the species, focused attention on those conditions necessary to ensure recruitment and perpetuation of the population within the aggregate state population, and enhancement/improvement of sage-grouse habitat that has been impaired or altered, through restoration and rehabilitation activities.

On September 22, 2015, a status review by the USFWS reached a determination that the Greater sage-grouse, despite long-term population declines, remained relatively abundant and well-distributed across the species' 173-million acre range. This decision was made in large part, because of the conservation efforts of the multiple states, key agency partners and private landowners. Individual states prepared and enacted conservation plans and the BLM/USFS finalized land use plan amendments to provide increased protection of sage-grouse habitat. The USFWS will continue to monitor population trends and conservation efforts of the Greater sage-grouse.

Beaver County adopted the Utah Sage Grouse Conservation Plan as a county plan and supports the conservation efforts and policies contained therein. As of January 2017, Utah has spent $5 million annually on sage-grouse conservation, restored 1.2 million acres of habitat and has protected 94% of the sage-grouse habitat in the state. Reports indicate that sage-grouse populations are currently increasing throughout the state.

Utah Prairie-dog. This southern Utah sub-species of prairie-dog is currently listed as threatened. The efforts of the State of Utah and several affected counties to delist this species has prompted heavy interest in translocating the rodents to new locations. Beaver County is the focus of several relocation sites, however, the county a section has been included in this plan restricting where prairie-dogs may be released in order to protect citizens and agricultural properties. *See* Section 9.3.1.

Gray Wolf. The Gray wolf currently introduced into the Northern Rocky Mountains is not the same subspecies that historically inhabited the state of Utah. There is further controversy over the endangered status of wolves in Utah while all across the northern tier of the continent, wolves are prolific and abundant with no listing status. This contradicts the stated definition of endangered as "any species which is in danger of extinction throughout all or a significant

portion of its range . . .” Beaver County has been the site of a recent wolf incident and in the interest of protecting the citizens of this county and their domestic animals and livestock, a specific section dedicated to wolf management is included in the plan. *See* Section 9.4.1.

Least Chub. The USFWS received a petition to list the least chub as threatened or endangered, but in August of 2014 they issued a finding that the listing was not warranted and removed it from candidate status.

Hamlin Valley Pyrg. This small snail was part of two separate petitions to list over 200 species in the western U.S. by environmentalist organizations starting in 2007. As of January 2017, the USFWS has not issued a finding and it remains under review as a candidate species.

All of the species on Beaver County’s List are being managed for recovery or sustainability by the State and federal agencies and are subject to various recovery plans and conservation strategies. All ESA listed species will have documented Recovery Plans prepared by the USFWS. All conservation agreement species have Conservation Agreements, which are similar to Recovery Plans but not as detailed. Other Beaver County Special Status Species generally do not have specific management plans. However, they are typically considered in Resource Management Plans prepared by Forest Service and BLM units within Beaver County.

II. OBJECTIVES

Beaver County’s objectives with regard to threatened, endangered, and sensitive species are as follows:

1. To protect the health, safety, welfare and private property rights, to improve the standard of living and to strengthen economic vitality;

2. To preserve and protect sensitive species and their habitat;

3. To amended, rewrite or repeal the Endangered Species Act with legislation that protects those species that truly need it, while giving greater flexibility and relief to property owners and land managers in protecting and enhancing critical habitats;

4. To become more actively involved in land management planning through coordination with federal and State agencies with regards to actions and policies involving threatened, endangered and sensitive species;

5. To support adaptive resource management that maintains multiple use and sustained yield on public lands;

6. To enact a common simplified and unified definition between agencies for designating

and describing special status species;

7. To encourage the use of the best available science in species management, recovery plans and species listings;

8. To remove the assignment of developed lands (e.g., housing developments, commercial developments, cultivated agricultural lands, etc.) from critical or crucial habitat designation; and

9. To demand an analysis of potential impacts must be provided for any introduction/reintroduction and full mitigation measures must be approved which constrain, limit, curb or restrict those species to the boundaries set forth in original plans. Introductions/reintroductions often grow beyond the stated boundaries and intended scope of recovery efforts, resulting in detrimental impacts to surrounding area economies, life style, culture and heritage.

III. POLICIES AND GUIDELINES

1. Beaver County will take the following actions concerning Sensitive Species/Species of Concern:

   a. Support creating a unified definition for species of concern across agencies;

   b. Support the use of credible data or information that agencies (BLM, USFS) use on which to base a decision that a species should be designated a "species of concern" or "sensitive" beyond criteria provided in their respective handbooks;

   c. Oppose the management of non-ESA listed species (sensitive species, species of concern) as though they are protected by the rules of the Endangered Species Act;

   d. Support delisting of any species with insufficient, unsupported, or questionable data not meeting the minimum criteria for its listing or protection level;

   e. Management plans shall not be created for single species and should be consistent with multiple use mandates;

   f. The County should be involved in the sensitive species/species of concern review process, including the determination of which species are included;

   g. The County should be involved in the establishment of recovery objectives for

species of concern (e.g. Greater Sage-grouse) and the development of management actions to move species off the list of concern. Once recovery objectives have been reached, those species should be immediately removed from the list of concern; and

h. Support the development of local solutions (e.g., habitat management plans or conservation plans) to keep a species from being listed under ESA.

2. Beaver County will take the following actions concerning Threatened or Endangered Species:

a. The County shall be a cooperating agency and participate in coordination with federal agencies in rulemaking, including any NEPA analysis related to the designation of critical habitat and development of recovery plans;

b. Require the full analysis of economic impacts on all proposed critical habitat designations or species management plans, and the inclusion of the County's participation in this analysis;

c. Support cooperation between private landowners and federal agencies to reduce the risk of listing under ESA;

d. Oppose the introduction or reintroduction of listed species into Beaver County, unless the County Commission deems no harm will come to the County, or that terms and conditions are approved that will guarantee no disruption of current land uses;

e. Should an agreement not be reached on a potential introduction or reintroduction, and a species is introduced anyway, demand the introduction be classified as a non-essential or experimental population;

f. Participate as a cooperating agency in all decisions and proposed actions which affect Beaver County regarding sensitive, threatened or endangered species; the introduction or reintroduction of listed species; habitat conservation plans; conservation agreements or plans; and candidate conservation agreements;

g. Support the development of recovery plans within 18 months of a species listing, including clear objectives to be reached in order for delisting to occur;

h. Require the petition of the immediate delisting of a species when population or recovery plan objectives have been met;

i. Oppose management actions increasing the population of any listed species in

the County without an approved recovery plan; and

j. Require the continued use of existing valid permits and lease rights on lands with listed species wherever possible.

3. Beaver County will take appropriate actions to conserve and aid recovery of endangered species within the county, consistent with stated county goals and objectives.

4. Beaver County will support efforts to protect and preserve threatened and endangered species using incentives and cooperative agreements entered into by private property owners or lessees and the authorized management agency.

5. Beaver County will encourage and support the amending or revision of the ESA.

6. Single-species management in all planning efforts should be avoided and in favor of planning the focuses on multiple uses of lands and resources, as required by federal law.

7. Restrictions on land use associated with special status species shall be removed from lands that do not contain: (a) current viable populations or (b) high value critical habitat.

8. Management actions and recovery plans must be based on current habitats and conditions, not a perceived native condition or potential future condition.

9. Recovery plans must provide for indicators that track the progress of a species recovery or plan effectiveness and identify the point at which recovery has been accomplished.

10. Critical habitat designations and species recovery plans are based on local populations and site-specific habitat conditions; Human developments shall be excluded from critical habitat designation.

11. Special status species conservation and recovery shall be managed in concert with traditional multiple use/sustained yield policies on public lands.

12. Special status species recovery habitats shall not be designated near human developments, housing areas, cultivated fields or commercial/utility developments.

13. Beaver County opposes the designation of potential habitat as critical habitat unless quantifiable data showing when and how features necessary for species recovery will be achieved on the property.

14. The Utah Wildlife Action Plan shall be used as a principal guide for implementing

conservation strategies and species recovery plans in Beaver County.

15. The Utah Sage Grouse Conservation Plan, as the source for the county plan, shall be used as the principle guide for implementing conservation strategies and recovery plans for sage-grouse in Beaver County.

16. All non-essential, experimental populations, temporary or transient individuals, or introduced species shall not receive consideration for special status species protections or recovery efforts.

17. A census shall be taken annually for special status species in Beaver County by the responsible agency. When annual counts are reported as zero for 5 consecutive years, that species is deemed to no longer exist in Beaver County.

18. Conservation agreements need to be reviewed and revised through coordination to be in consistency with Beaver County's plans and policies.

19. Land must be removed from priority, critical or other habitat designations when they do not contain populations of those species for which they are being designated.

20. Lands must be removed from priority, critical, crucial or other habitat designations when they are in conflict with human developments, agricultural lands or commercial/utility developments.

21. Beaver County supports the control of predators and zoonotic and vector borne diseases negatively impacting special status, candidate, or listed species.

22. Beaver County opposes the concept of buffer zones or setbacks for the protection of threatened, endangered or sensitive species.

23. Introductions/reintroductions must be constrained, limited and restricted to the scope and boundaries set forth in release plans; Mitigation strategies shall be approved for any species release that exceeds or overruns those boundaries.

24. The County does not believe that it was the intention of the Act to restore all original habitats formerly occupied by a specific species, or to reintroduce a species back to all former habitats, but only the amount needed to allow for species recovery and continued viability.

25. Devaluation of private property from habitat designations under the ESA is considered a "taking" and must be compensated, including under the 5th Amendment to the U.S. Constitution.

26. Beaver County calls upon the federal agencies that administer lands within the county

to:

a. Fully cooperate and coordinate with the county 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. Maintain and enhance desired plant communities that benefit watersheds, wildlife, livestock, recreation, and other beneficial uses;

c. Utilize native and non-native seed mixtures in vegetation treatments that are appropriate to management objectives, are adapted to the site conditions and are highly resistant to and/or competitive to invasive and noxious weeds;

d. Avoid attempts to circumvent responsible land management practices, to close roads, suspend grazing AUM's, and other actions under the pretense of sensitive species protections without clear scientific evidence and reason.

e. Provide copies of legal descriptions showing the exact boundaries of all designated or proposed critical habitats in Beaver County.

f. Provide a completed exclusion analysis for all lands within Beaver County.

g. Provide annual reports to Beaver County Commission on population counts and trends, habitat restorations or improvements, and other important management actions taken pursuant to threatened or endangered species in Beaver County.

h. Refrain from any planning decisions and management actions that will undermine, restrict or diminish the goals, purposes and policies of Beaver County as stated in this resolution; and

i. Refrain from implementing a policy that is contrary to the goals and purposes described in this resolution.

9.3.1 Prairie Dog Management

I. FINDINGS

In *People for Ethical Treatment of Property Owners v. U. S. Fish and Wildlife Service*, 57 F.Supp.3d 1337, 1346 (D. Utah 2014), [hereinafter "*PETPO*"], U.S. District Court Judge Dee Benson ruled that, "Congress has no authority to regulate takes of Utah prairie dogs on non-federal land. . . . Although the Commerce Clause authorizes Congress to do many things, it does

not authorize Congress to regulate takes of a purely intrastate species that has no substantial effect on interstate commerce. Congress similarly lacks authority through the Necessary and Proper Clause because the regulation of takes of Utah prairie dogs is not essential or necessary to the ESA's economic scheme [;]"

The ruling effectively repealed rule 4(d) of the Endangered Species Act (ESA) as it relates to Federal regulation of the take of Utah prairie dogs on non-federal lands in Utah. Under the decision, State law now regulates the take of Utah prairie dogs on private, State and local government lands. However, the ruling does not apply to Utah prairie dogs on protected private and federal lands.

Beaver County is defined as a cooperating agency with the Federal government under 40 CFR § 1508.8 and 43 CFR § 1601.0-5.

Under Utah Code Ann. § 17-53-318(2), Beaver County "is considered to have special expertise: . . . (ii) in a matter related to federal land development and planning, the implementation of a federal resource management plan, and other related federal land management actions; (iii) regarding whether a federal land development and plan, resource management plan, or other related federal land management action is consistent with an adopted county general plan; and, (iv) on a subject matter for which it has statutory responsibility, including a subject matter related to the health, safety, welfare, custom, culture, or socioeconomic viability of a county."

Utah Code Ann. § 17-53-318(3) directs that "A county through its governing body or a person designated by the governing body may participate in efforts to coordinate and make consistent the federal agency resources management plan or other related management action with the general plan as provided in: (a) the Federal Land Policy Management Act of 1976, 43 U.S.C. § 1701, et seq.,; (b) 16 U.S.C. § 1604; or, (c) any other federal law or rule that provides for coordination and consistency with local government plans and policies."

In keeping with the Federal District Court ruling in *PETPO*, *supra*, the Utah Division of Wildlife Resources ("UDWR") has developed the Utah Prairie Dog Management Plan for Non-federal Lands.

The plan has identified a portion of Beaver County as historic range for the Utah Prairie Dog, and having documented recovery objectives for the species will include translocation to suitable habitats.

Utah Code Ann § 23-13-14(3) dictates: "A person who knowingly and without lawful authority imports, transports, or releases a live species of wildlife that the person knows is listed

as threatened or endangered, or is a candidate to be listed under the Endangered Species Act, 16 U.S.C. § 1631, et seq., with the intent to establish the presence of that species in an area of the state not currently known to be occupied by a reproducing population of that species is guilty of a third degree felony."

Utah Code Ann. § 23-14-21(2) states: "The [Utah Division of Wildlife Resources] shall: (a) consult with the landowner in determining the suitability of a site for the transplant of a species; (b) prepare a list of proposed sites for the transplant of species; [and,] (c) provide notification of proposed sites for the transplant of species to: (i) local government officials having jurisdiction over areas that may be affected by a transplant . . ."

Utah Code Ann. § 17-53-223(1)(a) directs as follows: "A county legislative body may: (a) pass all ordinances and rules and make all regulations, not repugnant to law, necessary for carrying into effect or discharging the powers and duties conferred by this title, and as are necessary and proper to provide for the safety, and preserve the health, promote the prosperity, improve the morals, peace, and good order, comfort, and convenience of the county and its inhabitants, and for the protection of property in the county."

The Legislative Body of Beaver County hereby finds that the presence of the Utah prairie dog in surrounding counties has had a substantial impact on the prosperity, socioeconomic viability, and protection of property of those counties, and that translocation of any Utah prairie dogs into Beaver County from surrounding areas, or translocation within Beaver County from mapped and occupied habitat to unoccupied habitat, will have a similar detrimental impact upon Beaver County.

The USFWS's Utah Prairie Dog Final Revised Recovery Plan (2012) has speciously identified the entire boundary of Beaver County as historic habitat in direct contrast to the studies of G. D. Collier, et al. (Collier, 1975) (Pizzimenti & Collier, 1975) (Allen, 1905) and have specified a recovery unit boundary covering a majority of the county with no valid scientific evidence to support this demarcation.

The basis for much of the claim that the majority of Beaver County was historically occupied by the Utah Prairie Dog comes from an overly vague map by N. Hollister (Hollister, 1916) and a frequently cited report by a high school student (Hardy, 1937) which evidences the lack of scientific proof of the presumptive range historically occupied in the county.

In the exhaustive research done by G. D. Collier on Utah Prairie dogs from 1972-1975, in preparation for the U.S. Fish and Wildlife Service's ESA listing, there were no Utah Prairie Dogs found in Beaver County (Collier, 1975). Additionally, the historic distribution of the prairie dog

in Beaver County from 1920-1972 was completely conjectural based upon extensive interviews with local farmers, ranchers and others with no scientific credentials (Collier, 1975).

There are known to be Townsend ground squirrels throughout the Milford Flat area of Beaver County which have existed here prior to human settlement, which questions the validity of un-credentialed claims of prairie dogs in the area based on potential misidentification of these similar species (Collier, 1975); Furthermore, the rarity in which these two species intermingle, owing to their differing adaptabilities to arid habitats, serves to undermine the hypothesis of prairie dogs historically inhabiting this area.

A prairie dog specimen was collected in Pine Valley, Beaver County Utah, in a museum expedition of 1904 (Allen, 1905), confirming their existence in this location only.

II. OBJECTIVES

Beaver County's objective with regard to prairie dog management is as follows:

1. To protect the health, safety and welfare of its citizens and to protect private property from the destruction and damage caused by prairie dog burrowing and feeding activities.

III. POLICIES AND GUIDELINES

1. Beaver County refutes the claim that Utah Prairie Dogs historically inhabited large portions of the county. The citations used to support the argument that prairie dogs were abundant throughout the county are lacking in proof or scientific evidence and are based purely on hypothesis and conjecture.

2. Beaver County acknowledges the historic habitat that has been occupied and documented within the southern end of Pine Valley by the Utah Prairie Dog, and knowing this, they are to inhabit nowhere else in Beaver County.

3. Beaver County opposes any efforts to transplant prairie dogs into the county outside of that area mapped and deemed historic habitat by the county. The area that has been mapped by the County, and accepted as historic habitat, will be recognized for the species Cynomys parvidens.

4. The mapped and occupied habitat in the southern part of Pine Valley shall be recognized as habitat for the species Cynomys parvidens, while preserving all existing uses, in accordance with applicable State and Federal law and regulation. *See* Map 13.

5. In accordance with applicable State and Federal law and regulation, translocation shall be prohibited by the U.S. Fish and Wildlife service, the Utah Division of Wildlife Resources, or any other State or Federal agency desiring to move or translocate Utah Prairie Dogs into or within Beaver County unless approval is first obtained from the Board of County Commissioners prior to the movement or translocation of prairie dogs into or within any portion of the boundaries of the County.

9.4 Predator Control

I. FINDINGS

Across the United States, wildlife habitat has substantially changed as human populations have expanded and land has been transformed to meet varying human needs. These human uses and needs may compete with the needs of wildlife or attract wildlife and have inherently increased the potential for conflicts between wildlife and people.

Wildlife damage management, a specialized field within the wildlife management profession, is the science of reducing damage or problems caused by wildlife. It is recognized as an integral part of modern wildlife management (Berryman, 1991).

The U.S. Department of Agriculture ("USDA") Wildlife Services ("WS") program, a division of APHIS, is the federal agency authorized by Congress to conduct wildlife damage management to protect American agriculture, industrial and natural resources, property and human health and safety from damage associated with wildlife (Animal Damage Control Act, 1931). WS responds to requests for assistance when valued resources are lost, damaged, or threatened by wildlife. As requested, WS cooperates with land management agencies (e.g. BLM and USFS) and wildlife management agencies (e.g. UDWR and USFWS), and the Utah Department of Agriculture and Food to effectively and efficiently reduce wildlife damage. Aerial hunting of wildlife that damage livestock is authorized under the Airborne Hunting Act of 1971 and allows WS to pursue wildlife damaging livestock from fixed-wing or rotor operated aircraft. States also can permit private individuals to hunt coyotes from the air through a permitting process, which in Utah is managed through the UDAF.

The Utah Wildlife Services ("WS-Utah") program is a cooperative effort between the USDA and UDAF. The state authority for the program is found in Title 4, Chapter 23 of the Utah Code. Under that code, the state has created a nine member board to oversee the state role in predator damage management as directed in the Agricultural and Wildlife Damage Prevention Act. Most of WS-Utah's activities are spent on predator damage management, but other activities include monitoring animal and bird disease outbreaks and threatened and endangered

species protection.

Species in Utah that cause repeated damage to resources include coyotes, red fox, mountain lions, black bears, raccoons, and striped skunks. Other predators that cause localized damage include swift fox, bobcat, badger, mink, feral cats and free roaming dogs.

Livestock predation causes significant economic loss to livestock owners. Without effective predator management to protect livestock, predation would be higher (Howard & Shaw, 1978) (Collinge & Maycock, 1997). In Utah, coyotes account for an annual average of 65% of confirmed livestock kills. Mountain lions account for an annual average of 14% of losses and black bears average 21% of annual losses.

Livestock are an important component of the local economies throughout the state. UDAF estimated Utah statewide predation losses of sheep and lambs at $4,529,000 in 2014. It must be noted that these losses occurred with a predator damage management program in place, losses would have been much greater without this program. Although direct losses of livestock to predation are economically significant, actual indirect costs are also significant. The threat from predators' increases costs imposed on livestock producers from mitigation efforts including confinement, increased fencing, early weaning, choice of grazing areas, increased feed costs, stress from harassment, hired herders, guard animals, noise devices, lights and others.

Private landowners who suffer damage to their livestock, including cattle, sheep, goats, horses, mules, turkeys and swine, from predators such as bear, wolf or mountain lion are entitled to seek compensation through the Wildlife Damage Compensation Act (See Utah Code 23-24-1).

The UDWR recognizes predator management as an important tool available to division staff when needed. Although predator management can be controversial, it is important under certain circumstances for the effective management of predator and prey populations.

If predator populations are limiting UDWR's ability to reach other wildlife management objectives, wildlife officials may choose to implement predator management plans, such as those for mule deer. This plan directs financial resources ($600,000 annually) to the USDA-Wildlife Services for coyote control, specifically to help reduce populations in areas where deer fawn survival is low. Coyotes are not considered a protected species in Utah and a bounty program was also instituted as part of the effort to bolster dwindling mule deer numbers. In addition, targeted efforts using hunters and trappers cooperatively hired through Wildlife Services and UDAF for removal of coyotes from specific areas and during prescribed seasons are also used in this effort.

The UDWR is also working to limit the impact of cougars on Utah's deer herds, while maintaining a healthy cougar population statewide. Cougar harvest has been liberalized where mule deer or bighorn sheep populations fall below population management objectives. Currently

the UDWR has programs to control certain predators in specific wildlife management situations, including:

- Ravens, coyotes, red foxes and badgers that prey on sage-grouse and their eggs;
- Raccoons and red foxes that prey on waterfowl and their eggs;
- Cougars that prey on adult mule deer or bighorn sheep; and
- Coyotes that prey on mule deer or pronghorn fawns.

Utah's Mule Deer Protection Act (S.B. 245) was passed in 2012 to appropriate funds for coyote control. The Utah Legislature set aside $500,000 from the General Fund to administer the program, track harvest and participation, and finance the bounty program, which replaced bounty programs formerly administered by counties.

Two additional wildlife species can at times cause predatory problems in Utah: black bears and wolves. Both of these species are managed under specific plans (Utah Black Bear Management Plan and Utah Wolf Management Plan), although wolves do not currently present predator-management challenges to Utah wildlife managers at this time. Wolves do not currently inhabit Beaver County, although a transient individual was taken in the county. Senate Bill 36 directed UDWR to prevent any wolf pack from establishing in the delisted portion of the state. USDA-Wildlife Services have the authority to resolve livestock depredation incidents involving wolves in this area. For the remainder of the state, wolves continue to be classified as a federally endangered species and under USFWS authority.

In 2013, the UDWR published a conservation plan for Greater Sage-grouse, identifying 11 Sage-grouse Management Areas ("SGMA") throughout the state, including the Bald Hills and Hamlin Valley in Beaver County. These management areas were identified as the most important and high-value areas for intensive Sage-grouse conservation efforts. The UDWR conservation plan identifies eleven categories of threats to greater sage-grouse populations in Utah. Predation has been identified in Utah's plan as a "key threat" in most of those SGMA's. Studies have shown predators were responsible for nearly 100% of the chick mortality in sage grouse. (Burkepile, Reese, & Connelly, 2001). Significant predation was also documented by red fox in another study suggesting red fox populations should be discouraged in sage-grouse habitats (Bunnell & Flinders, 1999). Studies have consistently shown that removing predators had a large, positive effect on hatching success and increased autumn densities of grouse.

Predator control programs that protect livestock, wildlife, and agricultural crops and protect health and human safety are beneficial to Beaver County and its citizens. Prevention or control of wildlife damage, which often includes removal of the animals responsible for the damage, is an essential and responsible part of wildlife management.

II. OBJECTIVES

Beaver County's objectives with regard to predator control are as follows:

1. To coordinate with UDWR and other agencies involving predator control, to ensure an adequate predator management program;

2. To protect livestock and other domestic animals from predatory animals;

3. To protect and preserve the use of management tools and equipment in local and state policies for flexible and efficient predator control by professionals, agency staff and licensed sportsmen;

4. To continue the protection of mule deer and support actions that strengthen populations;

5. To obtain financial relief for depredating livestock losses; and

6. To demand that wildlife management agencies actively manage all wildlife populations, including predators.

III. POLICIES AND GUIDELINES

1. Beaver County will seek coordination with UDWR and federal agencies concerning predator control programs and management of predators;

2. Beaver County supports and encourages the continuance of the Predator Damage Management program offered by Utah Wildlife Services (UDAF and USDA WS);

3. Beaver County supports the Animal Damage Compensation Act and fair compensation for livestock losses;

4. Beaver County supports the Mule Deer Protection Act and the bounty program offered for coyote control;

5. Beaver County discourages any attempts to place protected status on coyotes;

6. Beaver County supports all legitimate management tools used in animal damage control and predator management by agencies and sportsmen including: foothold traps, snares, ground shooting, aerial shooting, trained dogs, denning, and the use of M-44's and DRC-1339 by Wildlife Services personnel;

7. Beaver County demands that state and federal agencies prioritize predator control in the management of Greater Sage-grouse, including DRC-1339 treated eggs for crow and raven control;

8. Beaver County encourages the removal of protected status from Ravens;

9. Beaver County demands that UDWR promptly respond to, and remove, aggressive

predators involved in potentially dangerous incidents or encounters, especially those involving animals habituated to human activities or developments, or those frequenting recreation areas or human habitations;

10. Beaver County will seek any and all actions necessary to prevent wolves from inhabiting Beaver County;

11. Beaver County demands that Rocky Mountain Gray Wolves be delisted statewide and that the Utah Wolf Management Plan be implemented;

12. Beaver County will continue to support predator control programs that are beneficial to its citizens and help maintain appropriate wildlife populations within the county.

9.4.1 Wolf Management

I. FINDINGS

The Southern Rocky Mountain wolf (Canis lupus youngi) (Goldman, 1937) was a subspecies of wolf that was found over southeastern Idaho, southwestern Wyoming, northeastern Nevada, Utah, western and central Colorado, northwestern Arizona and northwestern New Mexico (Allen, 1942). It was a valid subspecies (Wozencraft, 2005) that is now considered extinct.

The Northern Rocky Mountain wolf (Canis lupus irremotus) (Goldman, 1937) was a subspecies of wolf native to the northern Rocky Mountains, from northwestern Wyoming northward through western Montana and eastern Idaho into southern Alberta. The U. S. Fish and Wildlife Service in 1980, in their draft recovery plans to reestablish wolves into the Northern Rocky Mountains, chose the Mackenzie Valley wolf (Canis lupus occidentalis), also known as the Northwestern wolf. These wolves were viewed as a synonymous subspecies to the Northern Rocky Mountain Wolf *C. l.* irremotus, because of their overlapping habitat in Alberta, Canada. Rather than trying to locate and reestablish any remaining true Northern Rocky Mountain wolves, the USFWS used the plentiful Canadian wolves(*C. l. occidentalis)* in their recovery effort.

The Mexican wolf (Canis lupus baileyi), also known as the lobo, was a subspecies of wolf native to southeastern Arizona, southern New Mexico, western Texas and northern Mexico. It is the smallest and most endangered of the gray wolf subspecies, having been nearly extirpated from the wild by the mid 1900's. After being listed under the Endangered Species Act in 1976, five wild wolves were captured alive in Mexico and used to create a breeding program. These five wolves constituted the known population of Mexican wolves at that time. On January 16,

2015 the U. S. Fish and Wildlife Service finalized a rule listing the Mexican wolves as a separate entity under the ESA and revised the regulations for the nonessential experimental population under 10(j), placing this subspecies under endangered species status. The Mexican Wolf Recovery Plan called for the reestablishment of at least 100 wolves in their historic range. A study released by U. S. Fish and Wildlife shows a minimum population of 109 wolves as of 2014 in southwest New Mexico and southeast Arizona.

Despite all evidence to the contrary, the U. S. Fish and Wildlife Service chose to release a non-native subspecies of wolf into the northern Rocky Mountains. This wolf is unquestionably not native to Utah and is a larger specimen than the native Southern Rocky Mountain subspecies that once roamed this state. Further, the Mexican subspecies was selectively identified and given Endangered species status, despite the often cited concern over obvious inbreeding and lack of DNA diversity or a potential hybrid mixing in its blood lines. The Mexican wolf's habitat never extended into Utah, yet there are currently planning efforts by wolf advocates to push for these wolves to expand their territory into Utah.

Wolves are currently listed as endangered under the Endangered Species Act throughout the greater portion of the state of Utah; The U.S. Fish and Wildlife Service has acknowledged that Utah is not critical to the recovery of wolves.

The USFWS has refused to approve, deny or comment on the Utah Wolf Management Plan, prepared by the State of Utah Division of Wildlife Resources in anticipation of the wolf getting delisted within the state. The State has formally requested in writing, on multiple occasions, that the service delist the wolf throughout Utah. The service has failed to acknowledge or otherwise respond to any and all requests by the State.

Under Utah Code Ann. § 23-29-201(1), "[t]he division shall contact the service upon discovering a wolf in any area of the state where wolves are listed as threatened or endangered under the Endangered Species Act and request immediate removal of the animal from the state; (2) The division shall manage wolves to prevent the establishment of a viable pack in all areas of the state where the wolf is not listed as threatened or endangered under the Endangered Species Act until the wolf is completely delisted under the act and removed from federal control in the entire state."

It is the policy of the state to legally advocate and facilitate the delisting of wolves in Utah under the Endangered Species Act and place wolf management authority under state control.

Under Utah Code Ann. § 17-53-318(2), Beaver County "is considered to have special expertise: . . . (ii) in a matter related to federal land development and planning, the

implementation of a federal resource management plan, and other related federal land management actions; (iii) regarding whether a federal land development plan, resource management plan, or other related federal land management action is consistent with an adopted county general plan; and, (iv) on a subject matter for which it has statutory responsibility, including a subject matter related to the health, safety, welfare, custom, culture, or socioeconomic viability of a county."

Utah Code Ann. § 17-53-318(3) directs as follows: "A county through its governing body or a person designated by the governing body may participate in efforts to coordinate and make consistent the federal agency resource management plan or other related management action with the general plan as provided in: (a) the Federal Land Policy Management Act of 1976, 43 U.S.C. § 1701, et seq.,; (b) 16 U.S.C. § 1604; or, (c) any other federal law or rule that provides for coordination and consistency with local government plans and policies."

Utah Code Ann § 23-13-14(3) dictates: "A person who knowingly and without lawful authority imports, transports, or releases a live species of wildlife that the person knows is listed as threatened or endangered, or is a candidate to be listed under the Endangered Species Act, 16 U.S.C. § 1631, et seq., with the intent to establish the presence of that species in an area of the state not currently known to be occupied by a reproducing population of that species is guilty of a third degree felony."

Utah Code Ann. § 23-14-21(2) states the following: "The [UDWR] shall: (a) consult with the landowner in determining the suitability of a site for the transplant of a species; (b) prepare a list of proposed sites for the transplant of species; [and,] (c) provide notification of proposed sites for the transplant of species to: (i) local government officials having jurisdiction over areas that may be affected by a transplant . . ."

Utah Code Ann. § 17-53-223(1)(a) directs as follows: "A county legislative body may: (a) pass all ordinances and rules and make all regulations, not repugnant to law, necessary for carrying into effect or discharging the powers and duties conferred by this title, and as are necessary and proper to provide for the safety, and preserve the health, promote the prosperity, improve the morals, peace, and good order, comfort, and convenience of the county and its inhabitants, and for the protection of property in the county."

II. OBJECTIVES

Beaver County's objectives with regard to wolf management are as follows:

1. To protect the citizens of this county from unwanted dangerous predators that threaten the health, safety, welfare, customs, culture and socioeconomic viability of Beaver County; and

2. To support any effort to delist wolves throughout the state of Utah where they are currently listed as an endangered species.

III. POLICIES AND GUIDELINES

Beaver County's planned policies and guidelines for accomplishing the foregoing objectives are as follows:

1. The Legislative Body of Beaver County hereby finds that the presence of wolves in surrounding states has had a substantial impact on livestock operations, local communities, domestic animals, and big game populations, and that the introduction of any wolves into Beaver County from surrounding areas will have a similar detrimental impact upon Beaver County.

2. The Legislative Body of Beaver County asserts that this County is not part of the historic range of the Mexican Gray Wolf (Canis lupus baileyi) and prohibits their introduction into this County.

3. The Legislative Body determines that the Canadian Gray Wolf subspecies *Canis Lupus Occidentalis* that has been transplanted into Montana, Idaho and Wyoming is not native to Beaver County and its introduction is likewise prohibited.

4. The Legislative Body of Beaver County supports the Utah Division of Wildlife Resources and their management of wolves under the state wolf management plan.

References:

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9.5 Wild Horses

I. FINDINGS

STATUTORY REQUIREMENTS

Large numbers of unbranded and unclaimed horses roam in Beaver County on public lands administered by the United States Secretary of Interior through the Bureau of Land Management (BLM. These animals are known and referred to as wild free-roaming horses. *See* 16 U.S.C. 1331(b). Many of these animals wander from time to time onto private and State owned lands in Beaver County.

Congress asserted jurisdiction over wild free-roaming horses and burros pursuant to the Wild Free-Roaming Horses and Burros Act of 1971 (Public Law 92-195 and subsequent amendments), codified at 16 United States Code Sections 1331-1340. Congress charged the BLM and the Forest Service each to manage wild horses and burros found on the public lands they each administer. While no wild, free roaming burros occur in Beaver County, the wild free-roaming horses in Beaver County are found on lands administered by the BLM.

Despite the BLM's management authority over wild free-roaming horses and burros in Beaver County, Congress in the Wild Free-Roaming Horses and Burros Act of 1971 ("WFRHBA"), 16 U.S.C. 1331, *et. seq*., and FLPMA, 43 U.S.C. 1701, *et. seq*., have issued a series of mandates to the BLM.

Under the WFRHBA, the BLM shall remove excess wild free-roaming horses and burros from public land areas where overpopulation is determined to exist. 16 U.S.C. 1333(b)(2). The term "excess" is statutorily defined as animals which have been removed or which must be removed from an area "in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area". *Id*. The BLM must determine the AML of wild

horses and burros in an area and use removal, destruction and other options to achieve AML. *See* 16 U.S.C. 1333(b)(1). Thus, in the practical application of the WFRHBA, an “overpopulation” of wild horses and burros occurs in an area, for which the BLM shall remove “excess animals” from the area, whenever the count of wild horses and burros in the area reaches and threatens to exceed the area’s AML. In short, anything above AML is considered “excess” and must be removed. As the population of wild free roaming horses approaches AML, the trigger point for doing an EA and NEPA documents in preparation to remove excess animals is reached when the population reaches 85% of AML.

The BLM shall remove wild free-roaming horses or burros that stray on privately owned land if the private land owner so informs the BLM in writing. *See* 16 U.S.C. 1334.

The BLM shall "to the extent consistent with the laws governing the administration of the public lands [namely the Wild Free-Roaming Horses and Burros Act of 1971] coordinate the inventory, planning, and management activities [for wild free-roaming horses and burros] with the land use planning and management programs of [Beaver County]." 43 U.S.C. 1712(c)(9); and

"Land use plans of the BLM [for wild free-roaming horses and burros] under this section shall be consistent with [Beaver County's plan for the same animals] to the maximum extent [the Secretary of Interior] finds consistent with Federal Law [namely the WFRHBA] and the purposes of this Act [meaning FLPMA]." 43 U.S.C. 1712(c)(9).

Beaver County's plan to manage wild free-roaming horses and burros is consistent in every respect with the WFRHBA as amended and FLPMA as amended. Therefore, Beaver County expects maximum adherence by the BLM to this, Beaver County's plan for wild free-roaming horses and burros.

The WFRHBA requires the BLM:

a. To designate and maintain given areas for the protection and preservation of wild horses and burros to be managed "in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands;" 16 U.S.C. 1333(a); and

b. To keep current inventories of wild free-roaming horses and burros in the given areas to determine:

- If overpopulations exist;
- Whether actions should be taken to remove excess animals;

- How to best achieve appropriate management levels (AML) whether through removal, destruction of excess animals, or other options such as sterilization or natural population controls. 16 U.S.C. 1333(b)(1).

The WFRHBA requires the BLM to "immediately remove excess animals" from a given area "so as to achieve appropriate management levels" (AML) if the BLM determines on best available information that an overpopulation exists and action is necessary to remove excess animals in the given area. 16 U.S.C. 1333(b)(2). Again AML, particularly upper AML, is the point that defines when wild horses and burros reach a stage of "excess animals" that need to be removed. Such removal of excess wild free-roaming horses shall proceed in the following order and priority:

a. Destroy old, sick or lame animals in the most humane manner possible;

b. Capture and remove for private maintenance such number of excess animals for which a demand exists for adoption under qualified, humane care;

c. Destroy additional excess animals in the most humane and cost efficient manner possible.

See 16 U.S.C. 1333(b)(2)(A)-(C).

The WFRHBA also requires the BLM to sell without limitation all excess animals in excess of 10 years of age and all excess animals that have been offered unsuccessfully for adoption at least 3 times, until all excess animals offered are sold or the appropriate management level has been attained. *See* 16 U.S.C. 1333(e).

The WFRHBA does not expressly prohibit the BLM from utilizing sterilization and fertility programs for wild free-roaming horses and burros. However, the WFRHBA does not excuse the BLM from adhering to its capture/removal/destroy responsibilities under 16 U.S.C. 1333(b) and 1333(e) just because it engages in such sterilization and fertility programs.

The WFRHBA requires the BLM to remove wild free-roaming horses or burros who stray onto privately owned land if the private land owner so informs the BLM in writing. *See* 16 U.S.C. 1334.

The WFRHBA authorizes the BLM to enter into cooperative agreements with landowners, the State of Utah and Beaver County with respect to wild free-roaming horses and burros. *See* 16 U.S.C. 1336.

The WFRHBA does not authorize the BLM to relocate wild free-roaming horses and burros to areas of the public lands where they do not presently exist. 16 U.S.C. 1339. No wild free roaming burros occurred in Beaver County at the passage of the WFRHBA, nor do they occur at the present time.

REGULATORY REQUIREMENTS

The BLM's management of wild free-roaming horses and burros and the establishment of herd management areas ("HMAs") are done in accordance with approved BLM land use plans. *See* 43 CFR 4710.1. When HMAs are established, the BLM must inventory and monitor herd and habitat characteristics, 43 CFR 4710.2, consider the AML of the herd, and prepare a herd management area plan for each HMA. *See* 43 CFR 4710.3-1. The BLM is required by rule to limit the animals' distribution to the HMAs. *See* 43 CFR 4710.4.

BLM by rule allows for closing or limiting certain public lands areas to all or a particular kind of domestic livestock grazing *if necessary* to (1) provide habitat for wild free-roaming horses and burros, (2) to implement herd management actions, or (3) protect the animals from disease, harassment or injury. *See* 43 CFR 4710.5. Moreover this provision must be applied consistent with the additional BLM rule that management for wild horse and burro values "shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management area plans." 43 CFR 4710.4.

HMAs, THEIR AMLs, AND THEIR MANAGEMENT, GATHER AND REMOVAL PLANS

There are currently five BLM HMAs and one BLM herd area ("HA") situated wholly or partially in Beaver County. *See* Map 14. The names of these HMAs and HA (in alphabetical order) and the current BLM determined AML for each area are as follows:

- Bible Spring HMA * — AML 30-60
- Blawn Wash (HA) — AML 0
- Chokecherry HMA — AML 0-30
- Four Mile* HMA — AML 30-60
- Frisco HMA — AML 30-60
- Sulphur HMA — AML 165-250

* Part of the so-called Bible Spring Complex in Beaver and Iron Counties, for which the collective AML is 80-170

The Sulphur HMA is currently supposed to be managed according to the 1987 Sulphur Wild Horse Herd Management Area Plan and the 2010 Wild Horse Gather Plan For The Sulphur Herd Management Area Capture, Treat, and Release Plan, DOI-BLM-UT-C010-2010-0048-EA.

The Bible Spring and Four Mile HMAs are currently supposed to be managed according to the 2005 Bible Springs, Blawn Wash, Four Mile, and Tilly Creek Wild Horse Appropriate Management Level Assessment and the 2014 Bible Spring Complex Wild Horse Gather and Removal and Fertility Treatment Plan, DOI-BLM-UT-C010-2014-0035-EA.

The Chokecherry HMA is currently supposed to be managed according to the 2010 Eagle, Chokecherry, and Mt. Elinor Herd Management Areas Wild Horse Gather Plan, DOI-BLM-NV-L020-2010-0045-EA as tiered into the 1993 Pinyon MFP and 2008 BLM Ely District ROD and Approved RMP.

The Frisco HMA is currently supposed to be managed according to the 2012 Frisco Herd Management Area Plan and Gather Plan, DOI-BLM-UT-C010-2012-0018-EA.

The Blawn Wash HMA has been removed from wild horse management activity. Currently, the State of Utah School and Institutional Trust Lands Administration (SITLA) holds 25,970 acres of land in the HMA, comprising 43% of the area, but also producing 70% of the available forage. Wild horses managed by the BLM could not be excluded from the SITLA lands without fencing across very treacherous terrain. This option was determined to be too expensive and unworkable. Therefore, the Blawn Wash HMA will be managed for 0 AML.

BLM'S FAILURE TO FOLLOW APPLICABLE STATUTES, RULES AND HMA MANAGEMENT, GATHER AND REMOVAL PLANS

The BLM has not adhered to its legal duty to keep wild horses within AMLs. For purposes of the WFRHBA, "overpopulations" of "excess animals" chronically exist and persist far in excess of AML in all five active HMAs (more than double in some areas) and "action is necessary to remove excess animals in" those HMAs.

For purposes of the WFRHBA the BLM has not adhered to its legal duty to remove excess wild free-roaming horses from HMAs in Beaver County by first destroying old, sick or lame animals in the most humane manner possible; next capturing and selling without limitation all excess animals in excess of 10 years old; next capturing and removing for private maintenance such number of excess animals for which a demand exists for adoption under qualified, humane care; next by selling without limitation all excess animals that have been offered unsuccessfully for adoption at least 3 times; and next by destroying additional excess animals in the most humane and cost efficient manner possible. By not adhering to their removal mandate by the WFRHBA, BLM continues to cause conflicts with private landowners by allowing excess wild horses to wander onto private lands.

For purposes of the WFRHBA and applicable BLM rules, the BLM has purported to reduce various local livestock operators' permitted grazing forage, expressed as AUMs, in order to accommodate the exploding wild free-roaming horse populations. Such BLM grazing reductions are not necessary to implement any herd management plan or provide more wild free-roaming horse habitat. Rather, they were ordered because the BLM arbitrarily plans to *continue to fail to follow* its own herd management plans thereby destroying existing habitat.

For purposes of the WFRHBA the BLM has failed to manage wild free-roaming horses in the five active HMAs in Beaver County so as to achieve a thriving natural ecological balance and multiple-use relationship in those areas.;

For purposes of the WHRHBA and applicable BLM rules, the BLM has failed to act in a reasonably prompt manner to remove wild free-roaming horses from private lands upon notice from the land owners and from State lands managed by SITLA and DNR. The BLM has also neglected to keep wild free-roaming horses off of federally managed lands outside the HMAs.

The failings cited in the preceding paragraphs are due to the following:

a. The BLM does not utilize euthanasia as legally required except for injured animals;

b. The BLM does not put aged and unadoptable animals up for sale or euthanasia as legally required, but holds and feeds them in contracted pasture or other holding facilities for the remainder of their lives at great taxpayer expense;

c. The BLM does not realistically deal with the fact that the demand for adopting wild horses and adoption rates are low and continue to decline due to high feed costs, onerous adoption rules and selective demand for young workable horses or horses of the old Spanish barbed lineage.

d. The BLM does not realistically deal with the fact that the unwanted, unadoptable horses it keeps are estimated to exceed 50 thousand in number, costing the BLM over $40 million annually to care for and feed;

e. The BLM arbitrarily adopts the attitude of reducing established grazing levels first, rather than remove excess wild free-roaming horses, in order to preserve ecological balance;

f. The BLM does not set realistic and reasonable funding priorities to provide for legally required wild horse gathers except for "emergency situations;"

g. Even when funding for gathers is available, because pasture and holding facilities are full to capacity and overflowing with un-adopted/unsold/undestroyed animals illegally held in perpetuity, the BLM perpetually delays and altogether cancels wild horse gathers in the face of critical overpopulations far in excess of AML; and

h. The BLM at the Washington level deprives BLM state and local personnel of authority to timely make wild horse management decisions on when to gather, where to take captured horses, and how to dispose of unadoptable horses.

II. OBJECTIVES

Beaver County's objectives with respect to wild free-roaming horses are as follows:

1. To eliminate the Blawn Wash HA and keep the five HMAs in Beaver County (Bible Spring, Chokecherry, Four Mile, Frisco and Sulphur) as is, with no changes to the existing acreage or boundaries;

2. To keep wild free-roaming horses at or below established AMLs in all HMAs in Beaver County;

3. To achieve a thriving natural ecological balance and multiple-use relationship on all HMAs in Beaver County;

4. To keep wild free-roaming horses off of all public lands outside of the HMAs in Beaver County;

5. To keep all unwanted wild free-roaming horses off private and State lands in Beaver County;

6. To reverse any and all wild horse related reductions of active grazing AUMs that BLM ever required;

7. To demand that the BLM implements management plans that maintain existing vegetation treatment areas and identifies areas for additional vegetation treatments that will increase usable forage for livestock, wildlife and wild horses;

8. To oppose and prevent any wild free-roaming horses and burros from being transferred and introduced into Beaver County from outside the County and from outside any established HMA in the County;

9. To implement a zero tolerance policy for the introduction of wild free-roaming burros into Beaver County; and

10. To work with Utah Congressional delegates to remove language from the Interior Appropriations bills that prohibits the use of funds to deal effectively with excess animals.

III. POLICIES AND GUIDELINES

Beaver County's planned policies and guidelines for accomplishing the foregoing objectives are as follows:

1. Initial Large Gather Outside of HMAs. Following needed NEPA review if any, the BLM during the first field season after implementation of this plan should conduct a countywide gather to remove all wild free-roaming horses found on public lands in Beaver County outside of the HMAs. Animals captured during this gather generally should not be returned to HMAs but rather should be processed for either adoption, sale or destruction according to the requirements of the WFRHBA and applicable BLM rules, stated above. Small exceptions to this general provision could be allowed to introduce new animals into different HMAs for reasons of maintaining genetic diversity, but only if the wild horse population of the HMA is below 85% of AML.

2. Subsequent Biennial Gathers Outside of HMAs. Following needed NEPA if any, the BLM during subsequent alternating field seasons (or more frequently if livestock grazers or other stakeholders determine the need arises) should conduct county wide gathers to remove all wild free-roaming horses found on public lands in Beaver County outside of the HMAs. Animals captured during such gathers generally should not be returned to HMAs but rather should be processed for adoption, sale or destruction according to the requirements of the WFRHBA and applicable BLM rules, stated above. Small exceptions to this general provision could be allowed to introduce new animals into different HMAs for reasons of maintaining genetic diversity of an HMA herd, if wild horse populations are below 85% of AML.

3. Initial Gather In HMAs. Following any needed NEPA, and upon completing an updated inventory count of wild free-roaming horses in each HMA in Beaver County, the BLM during the initial field season following implementation of this plan should conduct gathers in all HMAs where the number of animals is found to equal or exceed the upper AML, removing enough animals to bring the herd number down to lower AML. Animals

captured during such gathers should be processed either for adoption, sale or destruction according to the requirements of the WFRHBA and applicable BLM rules, stated above.

4. Subsequent Annual Gathers In HMAs. Following any needed NEPA, and upon completing an updated inventory count of the wild free-roaming horses in each HMA in Beaver County, the BLM annually during each subsequent field season should conduct gathers in all HMAs where the number of animals is found to equal or exceed the upper AML, removing enough animals to bring the herd number down to lower AML. Animals captured during such gathers should be processed either for adoption, sale or destruction according to the requirements of the WFRHBA and applicable BLM rules, stated above.

5. Gathers on Private Lands. BLM should conduct private land gathers of wild free-roaming horses promptly upon proper notice from the landowner. The landowner notice to the BLM should be in writing and should include: location of gather (legal description), number of animals proposed to be gathered, brief description of animals (color), and a statement indicating desire for the BLM to remove the animals. Animals captured during such gathers should be processed either for adoption, sale or destruction according to the requirements of the WFRHBA and applicable BLM rules, stated above.

6. Interim Small Maintenance Gathers at Water Sites and Other Determined Baiting Areas. Small periodic maintenance gathers of 5 to 30 wild horses may be possible around water sources and other appropriate baiting areas, without the use of helicopters and large round-up crews, and thus better help to maintain horse numbers below upper AML. Animals captured during such gathers should be processed either for adoption, sale or destruction according to the requirements of the WFRHBA and applicable BLM rules, stated above. Additional details for such small gathers are as follows:

   a. In HMAs and on other public lands outside HMAs: Small periodic maintenance gathers at water sites and other determined baiting areas utilizing catch pens may be appropriate. The use of catch pens may be monitored by livestock operators and BLM officials to determine optimum times to close the pens according to the animals' becoming accustomed to the pens and when they are utilizing water. All capture enclosures would meet BLM Design Features standards and Standard Operating Procedures (SOPs) contained in the current EA.

   b. On private lands: Same as the preceding paragraph with the following modifications: The BLM and/or the County should supply and erect the pen panels (County could utilize possible assistance of volunteers such as Dedicated Hunters). The landowner should monitor the wild horses' use of the pens and notify the BLM when to catch. The BLM should oversee loading, transport and

unloading of the animals. The BLM should supply the feed and the County could, in certain circumstances, supply the personnel to feed the animals.

7. Decisions to conduct any of the wild horse gathers referenced in the preceding paragraphs should not depend on the vacancy rate at pastures and other holding facilities with which the BLM contracts to keep captured and removed animals. Rather, such decisions should depend solely on whether the number of animals in an HMA has reached the upper AML number, and for private land gathers whether the landowner has given the BLM appropriate notice. Because of time constraints involved in doing public scoping, EA's and NEPA studies, the hard trigger for beginning the process to do a gather should begin when the population of a HMA reaches 85% of AML.

8. For all BLM grazing allotments in Beaver County, whether in HMAs or outside of HMAs, the BLM should systematically review for all instances where it has ever ordered or required reductions of active livestock grazing AUMs due to overpopulations of wild free-roaming horses, perceived or real, present or anticipated. BLM should then reverse all such reductions and restore any such reduced AUMs to active use. Future reductions in AUM's within any HMA should not be mandated if wild horse populations are over the upper AML limit. Wild horse numbers must be reduced to established AML levels prior to any AUM reduction.

9. Following appropriate inventory of HMA range conditions and any NEPA review if needed, BLM should carry out projects in all HMAs in Beaver County and on other public lands impacted by wild horse overpopulations to implement vegetation treatments and to reclaim damaged ranges through restoration projects. Additionally, the BLM should develop and carry out plans for periodic maintenance of vegetation treatment areas.

10. The BLM should reform its policies and guidelines as follows:

    a. Put aged and unadoptable animals up for sale or euthanasia as legally required, not hold and feed them in contracted pasture or other holding facilities for the rest of their lives at great taxpayer expense;

    b. Accept and internalize the fact that the demand for adopting wild horses and the adoption rate are low and declining further due to high feed costs, onerous adoption rules and selective demand for young workable horses or horses of the old Spanish barbed lineage;

    c. Follow sound fiscal practices to avoid the inhumane holding of over 50 thousand wild horses, costing the over $40 million annually to care for and feed;

d. Eliminate the attitude of reducing established grazing levels first, and rather remove excess wild free-roaming horses in order to preserve natural thriving ecological balance and multiple-use relationships;

e. Set realistic and reasonable funding priorities to provide for the legally required wild horse gathers outlined in the paragraphs above;

f. No longer put off wild horse gather decisions based on vacancy of perennial holding facilities and pastures. Rather, base gather decisions on when actual wild free-roaming horse numbers reach upper AML for each HMA, and when they are found outside of HMAs. Begin the preparation process when the hard trigger point (85% of AML) is reached in advance of rising populations; and

g. Give back to state and local BLM officials the authority and leeway to make timely wild horse management decisions on when to gather, where to take captured horses, and how to dispose of unadoptable horses, rather than keep that authority bottled up at the Washington level.

h. Report to the BLM and demand the immediate gather and removal from Beaver County of any wild free-roaming burro found in the county.

11. An important component to maintaining a healthy and thriving ecological balance is to provide adequate forage for livestock, wildlife and wild horses. Many of the grazing allotments within the HMA's have existing vegetation treatment areas where the encroaching pinyon/juniper was removed and the area seeded to provide forage for grazing. Most of these areas have been neglected and are now overgrown with returning brush and pinyon/juniper stands. Vegetation treatment areas need to be maintained and periodically re-treated.

FERTILITY CONTROL

12. Fertility control is an option in all HMAs in Beaver County as analyzed in the related environmental assessments by the BLM. The primary purpose of using Porcine Zona Pellucidae (PZP) is to reduce the annual population growth. The primary use of fertility control is to maintain the population within AML once achieved. It could be used previous to achieving AML if gather success, holding capacity limitations, population growth rates, other national gather priorities or other circumstances prevent achieving AML during a gather. Use of PZP would be in accordance with BLM Washington IM 2009-090, or the current guidance and best practices directed by the BLM's National

Program Office. The use of PZP or other fertility control is not to be used in a manner that would threaten the health of individual animals or the long-term viability of any herd. A trained applicator would be selected to administer the vaccine during scheduled gathers.

WILD HORSE SURVEYS

13. Beaver County shall rely on the Utah Division of Wildlife Resources to conduct wild horse counts to determine if populations are within AML. In circumstances where an excess of wild horses is believed to exist, and the tentative schedule for the UDWR is not timely or sufficient, a disinterested, third party contractor may be used to do aerial surveys of the affected HMA.

10. FOREST MANAGEMENT

I. FINDINGS

Forested lands are an important natural resource to Beaver County and contribute to the quality of life by providing employment, forest products, water resources, open space, wildlife habitat, livestock forage, recreation, and provide numerous other social and economic benefits. According to the United States Department of Agriculture, about 47.5% of the County is forested, comprising approximately 784,900 acres of land in the County. Therefore, it is vital to manage forested lands in a manner that allows Beaver County to continue to enjoy the benefits of forested lands. Approximately 77% of all land in Beaver County is federally managed, with the USFS managing approximately 140,000 acres of land in the Fishlake National Forest that encompasses the Eastern side of the County.

Beaver County's broad range of environmental conditions results in great diversity of natural vegetation. Different types of vegetation are associated with differences in elevation. Increasing elevation is associated with increasing precipitation and decreasing temperatures resulting in varying zones of vegetation types. Typical of the Southern Rocky Mountain region, there are both lower and upper treelines. Below the lower treeline, conditions are generally too dry for trees to survive. Above the upper treeline, conditions are generally too cold. The lower forest vegetation type is comprised of pinyon/juniper, which is the dominant forestland in Beaver County. The upper elevations are comprised of montane forest (i.e. Ponderosa pine, Douglas fir, Engelmann spruce, Aspen, etc.) and woodland forest types (i.e. Gambel oak, Mountain mahogany, intermountain maple).

The National Forest system was originally set aside to provide a continuous supply of timber and for the protection of water sources specifically for local communities and agricultural needs. In 1960, Congress passed the Multiple-Use Sustained-Yield Act that directed that forests should be "administered for outdoor recreation, range, timber, watershed, and fish and wildlife purposes. *See* 16 U.S.C. § 528. However, Congress also declared that these additional purposes were to be "*supplemental to, but in derogation of the original purposes*." *Id*. (emphasis added).

Over the past few decades, the principles of multiple-use and sustained-yield have given way to excessive environmental protection and the limitation of many historic uses of forested lands. Many areas were given special wilderness designations after the passage of the Wilderness Act of 1964, which led to closed roads, no prescribed timber harvests, and drastic reductions of grazing AUMs. Since that time, there have been very few wilderness designations added to the National Forest System, however the USFS has managed many lands as de facto wilderness areas by designating Roadless Areas under the Roadless Area Conservation Rule.

This mismanagement of National Forest lands has threatened the health of forested lands in Beaver County. Limitations on timber harvesting have increased the amount of standing dead timber on forestlands. Excessive dead timber increases the risk of large and devastating forest fires. These management practices have been a contributing factor to the increased intensity of wildland fires Utah has experienced in recent years. Failure to remove standing dead timber has many other negative effects. With excessive standing dead timber, forests have no room for new growth. New growth in turn provides more habitats for wildlife and increased forage for grazing. The BLM has adopted and implemented these beneficial management policies for years, but the USFS has been resistant.

There are currently many acres of forests in Beaver County at risk of high severity disturbance, particularly catastrophic wildfire and insect outbreaks. There are many stands that are too dense, leading to high competitive stress and density-related mortality. High relative densities make forest stands susceptible to insect attack. Most of the local Spruce-fir forest types have neither resistance nor resilience to spruce beetle attacks and have been given a high risk rating. In addition, many stands have canopy fuel profiles which make them prone to crown fires. These stands have been given a low "torching index" rating, indicating that crown fires are highly likely. With high relative tree densities, development of fuel ladders, and low torching indexes, the potential for a catastrophic fire is very high.

Timber harvesting has become virtually non-existent in Beaver County according to Headwater Economics' Economic Profile System. Given the excessive amount of standing dead timber that exists in forested lands in Beaver County, increased prescribed timber harvests would not only improve the health of the forests, but provide an economic stimulus to the County.

Livestock grazing on National Forest lands in Utah has been drastically reduced since the early part of the twentieth century, although over the past 30 years, the livestock numbers have remained fairly constant in most cases. Stocking rates are generally very conservative on Forest Service lands and forage is typically under-utilized by livestock. The USFS monitors vegetation or forage utilization, especially in riparian areas and along streambanks, using various techniques. However, the amount and type of monitoring varies considerably from one forest to another. The use of stubble height measurements has become a popular technique for determining forage utilization in many areas and are written as "standards" in land use plans and annual operating instructions for allotments. These measurements are used to monitor "compliance" with the terms and conditions of grazing permits and as a basis for pasture moves or removal from an allotment. These practices are not supported by range science.

The USFS has failed to adopt a procedure for evaluating range conditions in terms of ecological site potential based on soils, moisture and other factors, as used by the BLM and other agencies. Thus, comparison of conditions and range trends on USFS lands with that of lands managed by other entities is very difficult.

The invasion of noxious weeds is another problem threatening the health of Forest Service lands in Beaver County. Noxious weeds are a significant problem and have been the focus of considerable effort for many years. Scotch thistle is of primary concern, especially in areas burned by fire. Cheatgrass is another invasive plant that has impacted much of the lower elevation areas on the National Forest. Cheatgrass outcompetes other desirable vegetation and is highly susceptible to frequent wildfires.

There are inholdings of state and private lands within the Fishlake National Forest in Beaver County. Management of these lands is primarily entrusted to the Utah Division of Forestry, Fire and State Lands ("Forest Division"). In 2016, the Forest Division developed the Utah Forest Action Plan. The plan provides a comprehensive analysis of the forest-related conditions, trends, threats and opportunities within Utah and will be used to guide the Division's planning efforts and project work. It is vital for the Forest Division to coordinate and consult with Beaver County on forest management initiatives affecting lands within the County.

II. OBJECTIVES

Beaver County's objectives with regard to forest management are as follows:

1. To ensure the forests are managed under the principles of multiple-uses and sustained yield;

2. To take an active role in consulting and coordinating with the County in forest management and planning activities;

3. To prevent forest fires unnecessary to maintaining a healthy ecosystem;

4. To demand that land managers utilize available means of reducing forest fuel such as grazing and timber harvesting.

III. POLICIES AND GUIDELINES

1. It is the policy of Beaver County to continue cooperating with the USFS and the Forest Division to address issues concerning forestland in Beaver County.

2. Beaver County supports the Utah Forest Practices Act and its stated purposes including:

    a. Preserving water quality and soil stability;

    b. Preventing fire hazard and insect infestation;

    c. Minimizing waste of timber resources; and

d. Protecting forest regeneration and production. *See* Utah Code § 65A-8a-105(1).

3. Providing a continuous supply of timber and protecting water resources shall be the primary goal of all forestland planning and management actions.

4. All forestlands shall be managed for multiple use and sustained yield.

5. Timber resources shall be managed to achieve multiple benefits.

6. Forest management plans shall employ a "shelterwood" system to reduce overstory density and eliminate fuel ladders, particularly in the Ponderosa and Spruce-fir forest types.

7. Forest management plan objectives shall focus on managing in a proactive manner to create forests that are resistant and resilient to both extreme fire and insect outbreak through combinations of mechanical treatments and prescribed fire.

8. Management plans and policies concerning grazing activities on national forest lands should give heavy consideration to historic access and usage; traditional uses and trailing routes shall be maintained.

9. Livestock grazing shall be managed to maintain good ground cover of perennial grasses, forbs and shrubs by stocking at appropriate rates and rotating use during growing seasons when possible; damage to desirable tree reproduction should be avoided.

10. Opportunities for harvesting forest products shall be promoted, including harvest of timber that can be used for energy, lumber, pellets, chips and other products.

11. All Forest Management Plans and NEPA studies shall consider the economic impacts of actions on Beaver County.

12. Prescribed fire, logging and mechanical thinning shall be used to keep forest canopies open to allow for forage production and to reduce high intensity canopy fires.

13. Beaver County shall encourage and support the existing CWMA for collaboration in weed control efforts as they relate to forestlands.

14. National Forest planning and management actions should be consistent with the fire management policies and guidelines found within this plan.

15. Beaver County supports prescribed burns as a fuels reduction management tool where appropriate, when conditions are favorable and where restoration plans are in place.

16. Beaver County encourages the USFS to employ a standardized criteria system for range

condition evaluation based on ecological site potential.

17. Land management agencies shall provide Beaver County with a meaningful opportunity to participate early and often in forest and rangeland planning processes and assist in identifying areas where restoration treatments are needed.

18. Forestlands shall not be managed as de facto wilderness, or given special land status designations unless they explicitly meet the statutory criteria for such and those designations are acceptable to the Board of County Commissioners.

19. The public must have ample and appropriate access to forestlands for multiples uses, including recreational activities.

11. LAW ENFORCEMENT

I. FINDINGS

The Beaver County Sheriff's Office provides law enforcement services to all areas of Beaver County and contract cities, as well as co-operative support services to local, state and federal law enforcement agencies and organizations. Beaver County's powers as a political subdivision of the State of Utah derive from the United States and Utah Constitutions, the Utah Code, the common law, and Beaver County ordinances and resolutions. The State of Utah has general powers of jurisdiction unless expressly assigned to the government of the United States in the United States Constitution. The government of the United States has only those powers expressly delegated to it in the United States Constitution, as expressly exercised by the Congress of the United States.

Law enforcement authority for all lands within its borders is a prerogative of Beaver County as expressed through its duly elected Sheriff and duly hired and appointed and contracted deputy law enforcement agents.

The responsibility of the Sheriff's Office is to protect the lives, property, and rights of all citizens of Beaver County, to maintain order, and to enforce the law. This duty is achieved through the efforts of experienced and well trained officers and staff of the Beaver County Sheriff's Office who strive to improve and maintain the quality of life enjoyed in the County and make it a safe place to live, work, and visit. This includes enforcing the rules, regulations, ordinances and other law set forth by Beaver County's duly appointed planning and zoning commission and elected board of county commissioners. Their mission statement is as follows:

> *The mission of the Beaver County Sheriff's Office is to protect and serve the citizens of Beaver County with excellence, fidelity, honor, respect, we will always serve with integrity to preserve life, protect property and maintain public order.*
>
> *In doing so we will perform our duties with the utmost respect to individual rights with no decision ever made based solely on race, religion, color or creed.*
>
> *We will vigorously pursue those who victimize the innocent, to see that justice is served. We will steady the course in the face of danger and know that our cause is just and needed.*
>
> *We will show compassion to those who suffer tragedy or fall prey to those who lurk in the shadows of society and know not what compassion means.*
>
> *We will wear our badge with pride and strive to ensure that the citizens we serve can be confident and proud of those that they have instilled trust in.*

Law enforcement agents and other officials of federal land management agencies such as the BLM and the US Forest Service, have no authority, right or permission to enforce state and local criminal and civil laws except as authorized by and consistent with the Federal Assimilative Crimes Act, 18 U.S.C. § 7(3).

The Federal Assimilative Crimes Act permits federal officers to enforce state and local laws by reference (assimilation) only on federal lands that are under either exclusive U.S. jurisdiction or concurrent U.S/State jurisdiction. Federal agents may not rely on the Federal Assimilative Crimes Act as a basis to enforce state or local laws on federal proprietary lands. In Beaver County, all BLM and Forest Service lands are mere proprietary jurisdiction lands, not concurrent or exclusive jurisdiction lands. Therefore, federal agents are NOT permitted by the Federal Assimilative Crimes Act to enforce state and local laws on those lands.

II. OBJECTIVES

Beaver County's objective with regard to law enforcement is as follows:

1. To establish and clarify law enforcement jurisdiction within the county.

III. POLICIES AND GUIDELINES

1. It is the policy of Beaver County, in the interest of the health, safety and welfare of its citizens, to not recognize any attempt by a federal agent to try to enforce state or local criminal or civil laws on any lands in Beaver County, including any BLM and Forest Service lands in Beaver County, and to declare that all criminal and civil state and local laws shall be enforced in Beaver County, only by the Sheriff and Board Of County Commissioners. This applies to all lands within the boundaries of Beaver County.

2. Beaver County serves notice of full reliance upon and conformance with House Bills 67, 147, 149 and 225, 2014 Utah General Legislative Session as codified in Utah Code §§11-51-102 through 104, 63-13-106, 63-13-106.1 through 106.10, and 17-22-31.

3. It is the policy of Beaver County that the right of the Beaver County Sheriff to exclusively exercise all law enforcement powers and to enforce all state and local criminal and civil laws upon any lands within Beaver County, federally owned or otherwise. Any such attempted exercise of law enforcement powers by an agent of a federal land management agency is not recognized by Beaver County, and shall be deemed an imminent threat to the health, safety and welfare of the citizens of Beaver County, unless properly exercised under an exception codified under Utah Code §§ 53-13-101.1 through 106.10.

4. It is the policy of Beaver County that any agent of any federal land management agency who is situated within Beaver County who intends to exercise any law enforcement powers of any kind against any person or entity which may result in the deprivation of property or personal liberty, regardless of whether the action may take place on federal lands or otherwise, and any such agent not already within Beaver County who intends to enter into Beaver County for such purpose, shall first declare his presence and intended action to the Sheriff of Beaver County and seek permission from the Sheriff to pursue such intended action.

5. Beaver County shall continue to support any and all actions to legally relieve the Federal Government of ownership, control and jurisdiction over public lands in Beaver County, and demand the Federal Government dispose and convey all right, title and interest thereto to the State of Utah. This transfer of land to the State will resolve the law enforcement jurisdiction issues stated above.

12. ECONOMIC CONSIDERATIONS

I. FINDINGS

Beaver County faces a number of economic development challenges. Chief among these challenges is a lack of quality housing to accommodate increases in population. Beaver County has found that lack of employment is not the primary reason for the lack of quality housing. Beaver County has identified other contributing factors including: a small and dispersed population; lack of publicly offered amenities; remote location; dry climate; a commuting work force; and a lack of export industries. Beaver County has lower taxable sales per capita in many retail subcategories than comparable counties like Sevier and Iron.

According to the Utah Department of Workforce Services, the average household income in Beaver County in 2015 was $50,492. This was nearly $5,300 less than the average household income in the United States and nearly $12,500 less than the average household income for the State of Utah. The unemployment rate in Beaver County as of January 2017 was 5%, slightly above the state and national average.

Like many other smaller, rural counties, Beaver County lacks a diverse economy, ranking behind only Duchesne, Uintah, and Emery Counties in Utah. Beaver County's largest employment industry is government (primarily local). As of September 16, government employment in Beaver County accounted for 766 jobs.

Unlike many other counties, Beaver County's second largest employment industry is agriculture, due primarily to the many hog producing facilities in the County. As of September 2016, agriculture (including hunting, fishing, and forestry) accounted for 488 jobs in Beaver County. The 2015 output of the agricultural sector was valued at $115,300,000. In order to maintain this major portion of Beaver County's economy, it is imperative that Beaver County maintains high air, water, and soil quality in a manner consistent with this plan.

Together, government and agricultural employment represent approximately 48% of employment in Beaver County. Most of the remaining employment comes from the leisure, hospitality, and retail industries. These industries typically provide jobs with low median wages.

Beaver County has a variety of natural assets that provide a strong economic foundation. Beaver County projects significant job growth over the next five years stemming from natural resource extraction. However, growth and decline in this industry can be somewhat unpredictable because of fluctuations in global commodity pricing. As a result, growth in the natural resource industry should be leveraged to diversify other industries.

Beaver County has significant competitive advantages that are currently being underutilized that can positively impact other employment sectors. In 2015, the Beaver County

tourism economic output was valued at $12,700,000, however, given the number of National Parks, State Parks, National Monuments and National Recreation Areas in or near Beaver County, there is an opportunity to expand this sector.

Additionally, Beaver County already has an established renewable energy development corridor, specifically in the Milford Valley. While commercial renewable energy accounted for an estimated $35,400,000, and contributed significantly to the county tax base, it was not a major job producer. As detailed in the Energy Resources section of this plan, there are opportunities to expand development to take advantage of Beaver County's power producing potential.

II. OBJECTIVES

Beaver County's objectives with regard to economic considerations are as follows:

1. To diversify the local economy, including leveraging job creation opportunities in the natural resource extraction industry; and

2. To prohibit activities that will fundamentally change the rural nature and unique characteristics of the land, which are key to the County's history and culture.

III. POLICIES AND GUIDELINES

1. Beaver County will engage in strategic planning and seek out both public investments to improve workforce infrastructure.

2. It is the policy of Beaver County to support the building, maintenance and expansion of quality housing developments that meet the demands of population growth and will expand Beaver County's workforce.

3. Beaver County will continue to identify recreational activities that extend the tourist season and expand regional tourism.

4. Beaver County's established renewable energy corridor will be utilized to attract industries heavily dependent on clear technology such as data centers and niche manufacturing.

5. Beaver County will establish collaborative partnerships with private industry to identify employer needs in order to find mutually beneficial solutions.

6. Workforce attraction and retention efforts will be coordinated between existing businesses, local governments, and housing developments.

7. Beaver County will explore options to provide work related educational services to allow

Beaver County's workforce to be better prepared and more qualified to meet modern job demands.

8. Beaver County will continue to solicit renewable energy development projects and will continue to support large-scale utility sized development in addition to small-scale residential and agricultural development of renewable energy.

9. Beaver County will explore the possibility of building a major renewable energy research facility.

10. Beaver County will create and promote incentives to draw-in potential employers.

11. Beaver County will coordinate with Tribal, federal and state agencies to identify mutually beneficial economic objectives and partner in projects when applicable and feasible.

12. Beaver County supports protection, maintenance, and expansion of natural resource use and development in furtherance of the mandate to manage public lands for multiple uses and sustained yield and preserves public access to public land.

13. The recreational opportunities in Beaver County will be marketed in order to increase year-round tourism in the County.

14. Given that federal land represents a large portion of Beaver County and Beaver County is economically dependent on use of that land, any federal decision or action affecting Beaver County must include an analysis of the economic impact on the County.

15. Beaver County opposes any federal action or decision that impairs the ability of the County or developers from building, maintaining, or expanding developments that provide quality and high paying jobs to Beaver County's citizens.

16. In order to preserve Beaver County's agricultural sector, which is key to Beaver County's local economy, land managers must ensure that resources such as air, water and soil are managed pursuant to the policies and guidelines set forth in the relevant sections of this plan.

13. AIR QUALITY

I. FINDINGS

Ambient air quality in Beaver County does not currently exceed EPA standards. Visibility is typical of remote areas in the western United States, containing generally clear skies. All atmospheric deposition levels are below federal levels of concern.

The Utah Division of Air Quality ("DAQ") is responsible for regulating and monitoring air quality in Utah in compliance with the Clean Air Act ("CAA"), except where local regulations mandate more stringent standards. Measurements are typically taken only in urban areas where ambient pollution levels are expected to be the highest and where data is required to assess attainment status. No air quality monitoring stations are located in or near Beaver County. The closest monitoring station is in Hurricane, Utah in nearby Washington County. Even in areas where air quality data is collected, the variability of site-specific conditions creates uncertainty, subjectivity and generalizations regarding air quality over larger areas. Air quality can be impacted by precipitation, wind, temperature, topography along with a host of biogenic and human factors.

The state air quality program is responsible for the implementation of the federal standards under the CAA, as well as state rules for pollution sources not regulated by the CAA. The CAA directs all federal agencies to comply with state and local air quality regulations to the extent they meet or exceed national standards and is administered by the U.S. Environmental Protection Agency ("EPA").

The CAA establishes two types of air quality standards: primary and secondary. Primary standards are set to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards are set to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The EPA has established health-based National Ambient Air Quality Standards ("NAAQS") for six pollutants known as criteria pollutants. These are carbon monoxide, nitrogen dioxide, ozone, particulate matter, sulfur dioxide, and lead. Table 4.0.1 provides a brief description of each criteria pollutant and Table 4.0.2 provides a brief description of each criteria pollutant's primary and secondary NAAQS. The EPA establishes the primary health standards after considering both the concentration level and the duration of exposure that can cause adverse health effects. Pollutant concentrations that exceed the NAAQS are considered unhealthy for some portion of the population.

Areas of the state that are not in compliance with the NAAQS are referred to as nonattainment areas. A maintenance area is an area that was once designated as

nonattainment, and which subsequently demonstrated to the EPA statistically that it would attain and maintain a particular standard for a period of 10 years. Attainment areas meet all NAAQS standards. Beaver County is designated as either attainment or unclassified with respect to National Ambient Air Quality Standards for all criteria pollutants.

Table 4.0.1 EPA Designated Criteria Pollutants

Name	Sources	Health Effects	Welfare effect
Carbon Monoxide (CO)	Burning of gasoline, wood, natural gas, coal, oil, etc.	Reduces the ability of blood to transport oxygen to body cells and tissues. May be particularly hazardous to people who have heart or circulatory problems.	N/A
Nitrogen Dioxide (NO2)	Burning of gasoline, natural gas, coal, oil and other fuels.	Can cause lung damage, associated with illness in respiratory system.	Ingredient of acid rain which can damage plants and pollute lakes.
Ozone (O3)	Chemical reaction of pollutants and volatile organic compounds	Can cause breathing problems, reduce lung function, asthma, irritated eyes, stuffy nose, and reduced resistance to colds and infections.	Can damage plants and trees; causes reduced visibility.
Particulate Matter (PM10, PM2.5, dust, smoke, soot)	Burning of gasoline, oil, coal, natural gas and other fuels; Industrial plants, agriculture, mining, construction and road dust.	Can cause nose and throat irritation, lung damage, bronchitis, and reduced lifespan.	Primary source of visibility reducing haze.
Sulphur Dioxide (SO2)	Burning of coal, oil, diesel, and gasoline; industrial processes.	Causes breathing problems and may cause permanent damage to lungs.	Ingredient in acid rain, causes damage to trees and plants. Reduces visibility.
Lead (Pb)	Paint, smelters, batteries, leaded gasoline.	Damages nervous system, including brain damage; causes digestive system damage. Children are at special risk.	Can harm wildlife.

Every three years, the DAQ collects information about the quantity and characteristics of the various air pollutants released by all emission sources in the state. In addition to these triennial inventories, emissions information is also collected annually from the largest industrial sources. Once collected, the inventory information is reviewed, quality assured, analyzed, stored in the DAQ data system, and made available to the public. The DAQ uses this emissions information to review trends over time, as input data for air. In the most recent triennial inventory from 2014, Beaver County averaged 9th lowest across all categories for

Utah's 29 counties.

In 2012, the EPA approved Utah's Smoke Management Program ("SMP"), which is a key element of the State Implementation Plan for regional haze that was required under the CAA. Utah is required, under the approved plan, to manage planned burning in a manner that protects air quality and ascertains air quality impacts locally and regionally. Currently, state and federal land managers attempt to manage air quality prior to controlled burns, but have not developed reliable means or data to accurately assess fire related impacts. For wildfires, many occurring outside Beaver County, no pre-fire or post fire efforts exist to manage air quality. Wildfires continue to be the largest cause of air quality concerns in Beaver County.

II. OBJECTIVES

Beaver County's objectives with regard to air quality are as follows:

1. To fulfill its responsibility to protect the health, safety and welfare of its citizens and visitors. Maintaining or improving air quality is part of that responsibility;

2. To coordinate with federal land managers to limit and mitigate air quality problems associated with wildland fires and prescribed burns; and

3. To maintain compliance with the CAA.

III. POLICIES AND GUIDELINES

1. Beaver County's air quality shall be protected by standards described in the Utah State Implementation Plan approved by the EPA, under authority of the CAA. Good air quality is necessary for the health of citizens, for quality of life and to prevent a non-attainment designation with potential restrictions on future economic development.

2. Prescribed fires or burning projects shall be conducted and managed in compliance with guidelines found in the Utah Smoke Management Plan.

3. Agencies shall prioritize mechanical treatments, such as thinning, brush hogging, etc., and timber harvesting over prescribed burning whenever possible.

4. Natural fugitive dust shall be reduced through improved vegetative cover, vigor and utilization.

5. Federal agencies shall resolve inconsistencies with biogenic pollutants, natural fugitive dust, wildland fire, and prescribed fire prior to restricting projects needed for socio-economic stability.

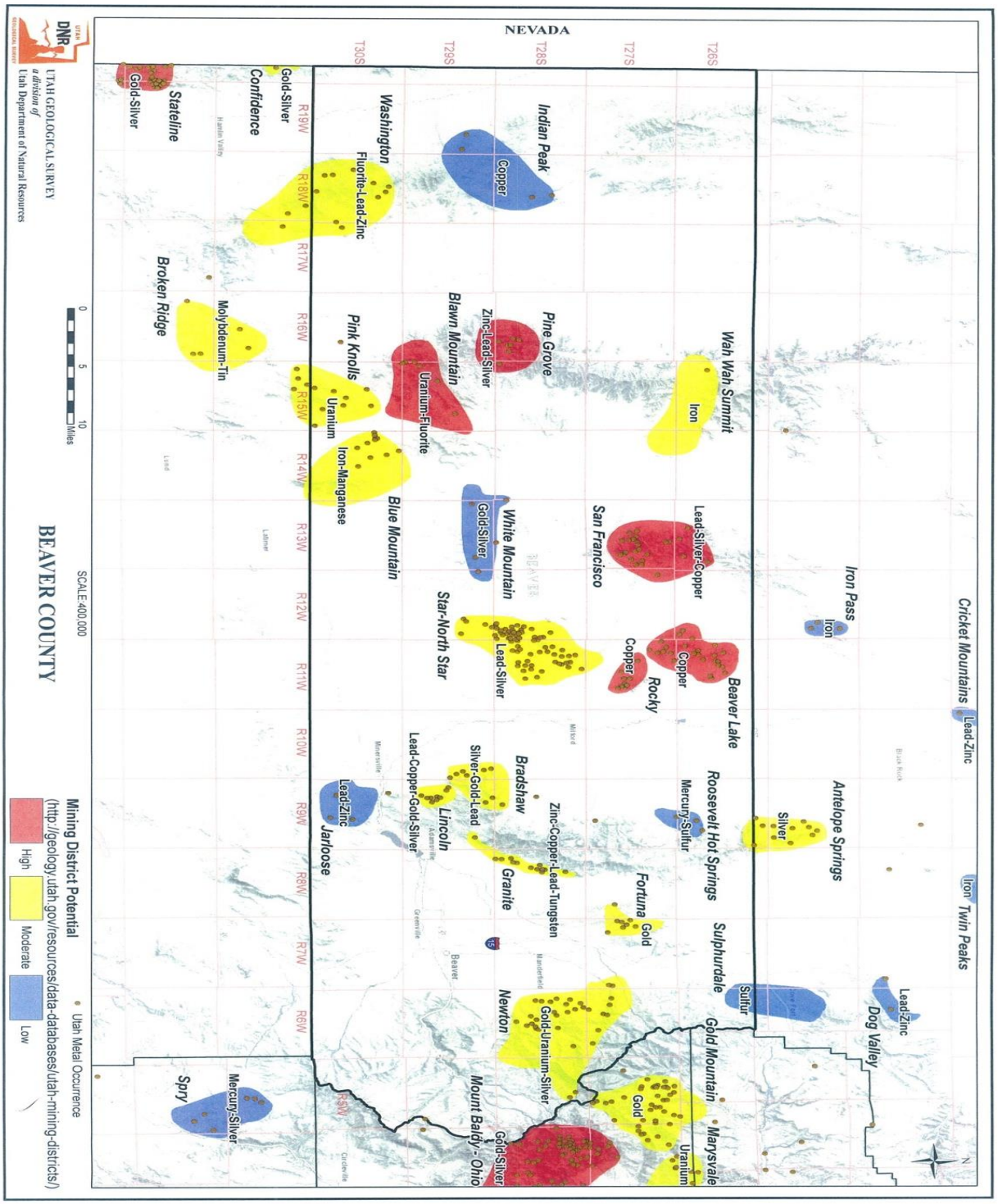
6. Land managers shall include Beaver County as cooperating agency in all NEPA processes and coordinate activities that impact air quality, in accordance with federal law.

7. Land owners/managers that generate, or allow to be generated, excessive levels of fugitive dust, such that health concerns are created, shall be responsible for mitigating, or the cost of mitigating dust control.

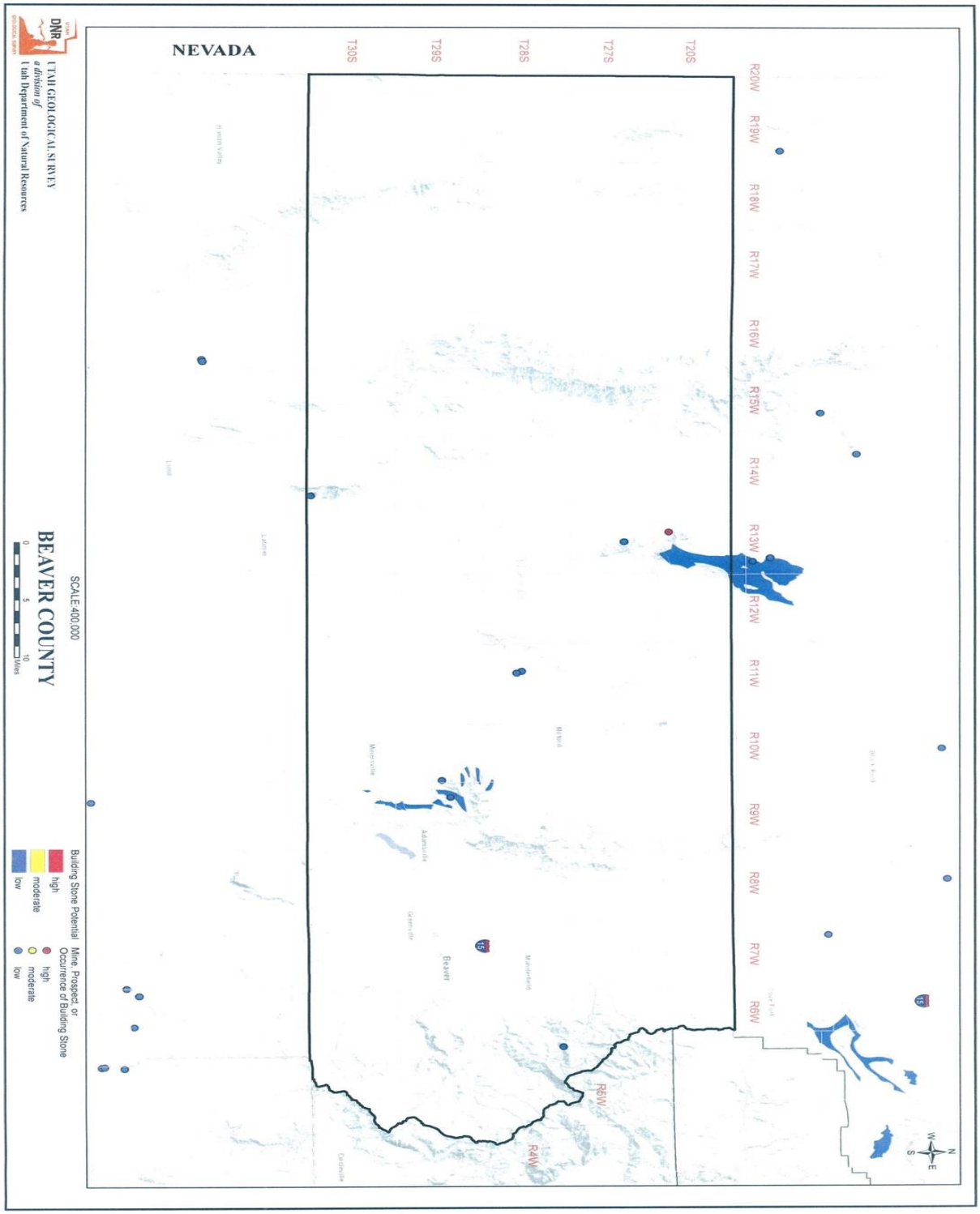
8. All mining and agricultural operations shall be responsible for monitoring and controlling dust and particulate matter within CAA standards.

9. It is the policy of Beaver County that solid waste shall not be burned.

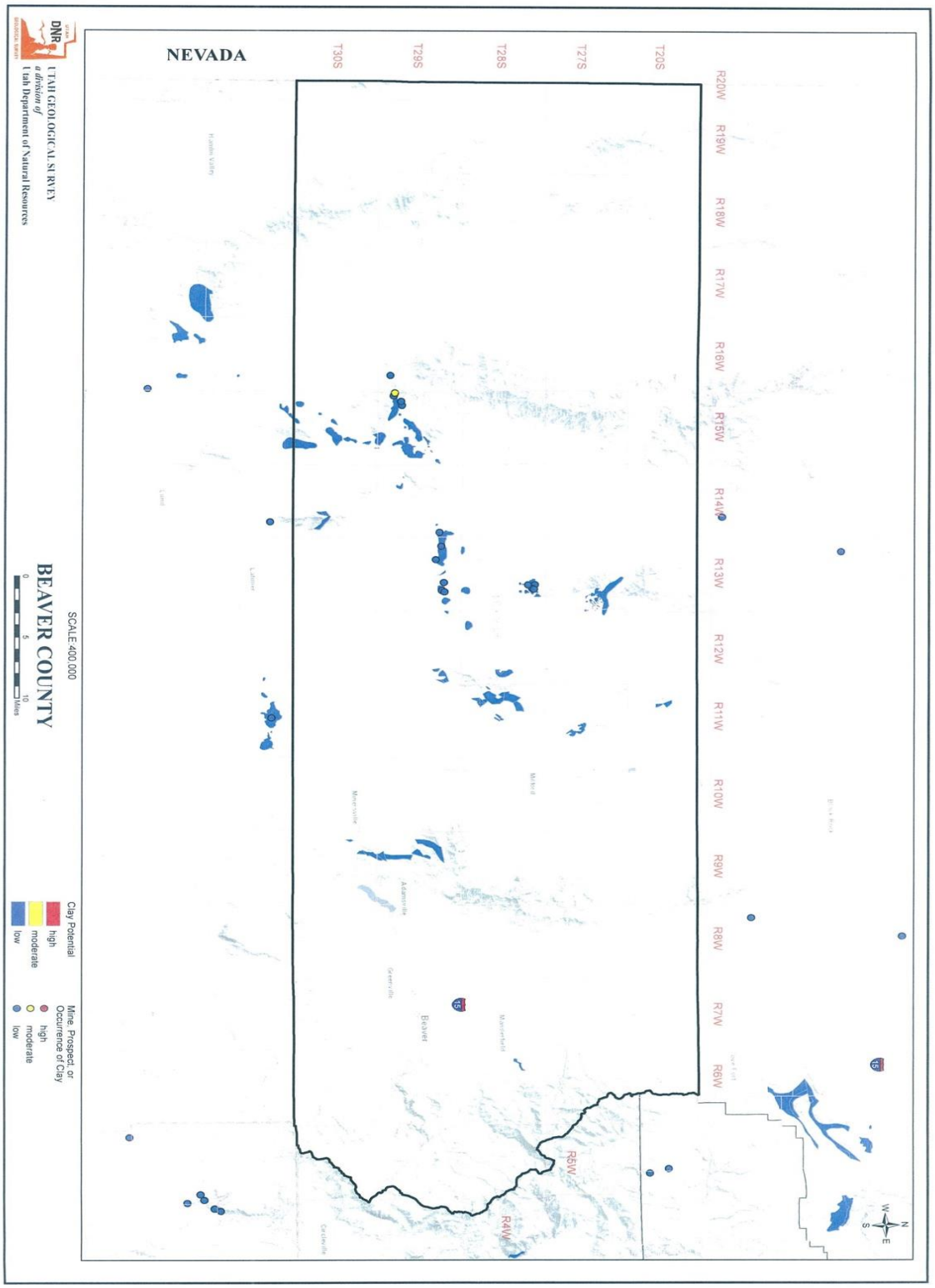
MAP 1 – Locatable Minerals



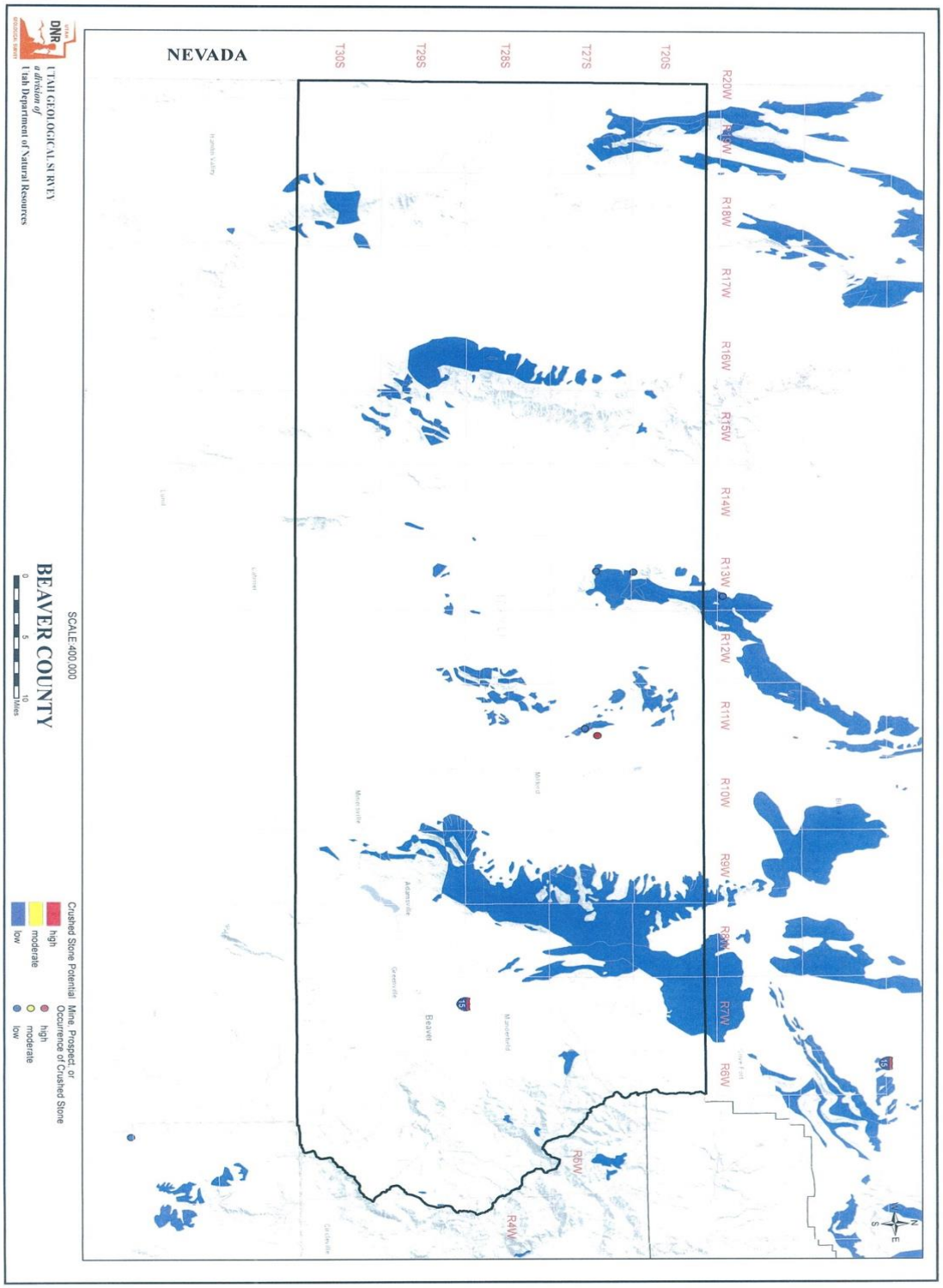
MAP 2 – Salable Minerals (Building Stone)



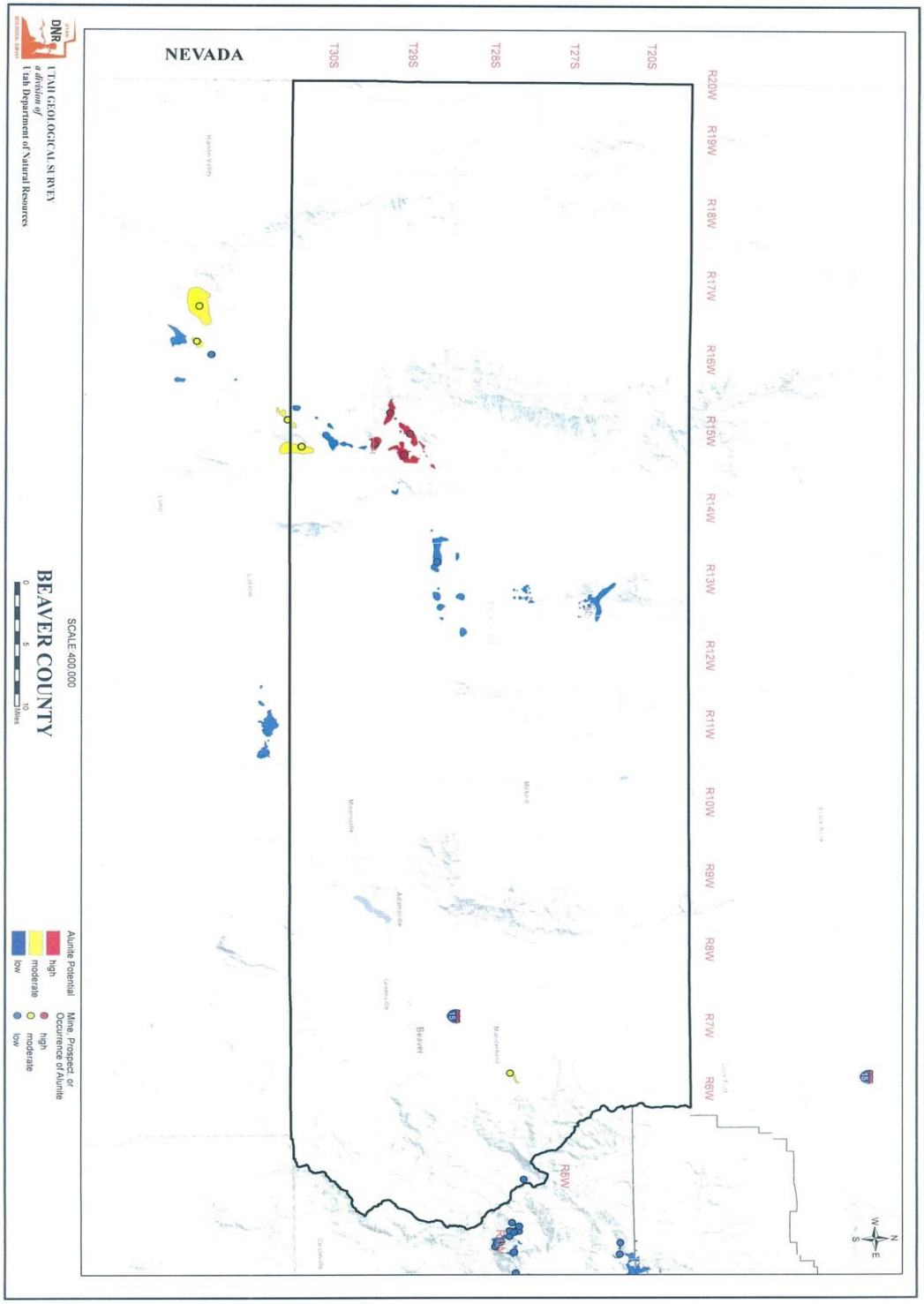
MAP 3 – Salable Minerals (Clay)



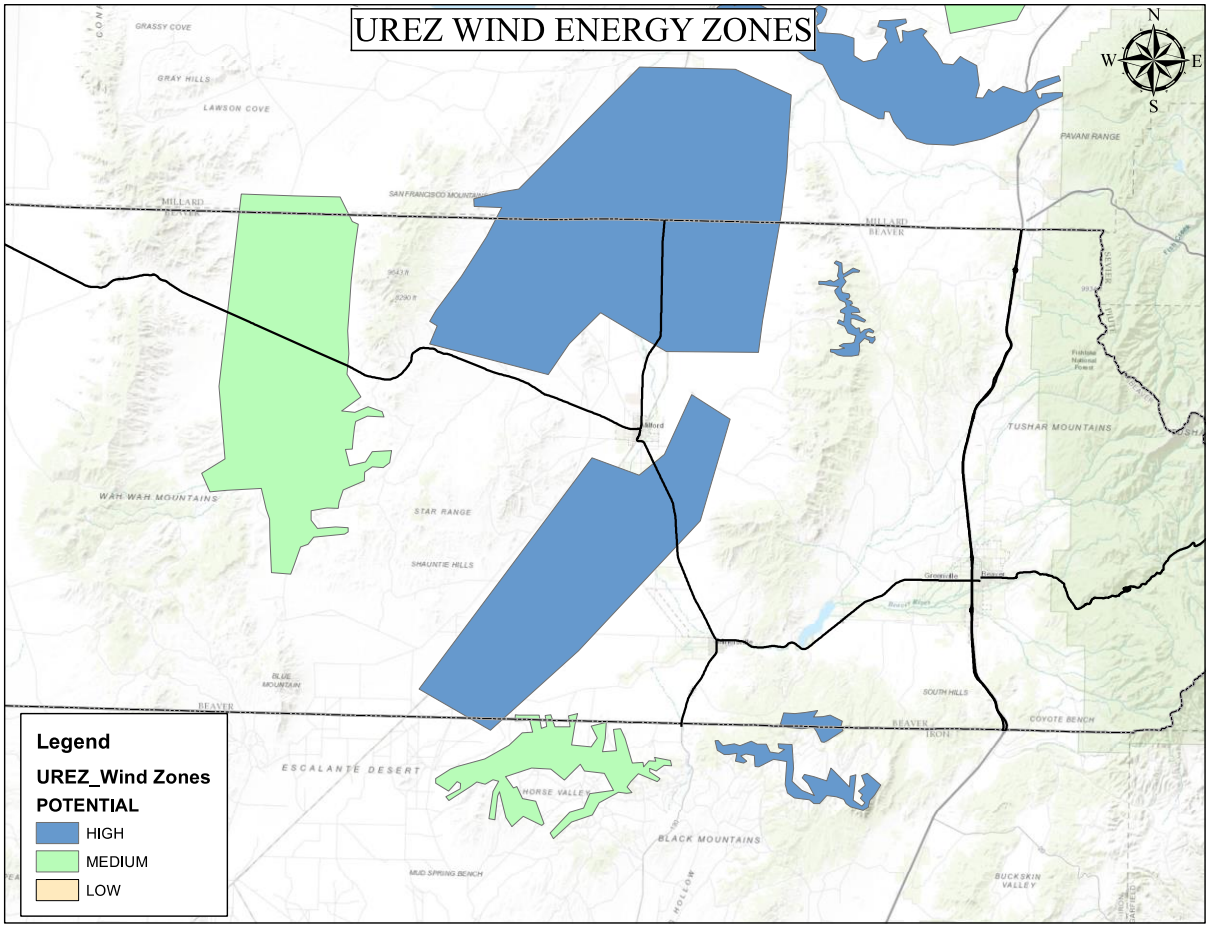
MAP 4 – Salable Minerals (Crushed Stone)



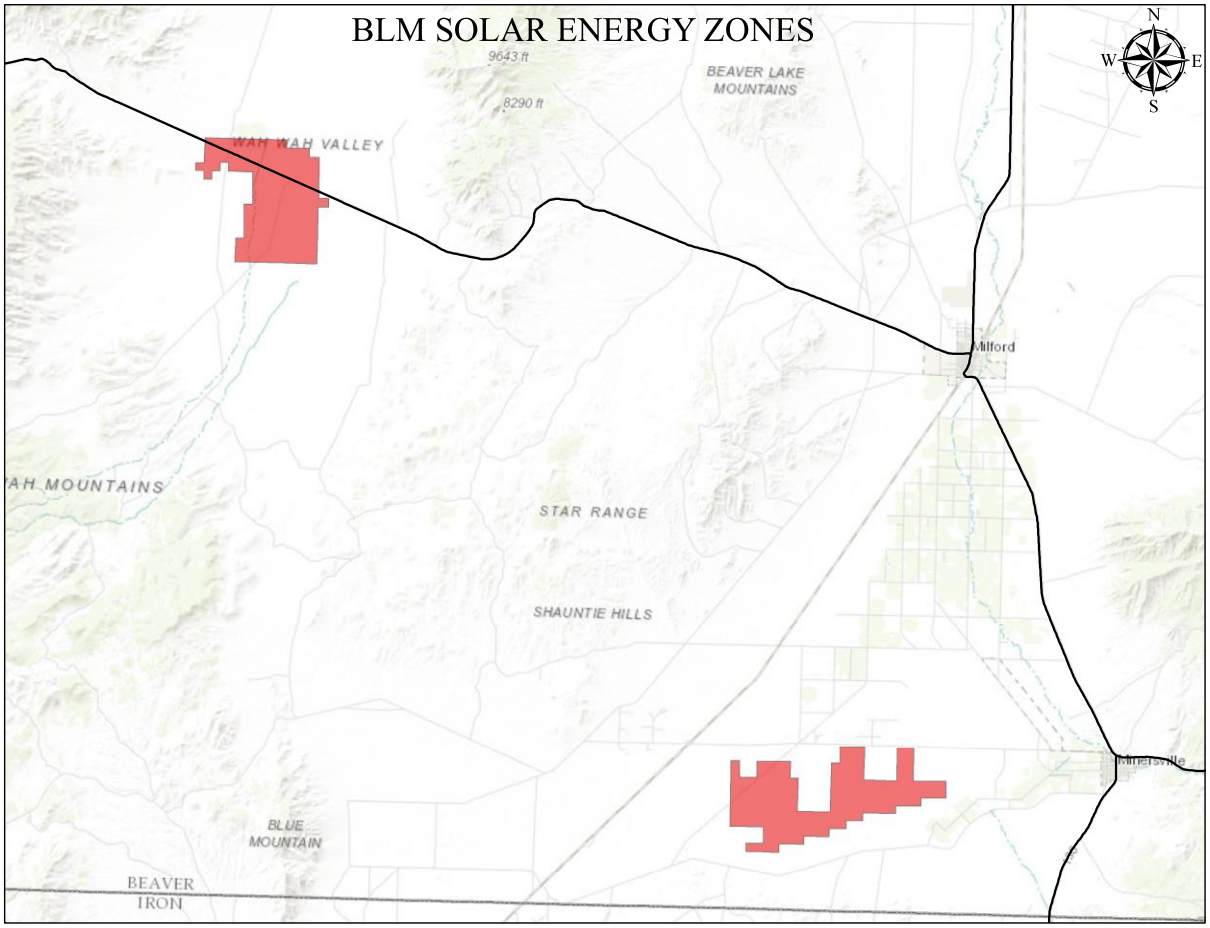
MAP 5 – Solid Leasable Minerals



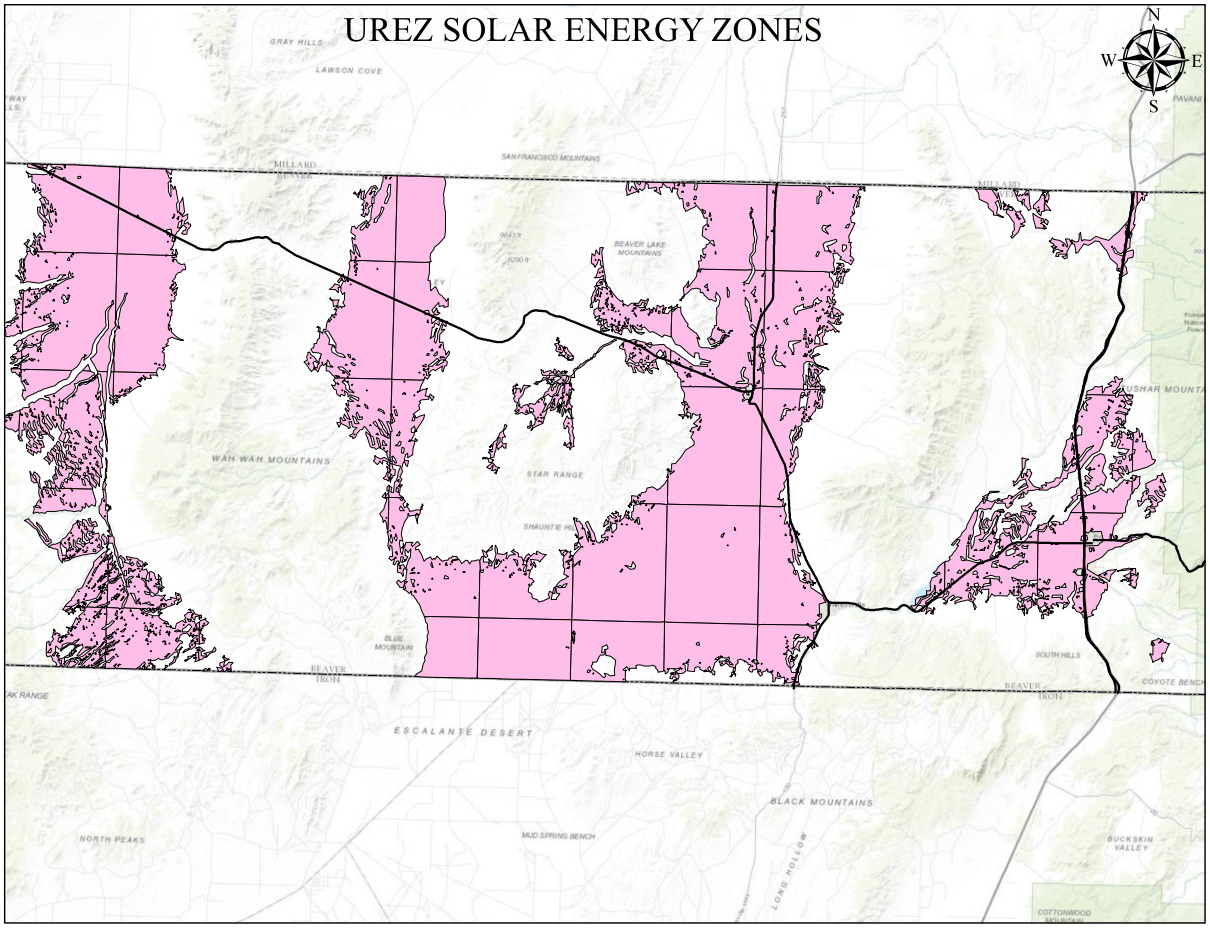
MAP 6 – Wind Energy



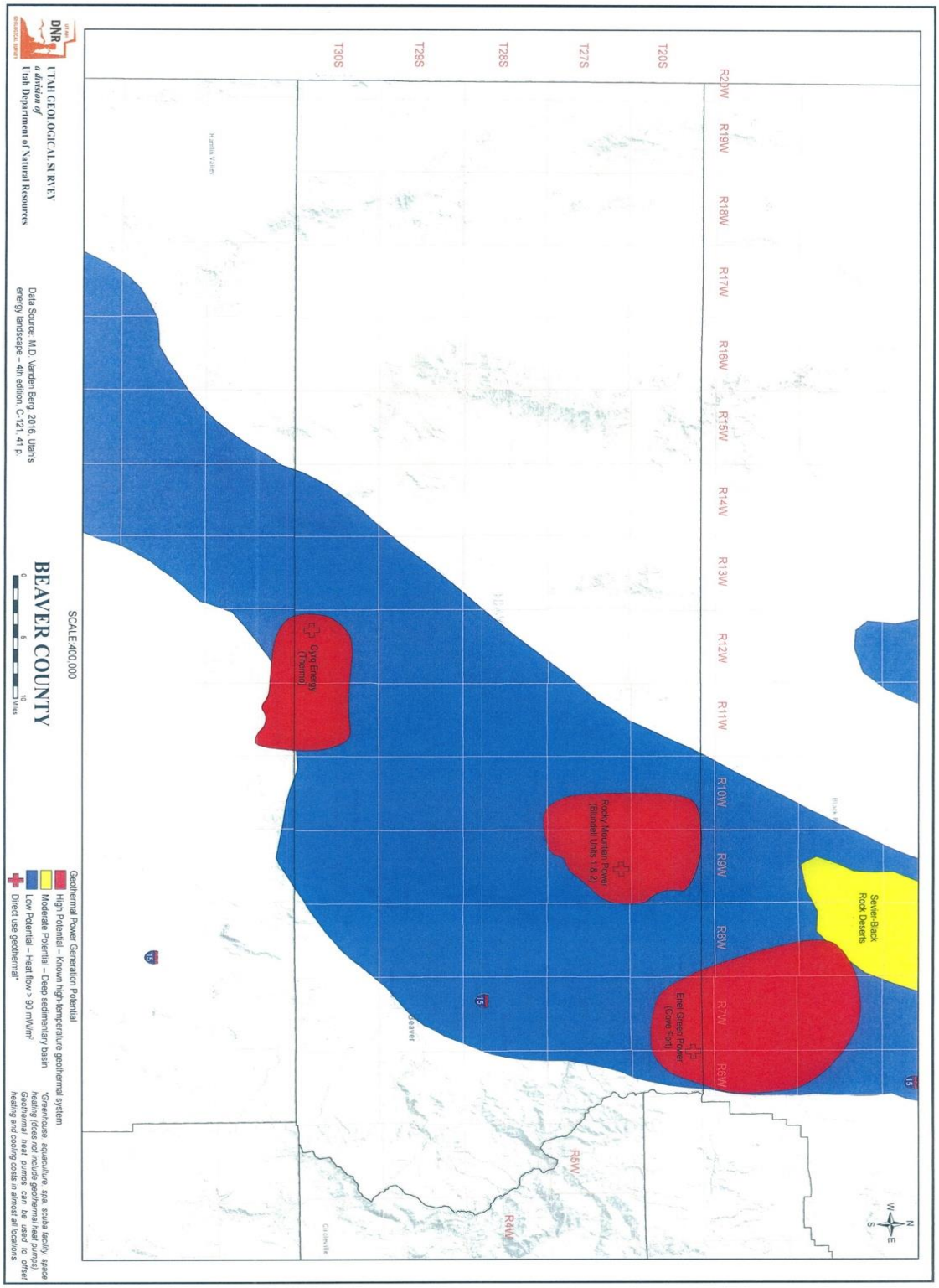
MAP 7 – Solar Energy (BLM Study)



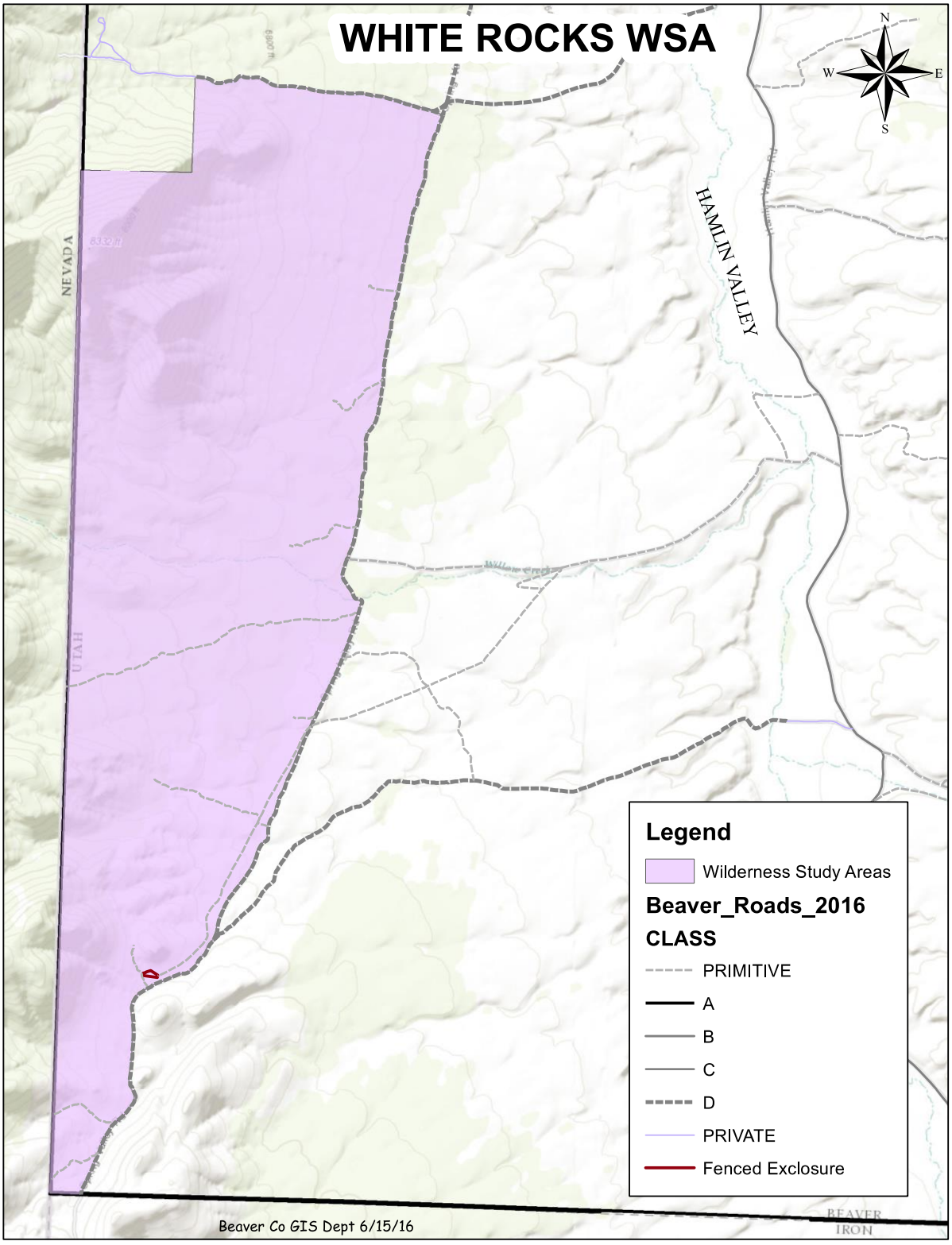
MAP 8 – Solar Energy (UREZ Study)



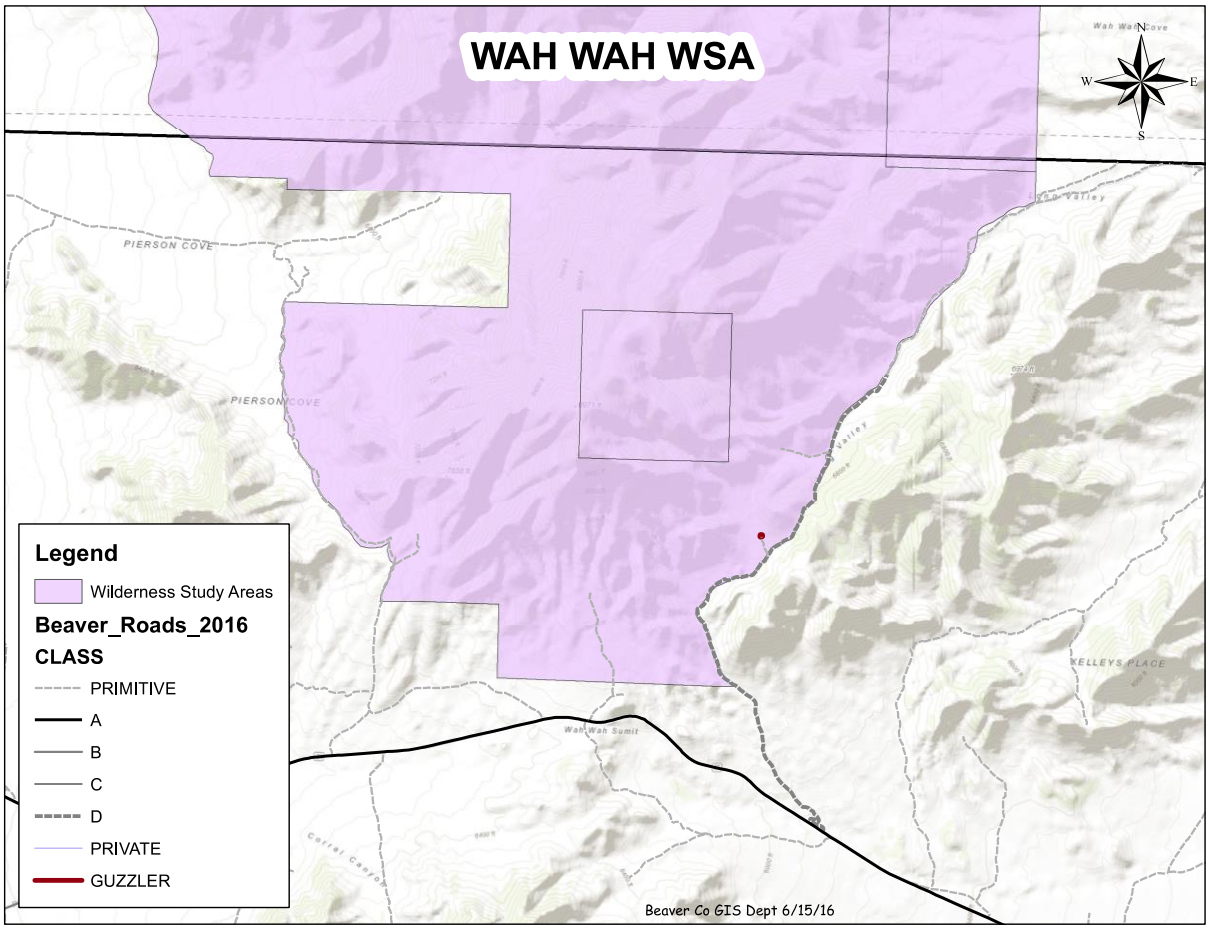
MAP 9 – Geothermal Energy



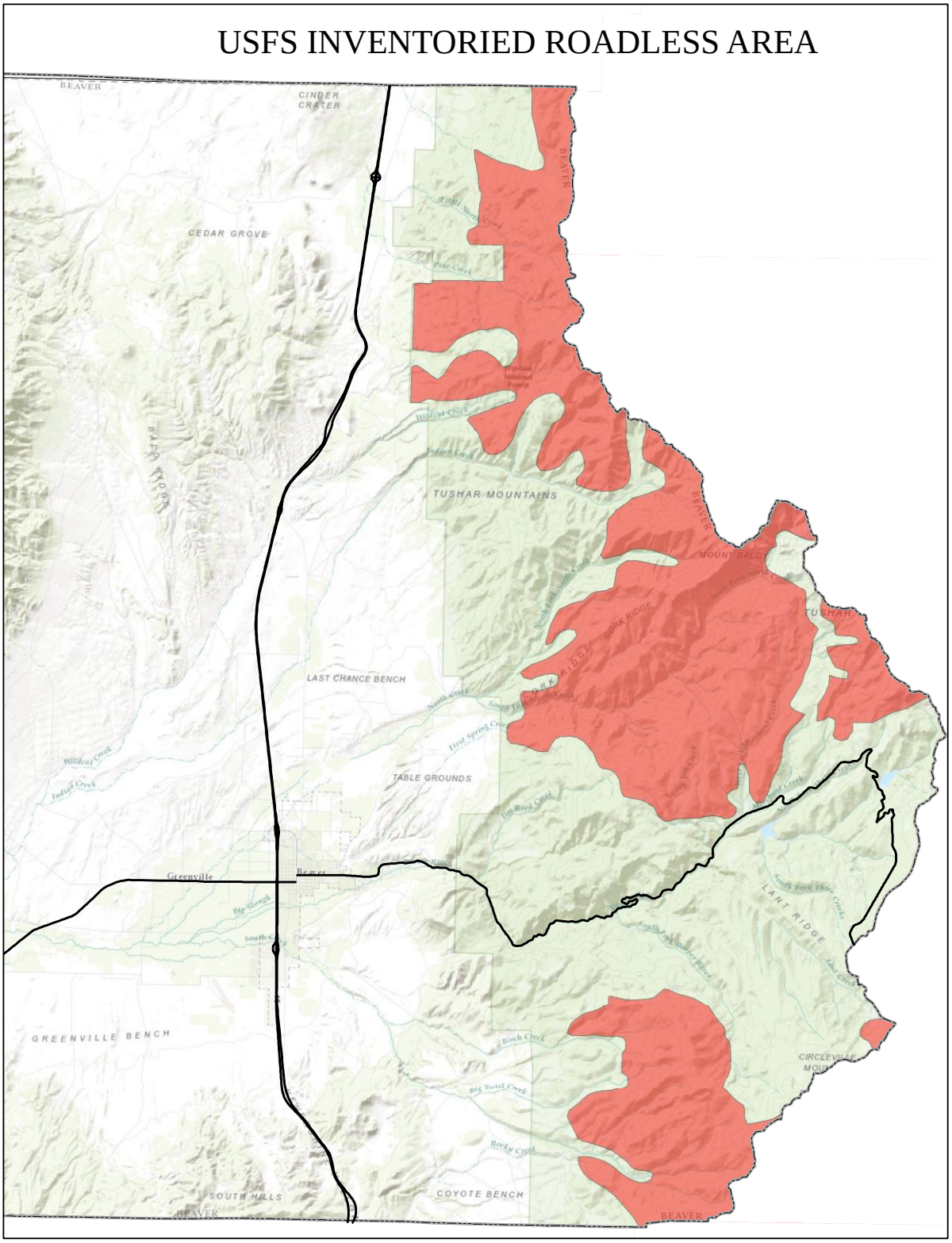
MAP 10 – White Rocks Range WSA



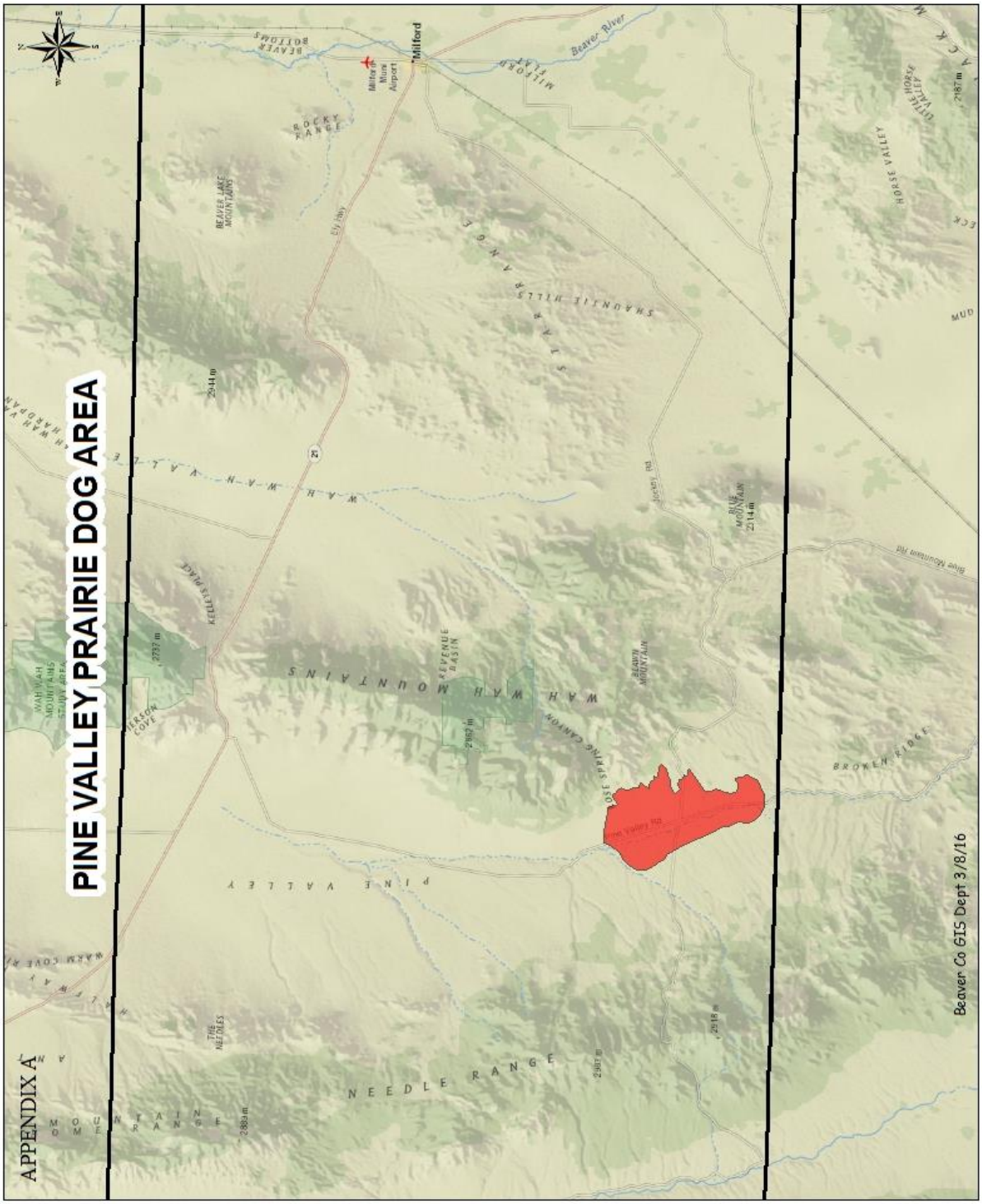
MAP 11 – Wah Wah Mountains WSA



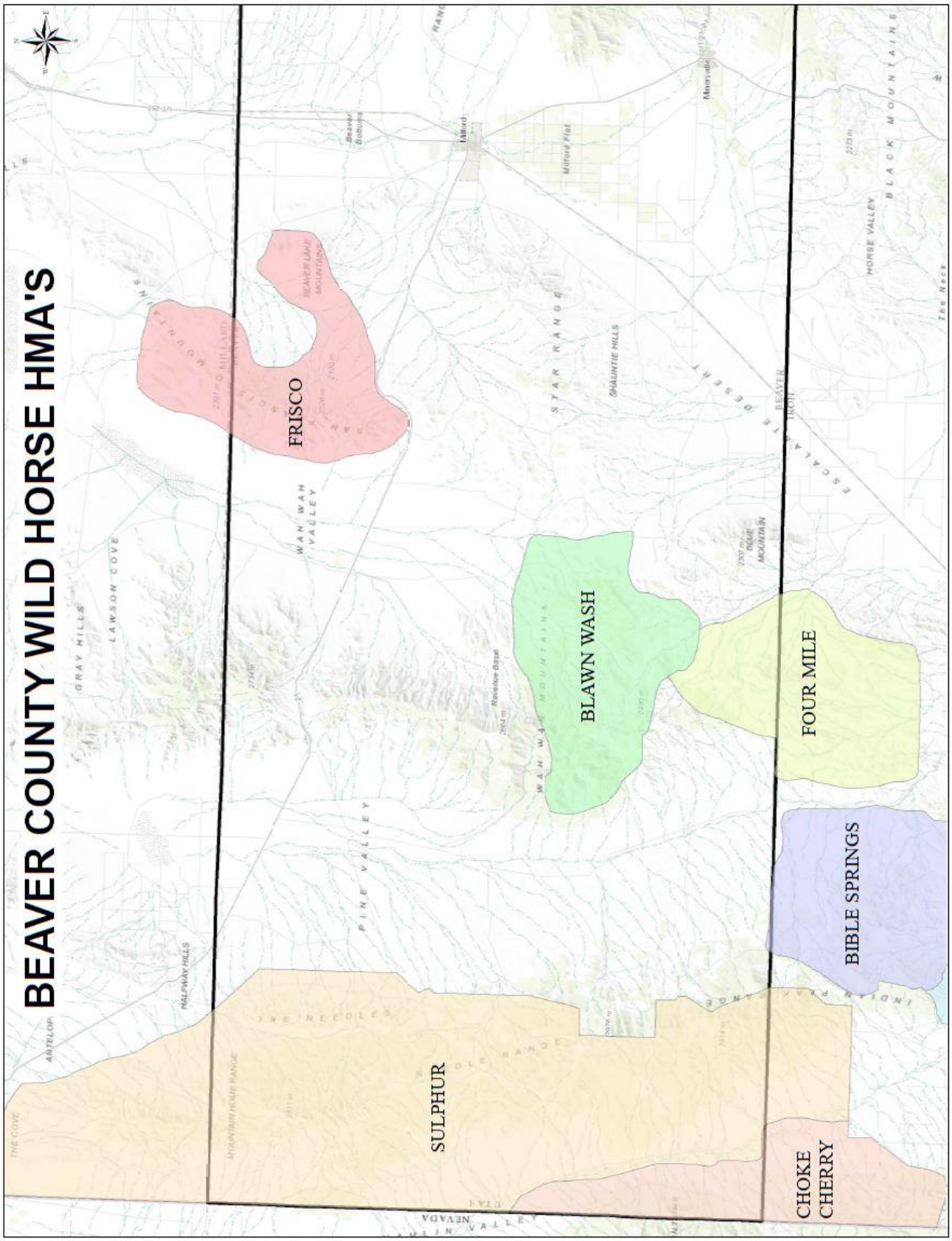
MAP 12 – Inventoried Roadless Areas



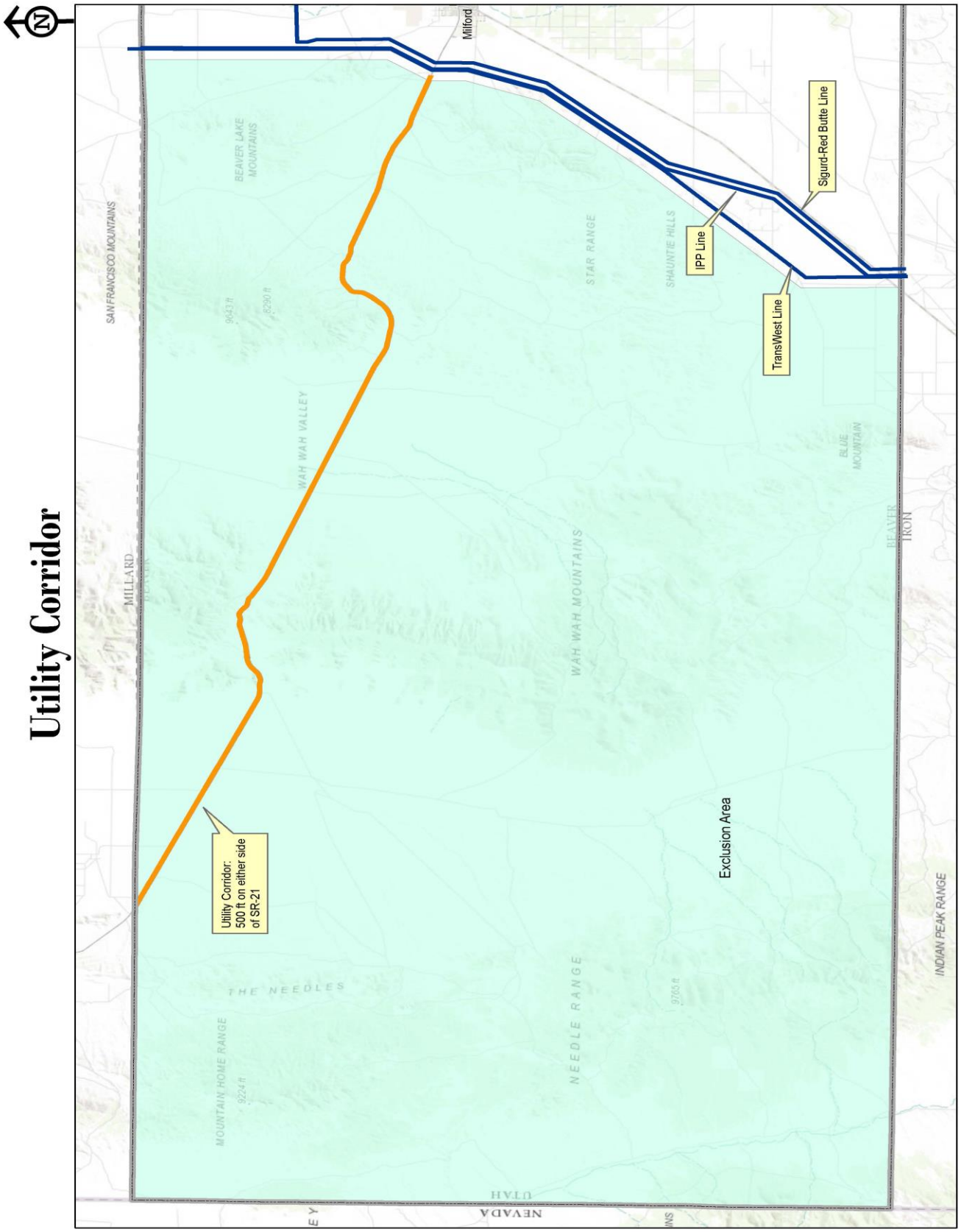
MAP 13 – Pine Valley Prairie Dog Area



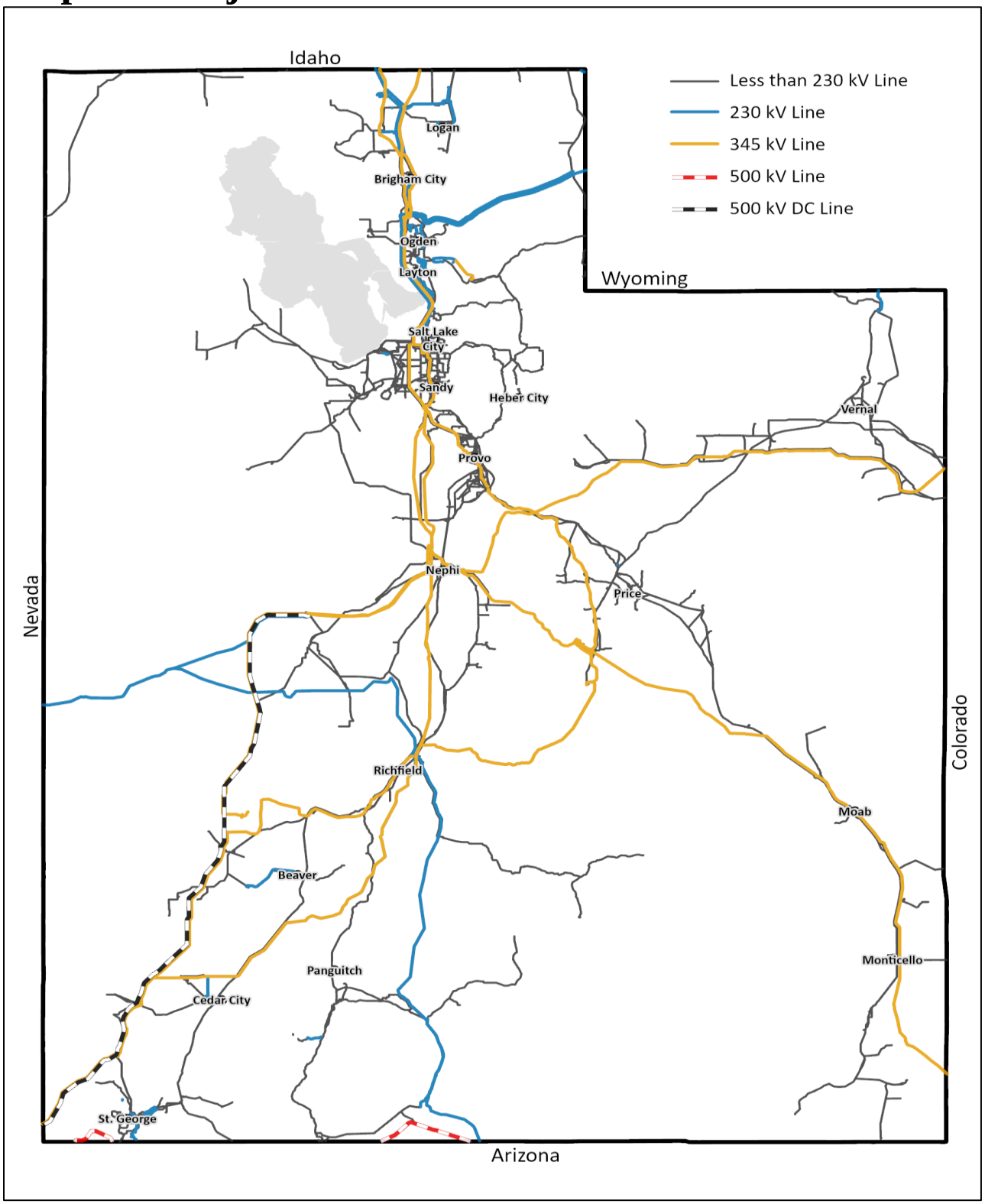
MAP 14 – Beaver County BLM HMAs



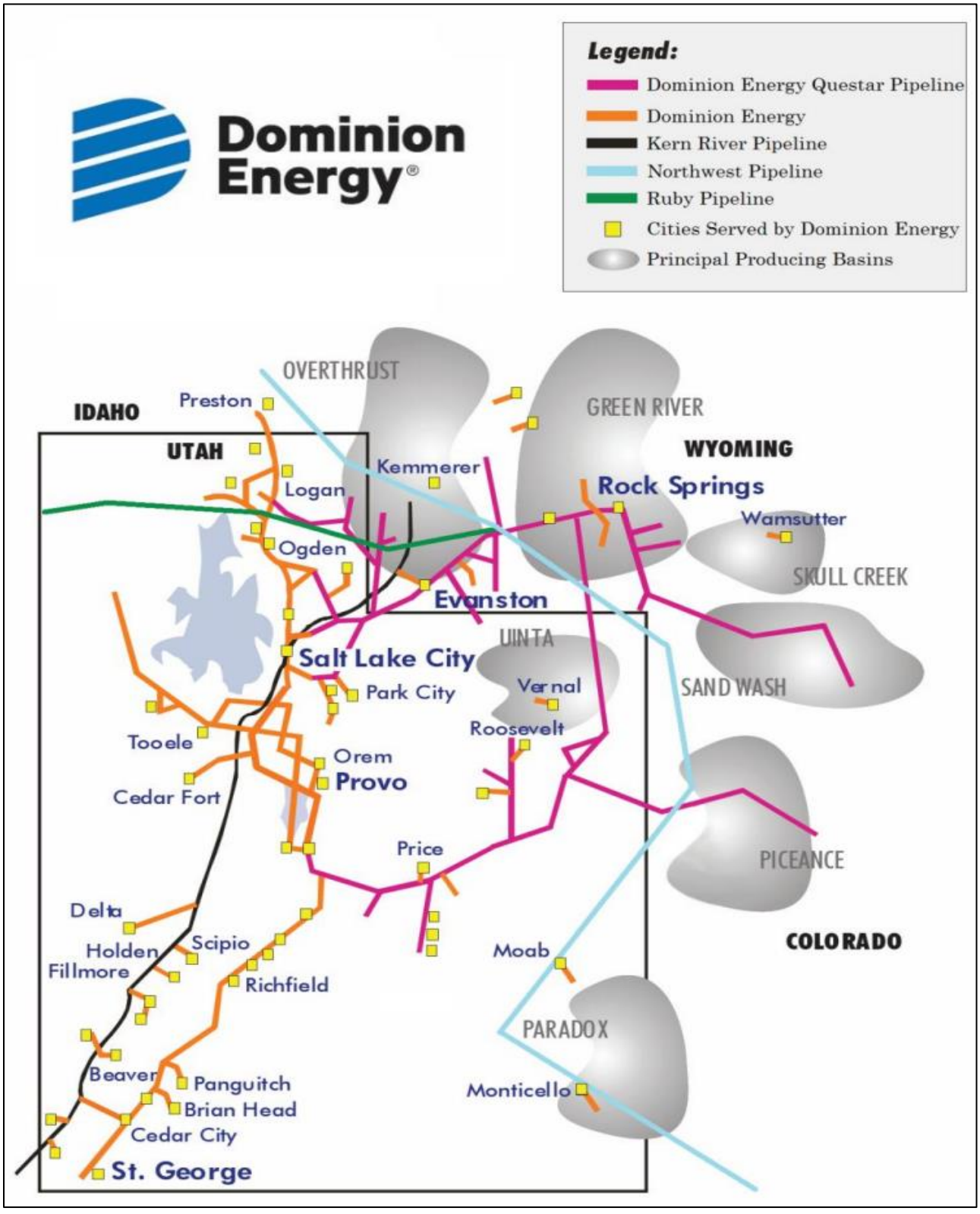
MAP 15 – Beaver County Utility Corridor



Map 16 - Major electrical transmission lines in Utah



Map 17 - Major natural gas pipelines in Utah



APPENDIX 1 – Scenic Quality Inventory and Evaluation Chart

Form 8400-5

INSTRUCTIONS

Form is used in conjunction with the Scenic Quality, Inventory and Evaluation Chart.

SCENIC QUALITY
INVENTORY AND EVALUATION CHART

Key Factors	Rating Criteria and Score		
Landform	High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops; or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers. **5**	Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features which are interesting though not dominant or exceptional. **3**	Low rolling hills, foothills, or flat valley bottoms; or few or no interesting features. **1**
Vegetation	A variety of vegetative types as expressed in interesting forms, textures, and patterns. **5**	Some variety of vegetation, but only one or two major types. **3**	Little or no variety or contrast in vegetation. **1**
Water	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape. **5**	Flowing, or still, but not dominant in the landscape. **3**	Absent, or present, but not noticeable **0**
Color	Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields. **5**	Some intensity or variety in colors and contrast of the soil, rock, and vegetation, but not a dominant scenic element. **3**	Subtle color variations, contrast, or interest; generally mute tones. **1**
Influence of **Adjacent Scenery**	Adjacent scenery greatly enhances visual quality. **5**	Adjacent scenery moderately enhances overall visual quality. **3**	Adjacent scenery has little or no influence on overall visual quality. **0**
Scarcity	One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional or wildflower viewing, etc. ** **5+**	Distinctive, though somewhat similar to others within the region. **3**	Interesting within its setting, but fairly common within the region. **1**
Cultural Modifications	Modifications add favorably to visual variety while promoting visual harmony. **2**	Modifications add little or no visual variety to the area, and introduce no discordant elements. **0**	Modifications add variety but are very discordant and promote strong disharmony. **-4**

** A rating of greater than 5 can be given but must be supported by written justification.

INSTRUCTIONS

Purpose: To rate the visual quality of the scenic resource on all BLM managed lands.

How to Identify Scenic Value: All Bureau lands have scenic value.

How to Determine Minimum Suitability: All BLM lands are rated for scenic values. Also rate adjacent or intermingling non-BLM lands within the planning unit.

When to Evaluate Scenic Quality: Rate for scenery under the most critical conditions (i.e., the highest user period or season of use, sidelight, proper atmospheric conditions, etc.).

How to Delineate Rating Areas: Consider the following factors when delineating rating areas.

1. Like physiographic characteristics (i.e., landform, vegetation, etc.).

2. Similar visual patterns, texture, color, variety, etc.

3. Areas which have a similar impact from cultural modifications (i.e., roads, historical and other structures, mining operations, or other surface disturbances).

Explanation of Criteria:
(See Illustration 1.)

NOTE: Values for each rating criteria are maximum and minimum scores only. It is also possible to assign scores within these ranges.

SCENIC QUALITY

A = 19 or more
B = 12-18
C = 11 or less

APPENDIX 2 – Visual Resource Management Classification Process

Five steps are involved in the visual resource management (VRM) classification process. These are: 1) outlining and numerical evaluation of scenic quality; 2) outlining of visual sensitivity levels; 3) delineating distance zones; 4) overlaying the scenic quality, sensitivity levels and distance zones using a matrix to develop visual resource inventory classes (VRI) I-IV; and 5) adjusting the inventory to meet the multiple use goals of the RMP and designating VRM management classes I-IV with objectives for each class through the planning process.

SCENIC QUALITY

The first step is accomplished by outlining scenery of similar nature on a topographic map. Once the area has been outlined, numerical values are given to its key factors (landform, color, water, vegetation, adjacent scenery, scarcity, and cultural modifications). When these values are established the total determines whether the area is A, B, or C, class scenery.

Class A scenery combines the most outstanding characteristics of each rating factor. Class B scenery combines some outstanding features and some that are fairly common to the physiographic region. Class C scenery combines features that are fairly common to the physiographic region.

VISUAL SENSITIVITY LEVELS

Sensitivity levels indicate the relative degree of user interest in visual resources and concern for changes in the existing landscape character. Public lands are assigned high, medium, or low sensitivity levels by analyzing the various indicators of public concern. Factors considered are the type of use, amount of use, public interest, adjacent land use, special areas, and other factors.

DISTANCE ZONES

The distance zones are outlined on topographic maps in three areas: (1) foreground/middle ground, (2) background, and (3) seldom seen. The foreground/middle ground zone is a distance of from 0 to 5 miles away. The background is the remaining area up to 15 miles distant, and seldom seen is the area beyond 15 miles. All distances are taken from any substantial travel corridor.

VISUAL RESOURCE INVENTORY CLASSES

Inventory classes are informational in nature only and are assigned through the inventory process. Class I is assigned to those areas where a management decision has been made previously to maintain a natural landscape. This includes areas such as national wilderness areas, the wild section of national wild and scenic rivers, and other congressionally and administratively designated areas where decisions have been made to preserve a natural landscape. Class II, III, and IV are assigned based on a combination of scenic quality, sensitivity level, and distance zones. This is accomplished by combining the scenic quality, sensitivity levels, and distance zones maps, using a matrix (see BLM H-8410-1) to assign the proper inventory class.

VISUAL RESOURCE MANAGEMENT CLASSES

Management classes are assigned through Resource Management Plans (RMPs). The assignment of visual management classes is ultimately based on the management decisions made in the RMPs. However, visual values must be considered throughout the RMP process. All actions proposed during the RMP process that would result in surface disturbance must consider the importance of the visual values and the impacts the project may have on these values. Management decisions in the RMP must reflect the value of visual resources. In fact, the value of the visual resource may be the driving force for some management decisions. For example, highly scenic areas, which need special management attention may be designated as scenic Areas of Critical Environmental Concern and classified as VRM class I based on the importance of the visual values (see Figure 2 for current VRM inventory classes).

OBJECTIVES FOR VISUAL RESOURCE MANAGEMENT CLASSES

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 should not attract attention.

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.

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.

Class IV Objective. The objective of this class is to provide for management activities, which require major modification 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 of the landscape.
(BLM 1992)

APPENDIX 3 – List of Acronyms

ACEC	Area of Critical Environmental Concern
ADC	Animal Damage Control
AML	Appropriate Management Level
AOI	Annual Operating Instructions
APHIS	Animal and Plant Health Inspection Service
ATV	All-Terrain Vehicle
AUM	Animal Unit Month
BLM	Bureau of Land Management
BMP	Best Management Practices
CAA	Clean Air Act
CAS	Conservation Agreement Species
CFR	Code of Federal Regulations
CRMP	County Resource Management Plan
CWA	Clean Water Act
CWMA	Cooperative Weed Management Area
DAQ	Utah Division of Air Quality
DNR	Utah Department of Natural Resources
DOE	Department of Energy
DOGM	Utah Division of Oil, Gas and Mining
DOI	Department of Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement

EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESR	Emergency Stabilization and Rehabilitation
FDQA	Federal Data Quality Act
FEMA	Federal Emergency Management Agency
FLPMA	Federal Land Policy and Management Act
GIP	Utah Grazing Improvement Program
GIS	Geographical Information Systems
HA	Herd Area
HFRA	Healthy Forests Restoration Act
HMA	Herd Management Area
IRA	Inventoried Roadless Area
kW	Kilowatt
LWC	Lands with Wilderness Characteristics
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NFP	National Fire Plan
NGO	Non-Governmental Organization
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places

NWPCP	National Wetlands Priority Conservation Plan
NWSRS	National Wild and Scenic River System
OHV	Off-Highway Vehicle
OMB	Office of Management and Budget
PEIS	Programmatic Environmental Impact Statement
PHMA	Priority Habitat Management Area
PJ	Pinyon-Juniper
PLPCO	Governor's Public Lands Policy Coordinating Office
PZP	Porcine Zona Pellucidae
RAC	Regional Advisory Council
RMP	Resource Management Plan
ROW	Right-of-Way
SEZ	Solar Energy Zone
SGMA	Sage-Grouse Management Area
SHPO	State Historic Preservation Office
SITLA	Utah School and Institutional Trust Lands Administration
SOP	Standard Operating Procedures
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TPA	Tons Per Acre
UCA	Utah Code Annotated
UDAF	Utah Department of Agriculture and Food
UDOT	Utah Department of Transportation

UDWR	Utah Division of Wildlife Resources
UFAA	Utah Farmland Assessment Act
UGS	Utah Geological Survey
UREZ	Utah Renewable Energy Zone
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VRM	Visual Resource Management
WFRHBA	Wild Free-Roaming Horses and Burros Act
WRI	Watershed Restoration Initiative
WS	Wildlife Services
WSA	Wilderness Study Area
WSC	Wildlife Species of Concern
WSR	Wild and Scenic River
WSRA	Wild and Scenic Rivers Act
WUI	Wildland-Urban Interface