

SOUTH GOSHEN CONSERVATION DISTRICT



LONG RANGE NATURAL RESOURCE LAND USE PLAN

2023 - 2027

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SOUTH GOSHEN CONSERVATION DISTRICT NATURAL RESOURCE LAND USE PLAN

South Goshen Conservation District's (SGCD) Natural Resource Land Use Plan has been developed in partial fulfillment of the requirements of the Wyoming Department of Agriculture Base Funding Criteria as per "Wyoming Conservation District Law" (W.S. 11-16-101 through 11-16-134).

SGCD has long been respectful of the constitutional concept of private property rights. It is the intent of this Plan to be a guide for the citizens of SGCD, and others, for identifying and respecting the customs, culture, economic viability, social stability and quality of life found in this unique area, and then applying those values to resource conservation, planning, growth, development, and such changes as may occur within SGCD through time.

SGCD Natural Resource Land Use Planning Process

Goshen County Land Use Plan was written and adopted by county commissioners December 15, 1977. The plan addressed the character, quality, and pattern of physical environments for activities of people and organizations throughout the county. Revisions thereafter included subdivision regulations (appendix A), flood damage prevention ordinance and 100 year flood plan (appendix B), regulations for permitting to construct, install or modify individual sewage disposal facilities (appendix C), wellhead protection ordinance (appendix D), and final revision in 1995 to protect the public health and environment of the county to address future development planning. The county land use plan was developed with collaboration of both public and committee input; addresses land use plan regulatory tool use which requires public education prior to individual actions; and is subject to review and periodic change as circumstances within the county change.

SGCD continues to work with Goshen County Commissioners in matters pertaining to local issues.

Goals adopted by the SGCD board include the following responsibilities:

- Protect land within the district against soil deterioration
- Rebuild damaged land
- Improve cropland, grassland, reception areas and wildlife habitat
- Reduce floodwater and sediment damage
- Stabilize critical blowout, runoff and sediment producing areas
- Develop water for agricultural, municipal, industrial and wildlife uses
- Improve water management, water distribution, water conservation, and water quality
- Encourage landowners and operators to become cooperators and develop conservation programs to protect and sustain natural resources
- Cooperate with local, state and federal agencies

SGCD recognizes that it will continue to experience change driven by a variety of social, economic, and natural resource issues and concerns, resulting in programmatic evolution through time.

SGCD particularly relies on the USDA-Natural Resources Conservation Service (NRCS) for technical assistance and other support.

SGCD anticipates continuing membership in the Wyoming Association of Conservation Districts (WACO) and The National Association of Conservation Districts (NACD).

Introduction

A number of factors contributed to the rapid deterioration of western agricultural lands during the early 1930s. The application of poor farming procedures, misuse of range, and extreme lack of moisture were probably foremost in creating these adverse conditions.

Recognizing the need to stop further degradation of these valuable lands a bill establishing the Wyoming Soil Conservation Act was established 1941. This Act authorized the establishment of Soil Conservation Districts. These newly formed bodies were given the responsibility of natural resource conservation within their respective districts.

The South Goshen Conservation District (SGCD) is one of 34 districts in Wyoming organized to provide leadership in the wise and sustained use of natural resources. The District has worked to conserve and enhance natural resources in Goshen County since 1953, writing long range plans utilizing community input every fifth year since inception.

Authority

Pursuant to W.S. 11-16-122 (iv) and (xvi) of the Wyoming Conservation District Law SGCD is authorized to:

- (v) Conduct surveys, investigations and research and disseminate information relating to range management, the character of soil erosion, flood prevention or the conservation, development, utilization and disposal of water, and the preventive and control measures and works of improvement needed, but in order to avoid duplication of research activities, no district shall initiate any research program except in cooperation with the government of this state or its agencies, or with the United States or its agencies;
- (vi) Conduct demonstration projects within the district on lands owned or controlled by this state or its agencies, with the cooperation of the agency administering and having jurisdiction thereof, and on other lands within the district with the consent of the owner or occupier of the lands, to demonstrate range management practices, the means, methods and measures by which soil and soil resources may be conserved, and soil erosion in the form of soil blowing and washing may be prevented and controlled and works of improvement for flood prevention or the conservation, development, utilization and disposal of water may be carried out.

Governmental Subdivision of the State

SGCD is a local government and a governmental subdivision of the state as defined and established by the Wyoming Statutes at Title 11, Chapter 16, et seq., entitled - "Wyoming Conservation Districts Law." The Board of Supervisors of SGCD (S members) are elected by the people of SGCD at General Elections, by popular vote. The elected members represent both the rural and urban populations within SGCD. The Supervisors are the only locally elected board charged specifically with the responsibility of representing local people on natural resource issues. A Conservation District Supervisor serves the community and district voluntarily and without pay. The SGCD Board of Supervisors employs a District Director, and other personnel to implement the projects and programs of SGCD. SGCD programs and administration is now supported by a voter approved mill levy, which generates revenue for projects and grants.

SGCD is guided by the legislative declarations and policy of the Wyoming State Legislature with the following charge:

AS REPRINTED FROM: W.S. § 11-16-103 Legislative declarations and policy

It is hereby declared that the farm and grazing lands of Wyoming are among the basic assets of the state; that improper land use practices cause and contribute to serious erosion of these lands by wind and water; that among the consequences which would result from such conditions are the deterioration of soil and its fertility and the silting and sedimentation of stream channels, reservoirs, dams and ditches; that to conserve soil, and soil and water resources, and prevent and control soil erosion, it is necessary that land use practices contributing to soil erosion be discouraged and that appropriate soil conserving land use practices be adopted.

It is hereby declared to be the policy of the legislature to provide for the conservation of the soil, and soil and water resources of this state, and for the control and prevention of soil erosion and for flood prevention for the conservation, development, utilization, and disposal of water, and hereby to stabilize ranching and farming operations, to preserve natural resources, protect the tax base, control floods, prevent impairment of dams and reservoirs, preserve wildlife, protect public lands, and protect and promote the health, safety and general welfare of the people of this state.

The above, being the charge and direction of the Wyoming Legislature for all Conservation Districts within the State of Wyoming, SGCD's responsibility to the cooperators of the District is measurable and accountable by the actions SGCD takes to accomplish the direction given by the Wyoming Legislature.

The SGCD Board of Supervisors, an elected body and a local government, is the local guide to the management of lands within the jurisdiction of SGCD and is accountable to the citizens of the District.

Federal Involvement

This plan is intended to provide a positive guide for the people of SGCD, and local, state, and federal agencies in coordinating their management activities. This should be done in a manner consistent with locally led planning efforts. The intent is to ensure that federal agency actions provide additional benefits to local citizenry. Coordination with a local government, such as SGCD, can help achieve this important goal.

Statutes exist that outline roles of local government in federal agency planning activities. These statutes generally outline the need to coordinate land use planning activities with state agencies, boards, commissions and departments; and provide technical assistance, information and education to the state, counties, municipalities, regions, and political subdivisions of the state, relative to land use planning.

At the highest levels of our government this intent is evident and mandated by statute. In the Executive Order {13352} for Facilitation of Cooperative Conservation, August 26, 2004, guidance is given to multiple federal government agencies including the Department of the Interior, Department of Agriculture, Department of Defense, and the Environmental Protection Agency, and states:

"... to ensure that... implementing laws relating to the environment and natural resources in a manner that promotes cooperative conservation, with an emphasis on appropriate inclusion of local participation in Federal decision making, in accordance with their respective agency missions, policies, and regulations."

"Cooperative conservation" in said order is defined as: *"actions that relate to use, enhancement, and enjoyment of natural resources, protection of the environment, or both..."*

The order goes on to state that federal agencies must carry out environmental programs and projects in a manner which:

- "(i) facilitates cooperative conservation;*
- (ii) takes appropriate account of and respects the interests of persons with ownership or other legally recognized interests in land and other natural resources;*
- (iii) properly accommodates local participation in Federal decision making;"*

Upon gaining Statehood, the State of Wyoming retained concurrent civil and criminal jurisdiction by the State of Wyoming on all lands ceded to the federal government (W.S. 36-10-103). To this end, local government works in coordination and cooperation with federal agencies.

It is the intent of SGCD to ensure communication with federal and state agencies on proposed actions that affect resources that lie within jurisdictional boundaries of SGCD. Where appropriate, the SGCD Board will coordinate with federal and state agencies in planning and implementation of those actions. When formal communication is required, official notification and delivery of information and documents should be directed to the South Goshen Conservation District, 1441 East M Street, Suite B; Torrington, Wyoming 82240. Electronic correspondence should be sent through the website at <http://conservegoshen.com/>; or by e-mail to karri.ellis@wy.nacdnet.net or denise.lucero@wy.nacdnet.net.

Statutory Requirements for Local Government-to-Federal Interaction and Influence

1. The National Environmental Policy Act (NEPA)

NEPA applies to *"every major Federal action significantly affecting the quality of human environment"* {42 U.S.C. § 4332(2) (C)}. The courts have interpreted this to mean that every time the federal government spends any amount of money for almost any action, NEPA compliance is required. There are several ways local governments can participate in the NEPA process, depending on the type of federal decision, the level of commitment of the local government, and the goal of the local government.

First, the local government can use its local land use or resource plan as part of the federal agency's "consistency review" process. Under this provision, if the federal agency, in the course of writing an EIS, receives a local land use or resource plan, NEPA commands the federal agency to *"discuss any inconsistency of a proposed action with any approved state or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the [environmental impact] statement should describe the extent to which the [federal] agency would reconcile its proposed action with the [local government] plan or law."* {40 C.F.R. §§ 1506.2, 1506.2(d)}.

NEPA also requires that copies of comments by state or local governments must accompany the EIS or EA throughout the review process {42 U.S.C. § 4332(c)}.

Second, local governments can separately participate in the NEPA process as a "cooperating agency" {40 C.F.R. § 1508.5}. Pursuant to NEPA, an applicant for "cooperating agency status" must both (1) be a locally elected body such as a conservation district board of supervisors or a county commission; and (2) possess "special expertise." A local government's special expertise is defined as the authority granted to a local governing body by state statute.

Wyoming statutes specifically recognizes a conservation district's duty to:

"provide for the conservation of soil, and soil and water resources of this State, and for the control and prevention of soil erosion and for flood prevention or the conservation, development, utilization and disposal of water, and thereby stabilize ranching and

farming operations, to preserve natural resources, protect the tax base, control floods, prevent impairment of dams and reservoirs, preserve wildlife, protect public lands, and protect and promote the health, safety and general welfare of the people of this state." W.S. 11-16-103(b).

Wyoming statutes go on to state that the powers and duties of conservation districts and supervisors include "*cooperate, including but not limited to representing the conservation district as a cooperating agency with special expertise as provided by the National Environmental Policy Act* " and to:

"Develop and implement comprehensive resource use and management plans for range improvement and stabilization.....In developing plans under this paragraph, the supervisors of the district shall consider the customs and cultures of residents of the district as those customs and cultures relate to the land and resource, current and historical information and data related to the uses of the land and resource... The supervisors of a conservation district which has officially adopted a comprehensive plan pursuant to W.S. §11-16-122 (b)(xvi) may coordinate with federal agencies as provided in the Federal Land Policy and Management Act of 1976, the Forest Rangeland Renewable Resources Act of 1974, as amended by the National Forest Management Act of 1976 and any other federal statute which provides for coordination with local governments and federal regulations adopted pursuant to this statute." W.S. §11-16-122(b)(viii), (xvi) and (xxviii).

Third, the Wyoming Statutes state:

"When representing a conservation district as a cooperating agency in matters related to the National Environmental Policy Act and in federal land planning, implementation and management actions, supervisors of a conservation district shall be deemed to have special expertise on all subject matters for which they have statutory responsibility as provided in W.S. 11-16-122, including but not limited to all subject matters directly or indirectly related to stabilization of the agriculture industry, protection of natural resources including but not limited to data and information, conservation of soil and water resources, control and prevention of soil erosion, flood prevention of the conservation, development, utilization and disposal of water within the district." W.S. § 11-16-135.

These statutes clearly define the local government's "special expertise" required to be a cooperating agency pursuant to NEPA.

2. Federal Land Policy and Management Act (FLPMA)

FLPMA, which governs the Bureau of Land Management (BLM), provides detailed requirements for "coordination" and "consistency" with local land use plans. With regard to the requirements for "coordination", FLPMA states (43 U.S.C. § 1712):

"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...considering the policies of approved State and tribal land resource management programs."

Such coordination is to be achieved by:

To the extent practical, the BLM must stay apprised of local land use plans (43 U.S.C. § 1712(c)(9)).

- o The BLM must assure that local land use plans germane to the development of BLM land use plans are given consideration.
- o To the extent practical, the BLM must assist in resolving inconsistencies between local and BLM land use plans.
- o The BLM must provide for the meaningful involvement of local governments in the development of BLM land use programs, regulations, and decisions that may impact non-federal lands.

Additionally, FLPMA requires BLM land use plans to be consistent with local land use plans, provided that achieving consistency does not result in a violation of federal law. FLPMA states:

"Land use plans of the Secretary {of the Interior, BLM} under this section shall be consistent with State and local plans to the maximum extent he finds consistent with federal law and the purposes of this Act." (43 U.S.C. § 1712(c)(9)).

In other words, FLPMA requires both "coordination" and "consistency review." Coordination should include both regularly scheduled meetings between the various local governments and BLM managers as well as inviting local BLM staff to local government meetings (Bureau of Land Management, 2012). FLPMA's consistency review requirement states that if a BLM land use plan is inconsistent with a local land use plan, the BLM owes an explanation of how achieving consistency would result in a violation of federal law.

Finally, FLMPA requires that the BLM also provide for a Governor's consistency review as part of the land use planning process (43 C.F.R. § 1610.3-2€).

3. The National Forest Management Act (NFMA)

NFMA, which governs the U.S. Forest Service (USFS), requires the agency to "coordinate." The NFMA requires:

"{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)).

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.

4. Governor's Consistency Review Process

State Governors are entitled to a separate consistency review of BLM and land use plans, revisions, and amendments. Title 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.

Multiple Use

SGCD, and its citizens, recognize that federal law outlines a multiple use management paradigm of federally managed lands. The Federal Land Policy and Management Act states in objective 7, *"that management be on the basis of multiple use and sustained yield unless otherwise specified by law;"* and in objective 12 the BLM is mandated to manage public lands *"in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber and fiber."*

The National Forest Management Act of 1976, Part 1600 states

"(3) to serve the national interest, the renewable resource program must be based on a comprehensive assessment of present and anticipated uses, demand for, and supply of renewable resources from the Nation's public and private forests and rangelands, through analysis of environmental and economic impacts, coordination of multiple use and sustained yield opportunities as provided in the Multiple-Use Sustained-Yield Act of 1960 and public participation in the development of the program."

The Multiple Use Sustained Yield Act (16 U.S.C. 528-531) states, *"It is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes."*

"Goal 2, Provide a variety of uses, values, products, and services for present and future generations by managing within the capability of sustainable ecosystems. Recognize the interdependence between the BLM and local communities. Consider natural and social systems across landownership boundaries, including land use patterns and open space."

SGCD has long supported multiple use, not only for federally managed lands, but also for State lands. Sustaining multiple uses includes preservation of historic and traditional economic uses on federally and State managed lands within and affecting SGCD.

SGCD has no natural forests managed by BLM within its borders.

General Information - SGCD (Suitewater)

South Goshen Conservation District is one of three districts located in Goshen County, and encompasses 478,479 total acres. Of those acres, private land makes up 91% of the total; state owned land makes up 7.2%; BLM land makes up 0.8%, local government land makes up 0.2% and state owned (Wyoming Game and Fish) land makes up 0.4%.

Water makes up 0.4% of the surface in SGCD. Precipitation in the district is between 19 and 28 inches annually.

Elevation in the district is between 4188 feet to 5664 feet. Sixty-six and Bear Creek Mountain are the major topographical formations in the area.

The average growing season is 121 to 140 days (Curtis and Grimes 2004).

Soils originate predominantly from sand and clay outwash or "pediments" transported by prevailing winds and surface runoff from the escarpments (e.g., Bear Mountain and Sixty-six Mountain) on the south and west (Adams 1902, Rapp et al. 1957).

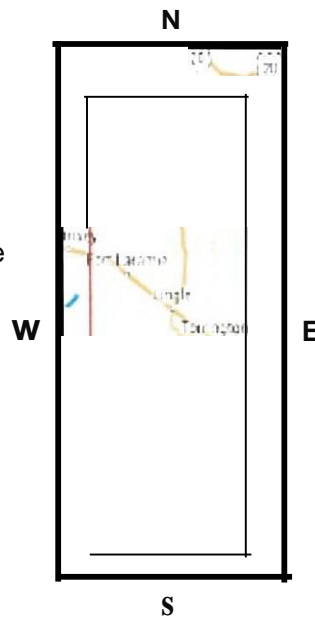
Dry land farming in SGCD continues today. Farmers grow dry land wheat and irrigated corn, hay, and sugar beets. Livestock production is an active economic factor.

The County is a long rectangle, 72 miles long and 31 miles wide, with Laramie County on the south, Platte County on the west, and Niobrara County on the north, and Nebraska on the east.

Lingle/Ft. Laramie Conservation District boundaries lie within the pink area of the inset map.

North Platte Valley Conservation District boundaries lie within the green area of the inset map.

South Goshen Conservation District boundaries lie within the blue area of the inset map.



SGCD History

Goshen Hole history started between 1842 and 1846 when John C.

Fremont's expedition camped in what he supposed was "Goshen's Hole", a name applied to the rich irrigated farming area with fertile lands and plentiful water. By 1888 the name appearing on the map was Goshen Hole, still referred to with reference to the Goshen Hole Reservoir south of Yoder and the Goshen Hole Ditch east of Yoder. The area was home to large livestock production.

LaGrange history dates back to 1867, when Kale LaGrange was a stage coach driver between Denver, Colorado; and the Red Cloud and Spotted Tail Indian agencies in northwestern Nebraska. The town of LaGrange is the oldest in the county. The area became a wide spread arena in which cattle could be driven and rested. Many temporary settlers etched out basic living areas along the river without care or knowledge of property rights. Timelines of LaGrange history can be found on the city website at <http://www.lagrangewyo.com/history.html>

Kale LaGrange claimed water rights for Horse Creek, platted the town site, and operated a mail route from Pine Bluffs, east of Cheyenne, to LaGrange. In 1890, the first Union Sunday School was organized. In 1904, the first telephone line entered LaGrange. It was the only central dial system in Goshen County. The first church was built in 1918 and still stands at its present site. Union Pacific Railroad development began in 1928 and brought prosperity to the area. The town was incorporated May, 1938. The years between the 40's and 60's brought more permanent settlers. In 1967, Frontier School of the Bible was established, with twelve students enrolled. Several former businesses and local homes have now been purchased by the school to provide classrooms, dining hall, dormitories and homes for students and faculty. Classes are in session from mid-August until mid-May. The school offers a three-year course in general preparations for the ministry, mission field, and Christian education, and is nondenominational. The town has a volunteer fire department/rescue unit with trained personnel. The town currently has a population of 448 at the 2010 census. Elevation is 4,598 feet, with a land mass of 0.41 square miles.

Yoder was named for Jesse Yoder who headed the Goshen Townsite Development Company. Railroads, irrigation canals, and homesteading brought prosperity and his townsite development plan combined the two settlements of Springer and Lacy Corners. By 1925, more than 500 people lived in Yoder. His vision was to make Yoder bigger than the county seat, and at one time the area supported substantial growth. The growth spurt did not last, and by 1970, population decreased to around 100. Census 2016 lists current residents at 151 with businesses noted as elementary, middle and high schools; a restaurant; bar; and post office. The elevation is 4,259 feet, with a total land mass of 0.21 square miles.

Hawk Springs is located on Wyoming Highway 85 between Torrington and Cheyenne, as is considered a CDP. A CDP is a **census-designated place** known as a concentration of population defined by the United States Census Bureau for statistical purposes only. Wild turkeys are often seen roaming between the east and west side of the highway running through town. History suggests the name Hawk Springs came from a saloonkeeper, known as "Black Hawk", located at the springs known as "the gentle spring where the falcon stood" now covered by Hawk

Springs Reservoir. According to the census of 2000, there were 69 people, 27 households, and 15 families currently residing in Hawk Springs. The elevation is 4383 feet, with land mass at 1.7 square miles.

General Information - Goshen County (county statistics are not broken down by cities or district borders but is an overall view of the entire county)

This county information reflects demographic, statistical, and economic data, found in all three districts. The county is situated in the High Plains east of the Rocky Mountains, and offers wide-open spaces, and fertile landscapes on which to build prospering enterprises. Torrington is the county seat. It is the 14th largest county in Wyoming by population and contains 8 Census places. The largest places in Goshen County by population are Torrington; Lingle; and La Grange. Other smaller municipalities within Goshen County are Fort Laramie and Yoder. Small, unincorporated communities in the county include Hawk Springs, Huntley, Veteran, and Jay Em. Ancestries reported in Goshen County show a major percentage of the population as German descent, with Mexican, English, Irish, Scottish, Swedish, and Norwegian/Scandinavian present.

Goshen County has a total area of 2,232 square miles, of which 2,225 square miles is land and 6.8 square miles (0.32%) is water. The county population totals 13,514 people (2014 Census) broken down as 54% urban and 46% rural. The County includes approximately 1,430,408 acres. Of this total, approximately 90.8% is privately owned, 2.7% federally managed, and 6.5% owned by the State of Wyoming.

Private lands	1,299,688	90.8%
BLM	25,197	1.8%
Forest Service	0	0.0
State	92,271	6.5%
Bureau of Reclamation	845	.035%
Water	4,378	.32%
Game and Fish Service	2,525	.18%
National Park Service	787	.035%
All other lands	4,717	.33%
Total		100%

The precipitation varies throughout Goshen County but averages 14 inches of rain and 33 inches of snowfall per year. On average, there are 310 sunny days per year with an average high temperature in July of 84 degrees and low of 13 degrees in January. The average growing season is 135 days per year.

Crops - Goshen County

Major crops grown in Goshen County include alfalfa, corn for grain and livestock feed, wheat, sugar beets, and dry edible beans. Goshen County ranks first in the State for agricultural importance to its economy. The County ranks first for corn and cattle production, second in wheat, all hay, and dry bean production. Goshen County continues to produce more cattle annually than any other Wyoming county.

Businesses - Goshen County

Larger businesses within the county support agriculture. Torrington Livestock Market, LLC, is the largest livestock market in the state; and employs approximately 35 full-time and 60 to 70 part-time sale barn personnel. The company also employs approximately 20 "field representatives" who work with customers throughout the region. During the fall, Torrington Livestock Markets operates both sale barn facilities, offering two and three sales and selling up to 19,000 head per week. The "north barn", Torrington Livestock Commission Co., is operated year round selling all classes of livestock every Friday during the year. Wednesday load lot sales for yearlings and calves is held every Wednesday September through April. The fall run is started with the Annual Labor Day Special Calf and Yearling Sale. The "south barn", Stockman Livestock Auction, was operated seasonally. Special calf, bred cow and pair sales were held there. As of April 2009 the McClun Bull Sale was the last cattle sale held. Facility is now used for Madden Bros Consignment Sales. Torrington Livestock Markets is a full-service company offering any type of marketing service for the livestock owner. These services include a sale barn, a bonded country cattle dealer company, called Torrington Livestock Cattle Co and marketing cattle through video sales with Cattle Country Video.

There are three fertilizer distributors, Westco, (which purchased Jirdon AgriChemicals in 2005); Panhandle Coop; and Simplot Growers Solutions; four equipment and implement dealers; two hardware and building supply stores; and a Kelly Bean Company receiving station, established in 1927 in Scottsbluff, Nebraska, which has matured into one of the largest markets of dry edible beans in the world.

In the year 2000, Northern Feed and Bean established a receiving station in Torrington, WY, to serve local bean growers. Northern Feed and Bean ships its pinto beans under the Frontier Label. Northern Feed and Bean is also a livestock and pet food dealer, serving ranchers, dairies, feedlots, 4-H clubs and urban and rural pet owners from the Colorado main office.

Holly Sugar, established in the 1920's, was considered a major agriculture industry that supported local economy; purchasing sugar beets grown by Goshen County farmers. Sadly, the future of this iconic industry remains unknown, with possibility of a reduced workforce and cessation to production lines in the Torrington factory.

Education - Goshen County

Eastern Wyoming College offers Associate of Science degrees in Agri-Business and Sciences with emphases in General Agriculture, Plant Science/Agronomy, Animal Science and Ag-Business.

Largest Employers - Goshen County

The largest employers in the county in order of most employees are Goshen County School District #1, Wyoming Medium Correctional Institution, Banner Health, Eastern Wyoming College, St. Joseph's Children's Home, City of Torrington, and Goshen County.

Goshen County History

The history of Goshen County is closely associated with the different stages in the settling of the West. Historically, the "Old West" is documented as the area of Goshen County. The North Platte River Valley afforded an easy route for the early explorers, cattlemen, and trappers, and later the covered wagons with emigrants moving to the West, eventually providing land for early homesteaders. The earliest known inhabitants of the area began with prehistoric hunters using Folsom and Yuma type arrowheads, making sightings of such artifacts a significant find. Those early settlers were followed by a hunting, nonagricultural people, who were then followed by proto-Pawnee people who tilled the soil, made pottery and built semi-subterranean houses. Sedentary tribes of the Pawnee came next, who established farming villages of mud huts in the valleys and hunted on the adjacent plains. Furs were the trade of choice. Not long after the Louisiana Purchase, the white man began to exploit the fur resources of the Rocky Mountains and the Great Plains and settled in the area to promote the Rocky Mountain Fur Company. In the early 1820s to early 1840's, people traveling the Oregon, Mormon, California, and Texas Trails brought many pioneers into the North Platte River valley. In the summer of 1834, a trading station was established near the junction of the Laramie and Platte Rivers called Fort William, later known as Fort Laramie. Trading of furs and provisions for travel helped civilize the Old West. For the most part of early history there was little conflict with Indian tribes in the area until a mishap in 1854 over a stolen cow ended in the "Gratten Massacre". The Fort was basically under siege for many years thereafter until it was taken over by the United States Government and became a military unit. The military force helped stabilize the Sioux conflicts and protected travelers heading west. By 1868, the Fort Laramie Treaty was initiated, which restricted regional tribes from hunting north of the North Platte River. The treaty brought more permanent settlers. Ranching was the primary industry.

Using homestead rights to file on lands adjacent to the streams and cooperatively using their own labor, teams, and equipment; settlers built canals to bring water to their lands. The oldest adjudicated water right in Goshen County is from Rawhide Creek, with a priority of 1881. This was followed by the construction of the North Platte Canal in 1883, the Torrington Canal in 1886, and the Lucerne Canal in 1892. Large scale irrigation began with the construction of the Whalen Falls Carey Act Project in the early 1900's, followed by the building of the Interstate and Fort Laramie Canals by the Reclamation Service in 1910. After the completion of the large canals considerable additional land was brought under irrigation. This resulted in an increase in farm population, which in turn led to an increase in the population of nearby towns. The government promoted settlement in the new lands by passing homesteading acts, which promised "free" land for an investment of five years of living on and improving the land.

Transportation in the County

The County has two major highways, US 26, which runs east and west through the county, and US 85, which runs north and south. Much of US 26 follows the areas of the Mormon Trail and

the Oregon Trail. State secondary roads, and county roads, serve the major parts of the county and the farming and ranching communities. State Routes 313 and 151 are maintained roads.

There are two railroads in the county, the Union Pacific (UPRR) and the Burlington Northern Santa Fe (BNSF). Both transport coal from multiple mines. There are various sites belonging to both railroads throughout the county.

Utilities in the County

Western Area Power Administration Grid provides power to various providers in the county. Wyrulec is the biggest rural provider. Torrington Electric provides urban power.

Major Natural Gas providers in the county are Wyoming Choice Gas and Black Hills Energy. Most commonly used house heating fuel in Goshen County is utility gas (67.7%); bottled, tank, or LP gas (19.3%); electricity (9.0%); wood (3.1%); and fuel oil, kerosene, etc. (0.8%).

The major telephone land line service is provided by Centurylink. The major cell phone services are provided by Verizon Wireless and AT&T, with additional cell service provided by Union and Viera.

Goshen County Water Resources (Suitewater, NRCS, Geology and Groundwater Resources of Goshen County Wyoming - 1957)

Most of Goshen County is in the North Platte River Watershed, with Lower Laramie and Horse Creek Watersheds stretching into parts of the county. The North Platte River flows through the valley as the major drainage, which begins in Colorado, and flows through Wyoming, and into Nebraska. The Laramie River, Rawhide Creek, Horse Creek, Deer Creek, Cherry Creek, Katzer Drain, and Bear Creek are smaller tributaries that flow into the North Platte River.

There is one major diversion (Whalen Dam) directing water from the North Platte River in two directions into Gering-Ft. Laramie Canal and the Interstate (Pathfinder) Canal. Other diversions include Lucerne Ditch, Grattan Ditch, Torrington Ditch, New North Platte Ditch, Pratt-Ferris Ditch, and the Rock Ranch Ditch. Other smaller diversions in the county direct water from Rawhide Creek, Bear Creek, Horse Creek and Arnold Drain. Watershed dams constructed to control flooding include Arnold Drain, London Flats-Bovee, Angell Draw, Spring Canyon, Case Bier, and Pine Ridge.

Agricultural operations are the single largest consumer of water in the watersheds.

SGCD-Horse Creek Basin Hydrology

After installation of irrigation systems in the county, natural flow of streams were channeled into constructed drainage systems. Created in 1923, Horse Creek is the principal watershed draining most of Goshen Hole. This perennial stream originates in the southern foothills of the Laramie Mountain Range and flows generally north and east, joining the North Platte River approximately 5 mi east of the Wyoming/Nebraska line.

Bear Creek, Horse Creek, and Rawhide Creek are major perennial tributaries. Fox Creek is a small perennial spring feeding into Bear Creek. Other tributaries include Dry Creek, Cherry Creek, Corn Creek, Lone Tree and Box Elder Creek, all intermittent prairie streams.

The Horse Creek sub-basin contains no Federal Reservoirs. Large Non-Federal Reservoirs, (permitted to store water for irrigation) include Horse Creek, Goshen Hole, Bump/Sullivan, and Sinnard; as well as the two largest reservoirs- Hawk Springs Reservoir, (surface area of 1,280 acres and capacity of 16,735 acre-foot) and Springer Lake.

Springer/ Bump Sullivan Wildlife Habitat Management Area (Wyoming Game and Fish) consists of 3,047 acres along U.S. Highway 85, and was created to address irrigation needs and support the local economy by increasing hunting in the area. Surrounding the reservoirs are rolling plains. Elevation averages 4,200 feet. The dominant ecological cover type in the area is herbaceous plants and cultivated fields. Natural cover includes remnants of the Northwestern Great Plains Mixedgrass Prairie and areas of Western Great Plains Riparian/Floodplain. Undisturbed sites are dominated by fescues; western wheatgrass; and needlegrass. Shrub components include snowberry, fringes, sage, and sand sage. Cottonwood and willow dominate the wooded areas. Various types of grasses, forbs, shrubs and trees have been planted to increase nesting, hiding and feeding areas for wildlife. Current management priorities on the Springer area are focused on geese, ducks and pheasants. Thousands of goose eggs are laid each year in artificial nesting structures. Large numbers of waterfowl use this area as a stopover migration point on their routes during spring and fall. Species include a variety of ducks, bigger black-necked Canada geese, snow geese, Sandhill cranes, and a variety of shorebirds. In addition, pheasants, cottontail rabbits, wild turkeys, mule deer, white-tailed deer, skunks, fox squirrels, and muskrats can also be found. Songbirds, doves and bald eagles also use these lands. Fishing opportunities are limited somewhat as water levels fluctuate constantly due to primary irrigation use.

Downer Bird Farm, operated by Game and Fish, commercially raises between 12,000 to 15,000 pheasants each year for reintroduction into the wild. Releases are timed for peak delivery into specific locations throughout the area. Winters are extremely brutal and landscaping does not tend to support overwintering. This project stimulates local economic development and tourism through hunting and wildlife viewing.

Surface and Groundwater - Horse Creek Sub-Basin (Geology and Groundwater Resources of Goshen County Wyoming-1957) (NRCS)

Streams in Goshen County are either perennial or intermittent. Perennial streams store water by snowpack or ground water discharge. Intermittent streams are usually associated with snowmelt, thunderstorms, and rainstorms. Those storms typically determine stream flow velocities and can quickly evaporate or erode surrounding material depending on the severity of the storm.

Water table depth is generally determined largely by configuration of the land surface. In general, the depth to water is greatest where the land surface is high and least where the land

surface is low. In irrigated areas, the water table rises during the irrigation season and falls during the rest of the year. In the irrigated area underlain by alluvium and terrace sand and gravel, the amount of recharge to the water table from precipitation is so small in comparison to the recharge from irrigation that it has no appreciable effect on the water table.

Approximately 99 percent of permitted total groundwater water use in the Horse Creek sub-basin is for irrigation and industrial purposes. Agricultural wells, especially irrigation wells, are permitted to use approximately 94 percent of groundwater in the sub-basin, and most of these wells obtain water from the Quaternary (Alluvial deposits), and Late Tertiary Aquifer Systems (Ogallala, Arikaree Formations, White River Group). Industry makes up around 5 percent of groundwater use, with domestic use utilizing the remaining 1 percent.

Flows in Horse Creek are heavily influenced by irrigation withdrawals and returns during summer months, and recharged by infiltration of irrigation water and from precipitation that falls as rain or snow. Part of this water runs off directly into streams. Another part evaporates, a part is consumed by vegetation, and a part percolates through pore spaces in the soil and underlying rocks to the water table.

Some of the water in the zone of saturation eventually returns to the surface through seeps and springs, or is discharged by wells and evapotranspiration. Most of the water, however, percolates directly and invisibly into surface streams. The porous rocks below the water table generally are saturated. Those that are sufficiently permeable do yield water to wells. In the more permeable rocks, such as the deposits of unconsolidated sand, and gravel, the individual pores are interconnected and are large enough so that the water moves freely through them under the force of gravity; but in less permeable rocks, such as the siltstone and clay of some of the bedrock formations, the pores are so small that water moves through them slowly.

The recharge by springs and seeps supply small quantities of water used primarily for watering livestock. All the springs observed in the area are gravity springs: water that does not issue under artesian pressure but discharges by gravity along outcrops of the water table. There are two types of gravity springs in the area: depression springs, where water flows to the surface from permeable material because the land surface extends below the water table; and contact springs whose waters flow to the surface from permeable material over an outcrop of low permeable material, which retards the downward percolation of the ground water. Depression springs generally are found in the alluvium along the stream valleys and in the lowland areas. Contact springs occur mainly along the contact between the Burle and Arikaree formations on the faces of the escarpments that surround the Goshen Hole low land.

In the non-irrigated areas seepage from precipitation that occurs as rain or snow is the principal source of recharge. The average annual precipitation in the area is 14 inches, of which possibly not more than 5 percent percolates to the ground-water reservoir. Most of the water recharge moves toward the North Platte River or its tributaries. In the irrigated areas underlain by permeable sand and gravel irrigation seepage provides recharge, and by small amounts, precipitation seepage. In the irrigated areas underlain by fine-grained slope-wash material, where the water table is near the surface, precipitation causes a significant rise in the water

table. It is estimated that about 50% of the diverted water used for irrigation near Horse and Bear Creeks is recharged to the groundwater reservoir.

SGCD and Goshen County Irrigation

Hawk Springs Reservoir and the surrounding area is owned by the Horse Creek Conservation District, (known as Horse Creek Water Users). Contract between the State of Wyoming and Hawk Springs Development Company was completed June 21, 1910. Settlers petitioned for the organization of the Horse Creek Conservation District on March 11, 1927. The District proceeded to take over and acquire from the Hawk Springs Water Users Association all of the physical assets of the project including permits, reservoirs, ditches and structures; and continues to manage water delivery from the sub-basin today.

Elsewhere in the county and in the northern part of SGCD, Goshen Irrigation District (GID) is the delivery system. GID operates and maintains the Fort Laramie Canal from Whalen Dam to mile marker 85.3 (state line), with some general rehabilitation work done by both the Goshen Irrigation District and the Gering-Ft. Laramie Irrigation District of Nebraska. GID also manages around 300 miles of laterals and approximately 200 miles of drains. Water is delivered to 52,484 acres (approximately 400 farms), and to the United States (at the state line), to be used by the Gering-Ft. Laramie Irrigation District.

Public Water- SGCD

There are no community public surface water systems located in the Horse Creek Sub-Basin. There are no community public conjunctive use water systems (systems that use both surface and groundwater) located in the Horse Creek Sub-Basin. All public water supply systems located in the Horse Creek Sub-Basin utilize groundwater.

The two community public water systems within the Horse Creek Sub-Basin utilize groundwater with approximately 650 people relying solely on groundwater sources of supply for their community water systems. A total of five (5) wells are utilized, three (3) in the town of Yoder and two (2) in the town of LaGrange.

Geology (Geology and Groundwater Resources of Goshen County Wyoming- 1957)

Goshen Hole Proper is separated from the inner valley of the North Platte River by a maturely dissected ridge of the Brule formation, which in places is several hundred feet above the flood plain of the river. It is bounded on the northwest, the west, and the southwest by an escarpment that is several hundred feet high. On the south the escarpment is discontinuous, as Bear Creek Mountain and Sixty-six Mountain are erosional outliers of the once continuous upland. The east boundary of Goshen Hole Proper, which is poorly defined, is approximately the west side of Table Mountain. Goshen Hole Proper can be defined better as including the lowland area- drained by Cherry Creek and the area drained by Horse Creek between its confluence with Bear Creek and the south Horse Creek lateral division. Topographically Goshen Hole Proper is a low plain and a series of sweeping pediments that in most places slope up to the rimming escarpment. In many places the plain and lower slopes of the pediments are mantled with slope-wash material, which is pockmarked with windblown depressions, some of which are more than 40 feet deep. The upper parts of some of the pediments are cut by gullies

which open onto the middle or lower slopes. The rolling topography of the part of Goshen Hole Proper underlain by the Lance Formation reflects to some extent the unconformable surface between the Lance and Chadron Formations.

The formation of Goshen Hole Proper was generally similar to, but in some respects different from the formation of the valley of the North Platte River. As the river valley was cut below the Oligocene-Miocene (Brule-Arikaree) contact, several tributary streams, whose courses were through the area now occupied by Goshen Hole Proper, also cut down below the contact. Goshen Hole began to form with the retreat of the escarpments along the contact. At this time Chugwater Creek was working headward toward the south from the Laramie River and intercepted the headwaters of the eastward-flowing from the Laramie River and intercepted the headwaters of the eastward-flowing streams that entered Goshen Hole. A tributary working southward from the North Platte River through Goshen Hole intercepted and diverted Bear Creek and then Horse Creek into Goshen Hole. Erosional processes of the expanding Goshen Hole were dependent mainly upon local climate; whereas the erosion in the valley of the North Platte River was dependent upon the amount of runoff in the headwaters as well as upon the local climate. During the wetter periods large amounts of material were eroded from the escarpments and older pediments and carried to the North Platte River. During the drier periods there was essentially no external drainage from much of Goshen Hole, and the small amounts of material eroded were then deposited as alluvial fans and removed by wind. Erosion gradually exhumed some of the pre-Tertiary topography and created an irregular landscape in parts of Goshen Hole.

Geologic units in SGCD (Geology and Groundwater Resources of Goshen County, 1957)

Geologic units in Goshen Hole are noted as the Chadron Member of White River Formation from the Phanerozoic | Cenozoic | Tertiary | Oligocene ages with terrace deposits mixed with scattered alluvium, residuum, eolian, slope wash, and outwash deposits. Areas with Early, Middle, and Late Miocene ages are also reported. Eolian deposits mixed with scattered residuum, alluvium, and slope wash deposits; and Residuum mixed with alluvium, eolian, slope wash, and grus deposits, and/or bedrock outcrops; are located in the northern and eastern areas.

Soils (NRCS Ecological Site Description)

Soils in SGCD are very deep to moderately deep (greater than 20" to bedrock), well drained and moderately permeable. Layers of the soil most influential to the plant community varies from 3-10 inches. These layers consist of the A Horizon with very fine sandy loam, loam or silt loam texture and may also include the upper few inches of the B Horizon with clay loam texture.

Soil associations in the **southern part of Goshen County** include:

(Soil Survey, Goshen County, Wyoming Southern Part - 1971)

1. Satanta-Mitchell Association

Deep, nearly level to sloping, well-drained, loamy soils on uplands. This association consists of wind-laid loams and silt loams that occur mainly near Veteran, west and south-west of Yoder, and near Huntley, but also on Table Mountain and in the western part of Goshen Hole. The elevation ranges from 4,100 to 4,500 feet. Blue grama, western wheatgrass, and needle-and-

thread are the dominant vegetation.

2. Rosebud-Norka-Creighion Association (figure 2)

Moderately deep to deep, nearly level to sloping, well-drained, loamy soils on uplands. This association consists of moderately deep loams and fine sandy loams; and deep loams and very fine sandy loams. It occurs mainly on Harmony Heights, in the Iowa Center area, and south of Bear Creek. The elevation ranges from about 4,400 to 5,400 feet. Blue grama and needle-and-thread are the dominant vegetation.

3. Anselmo-Manter-Dwyer Association (figure 3)

Deep, nearly level to sloping, well-drained to excessively drained, sandy and loamy soils on uplands. This association consists of wind-laid sands that occur mainly in an area that extends from LaGrange to Yoder but also as small areas in the west-central part of the area. The elevation ranges from about 4,100 to about 4,850 feet but is predominantly between 4,200 and 4,600 feet. Blue grama and needle-and-thread are the dominant vegetation.

4. Dunday-Trelona-Dwyer Association (figure 2) (figure 3)

Deep to shallow, nearly level to steep, excessively drained to well-drained, sandy and loamy soils on uplands. This association consists of deep, nearly level to moderately steep, wind-laid sands and of shallow, gently sloping to steep sandy and loamy soils. This association occurs mainly in the western and southwestern parts of the area, but also in the southeastern part. The elevation ranges from about 4,250 to about 5,660 feet. Blue grama, needle-and-thread, and prairie sandreed are the dominant vegetation.

5. Valentine-Dwyer Association (figure 3)

Deep, nearly level to steep, excessively drained sands on uplands. This association consists of wind-laid sands. It occurs mainly between the North Platte River bottoms and the Interstate Canal, but also southeast of Torrington and northeast of Hawk Springs. The elevation ranges from about 4,100 to 4,400 feet. Prairie sandreed and needle-and-thread are the dominant vegetation.

6. Mitchell-Bordeau-Epping Association (figure 4)

Predominantly deep, nearly level to moderately steep, well-drained, loamy soils on alluvial fans, foot slopes, and valley fills. This association consists partly of deep loams and sandy loams on nearly level to moderately steep fans and foot slopes and partly of shallow loams on nearly level to moderately steep uplands. It occurs mainly in an area that extends from the North Platte River to the southern part of the area, but also in the eastern part of the area. The elevation ranges from about 4,030 feet to about 5,000 feet. Blue grama, threadleaf sedge, and needle-and-thread are the dominant vegetation.

7. Kim-Orella-Heldt Association (figure 5)

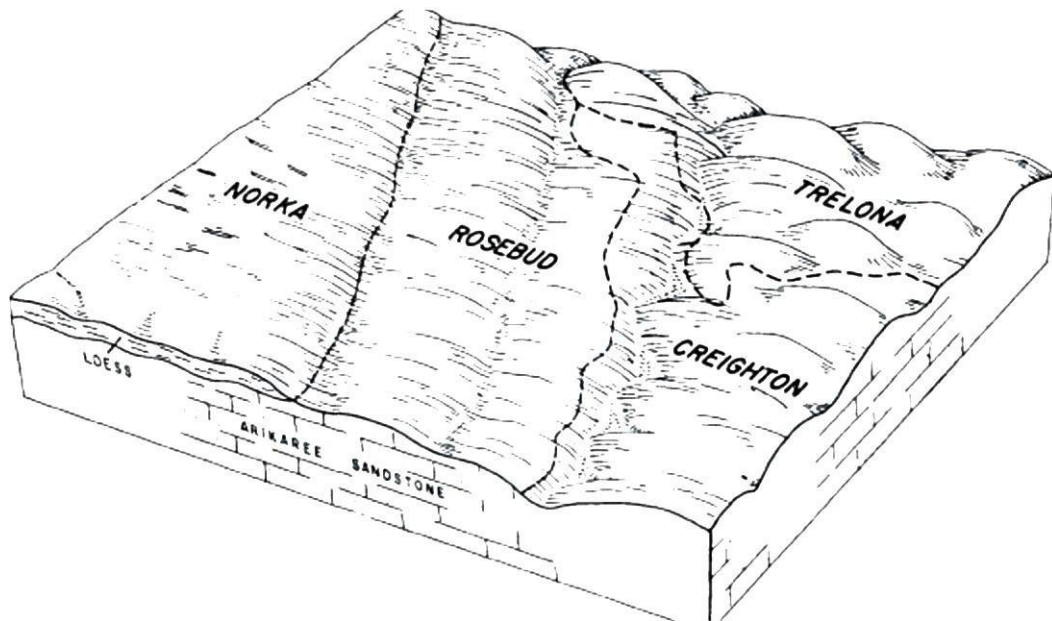
Predominantly deep, nearly level to gently sloping, well-drained, loamy and clayey soils on alluvial fans, foot slopes, and valley fills. This association consists of deep, water-laid clays and clay loams on nearly level to sloping fans, foot slopes, and valley fills, and shallow clays on nearly level to gently sloping uplands. The principal area is in Cherry Creek Valley and includes a tongue that extends southeast into the broad flat west and northwest of Huntley. Smaller areas are in the eastern part of the Area and in the southwestern part of Goshen Hole. The elevation ranges from about 4,100 to 4,450 feet. Western wheatgrass is the dominant vegetation.

8. Haverson-Bankard Association (figure S)

Deep, nearly level to gently sloping, well-drained to excessively drained, loamy and sandy soils of the flood plains. This association consists of water-laid loams and sands that occur mainly along the North Platte and Laramie Rivers, and also along Rawhide Creek and Horse Creek near the Wyoming State Line. The elevation ranges from about 4,025 to about 4,300 feet. Needle-and-thread and blue grama grasses and cottonwood trees are the dominant vegetation.

See graphs and descriptions pages 20 - 23.

Figure 2.-Typical pattern of soils, topography, and parent material in association 2

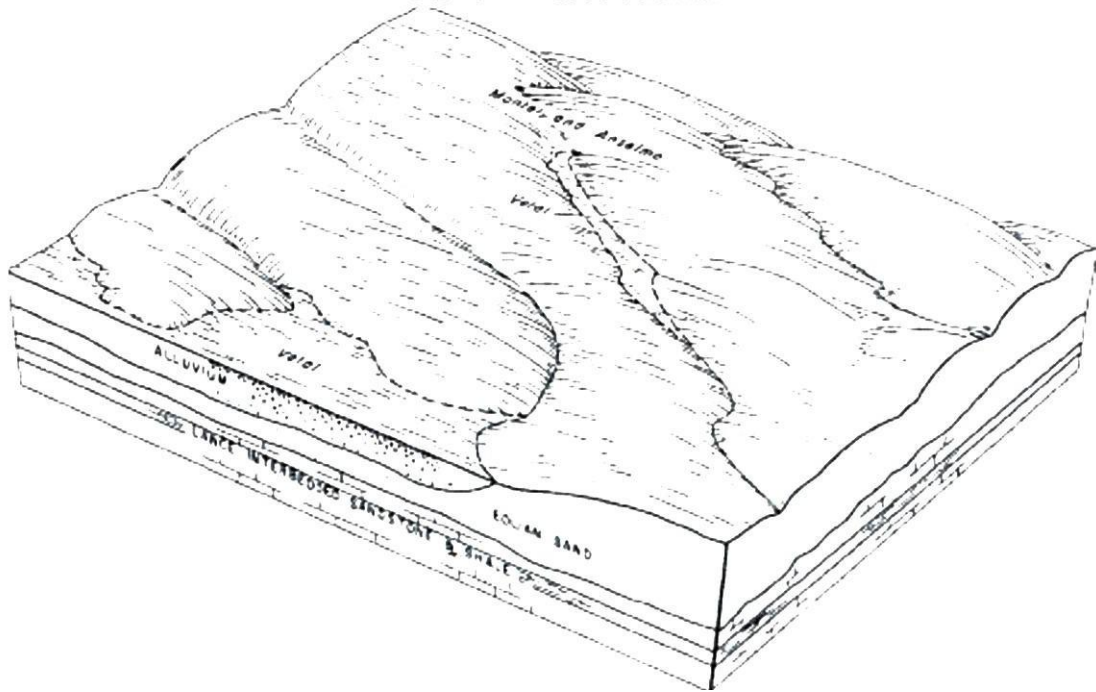


Rosebud soils are moderately deep. They have a surface layer of dark grayish-brown loam and fine sandy loam and a subsoil of dark-brown or brown sandy clay loam and very fine sandy loam.

Norka soils are deep. They have a surface layer of grayish-brown loam and a subsoil of grayish-brown or brown clay loam. **Creighton** soils are deep. They are very fine sandy loam throughout the profile. The surface layer is grayish brown, and the subsoil is brown.

About 65 percent of this association is used for dry-land crops, about 33 percent for native grass, and about 2 percent for roads and farmsteads. None of this association is irrigated.

Figure 3.-Typical relationship of Manter, Anselmo, and Vetal soils to topograph: and parent material in Association 3.



Anselmo soils are well drained. They are sandy loam or fine sandy loam throughout. The surface layer and the underlying material are grayish brown.

Manter soils also are well drained. The surface layer and the sub-soil are grayish-brown fine sandy loam. Dwyer soils are excessively drained. The surface layer and the underlying material are light brownish-gray loamy fine sand.

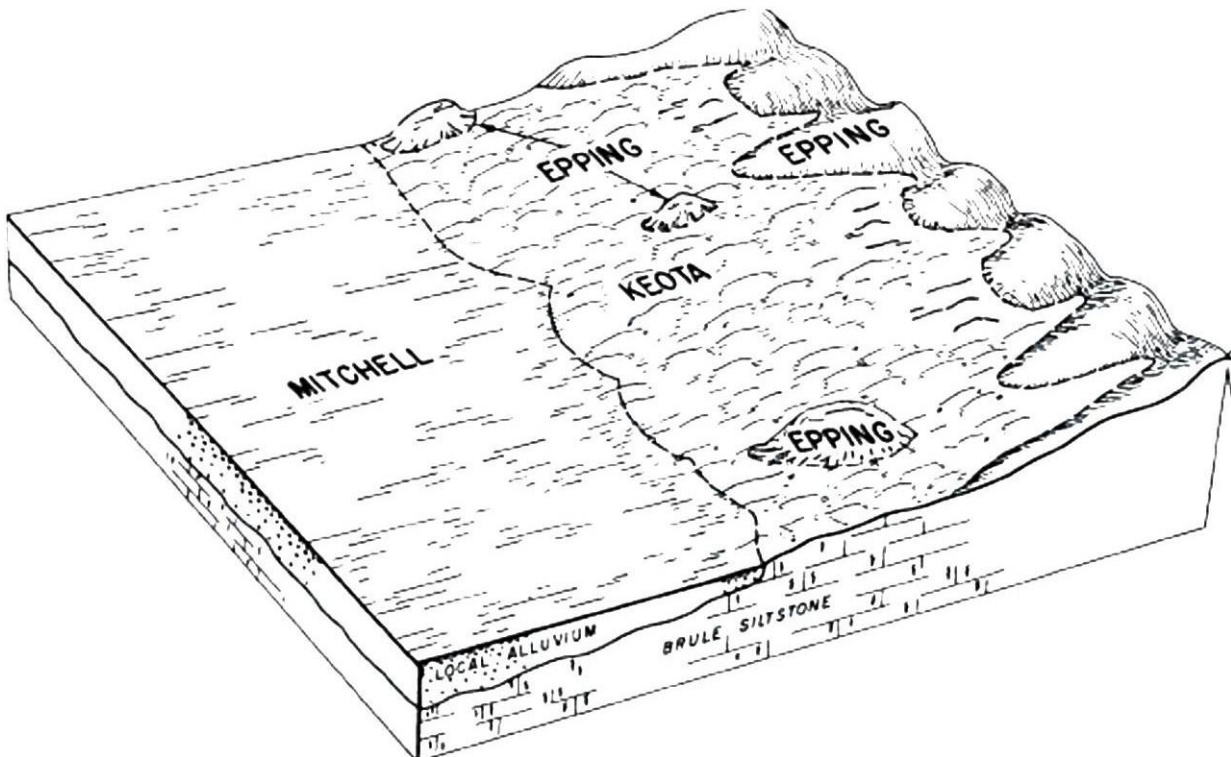
About 67 percent of this association is used for grazing, about 17 percent for dryland crops, about 13 percent for irrigated crops, and about 3 percent for roads, townsites, and farmsteads.

Dunday soils are deep and excessively drained. The surface layer and the underlying material are grayish-brown loamy fine sand. Dwyer soils also are deep and excessively drained. The surface layer and the underlying material are light brownish-gray loamy fine sand.

Trelona soils are shallow and well drained. The surface layer is grayish-brown fine sandy loam, and the underlying material is sandstone.

About 98 percent of this association is used for grazing, about 1 percent for dryland crops, and about 1 percent for roads, farmsteads, and ranch headquarters.

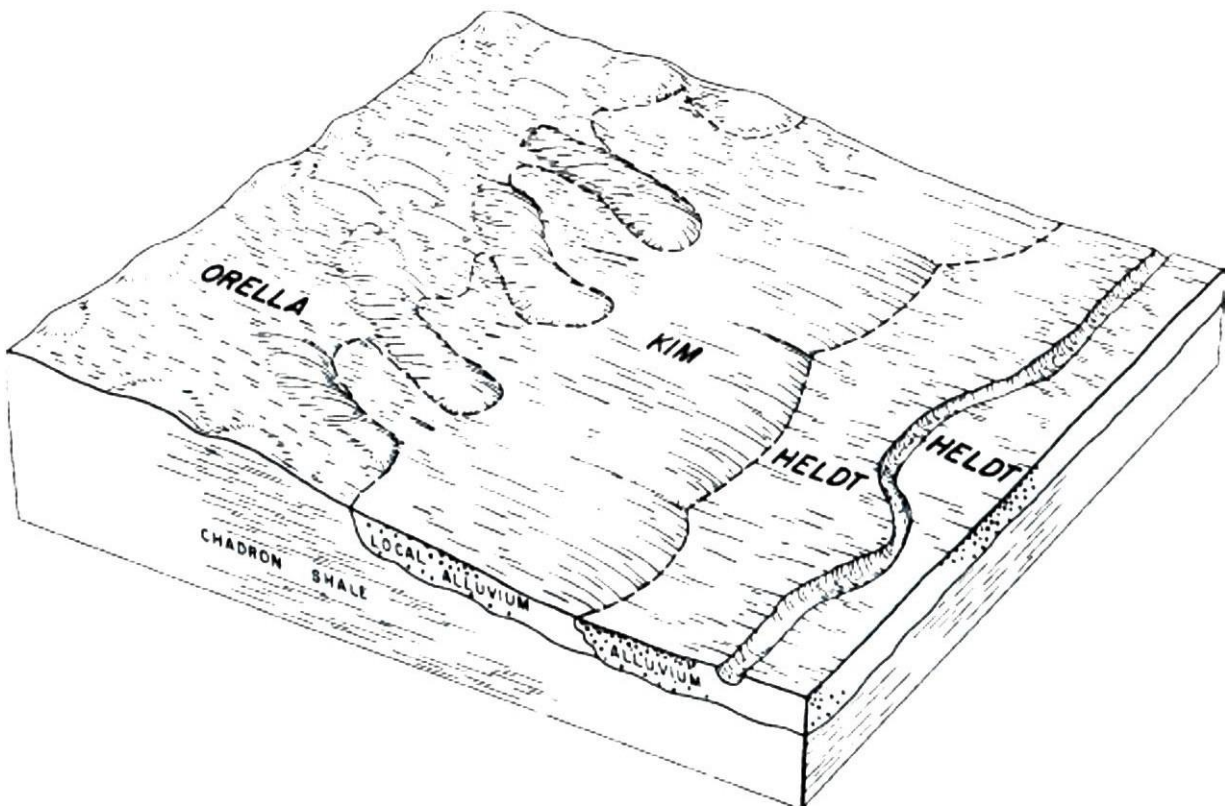
Figure 4.-Typical relationship of Mitchell, Keota, and Epping soils to topography and parent material in association 6.



Bordeaux soils are deep. They have a surface layer of grayish-brown fine sandy loam and underlying material of pale-brown loam. The slopes range from nearly level to sloping. Epping soils are shallow. They are silt loam throughout. The surface layer is light brownish-gray, and the underlying material is siltstone. The slopes are nearly level to moderately steep.

About 68 percent of this association is used for grazing, about 24 percent for dryland crops, about 7 percent for irrigated crops, and about 1 percent for roads and farmstead

Figure 5.-Typical pattern of soils, topography, and parent material in Association 7.



Kim soils are deep. They are clay loam throughout. The surface layer is light gray, and the upper part of the underlying material is light brownish-gray. The slopes range from nearly level to sloping.

Orella soils are shallow. They are clay throughout. The surface layer is light gray, and the underlying material is light brownish-gray. The slopes are nearly level to moderately steep.

Heldt soils are deep. They have a clay surface layer and a silty clay subsoil, both of which are light brownish-gray. The slopes are nearly level.

About 69 percent of this association is used for grazing, about 23 percent for irrigated crops, about 6 percent for dryland crops, and about 2 percent for other purposes.

Haverson soils are well drained. The surface layer and the underlying material are light brownish-gray loam. The slopes are nearly level and very gently sloping.

Bankard soils are excessively drained. The surface layer is grayish-brown loamy fine sand, and the underlying material is very pale brown fine sand or loamy fine sand. The slopes range from nearly level to gently sloping.

About 52 percent of this association is in native grass and trees and is used mostly for grazing. About 39 percent is used for irrigated crops, and about 9 percent for roads, railroads, townsites, and farmsteads.

Vegetation (NRCS Ecological Site Description)

Native vegetation fills a foundational role in SGCD, providing forage and cover for both wildlife and livestock, visual aesthetics, erosion control, soil fertility, photosynthesis, carbon sequestration, evapotranspiration, and economic benefits. Grazing by domestic livestock is one of the major income-producing industries in the area. Rangelands in this area provide yearlong forage under prescribed grazing for cattle. During the dormant period, livestock may need supplementation based on reliable forage analysis.

Rhizomatous Wheatgrasses, Needle-and-Thread, Blue Grama Plant Community (Loamy soil)

The Historic Climax Plant Community (HCPC) evolved with grazing by large herbivores, and remains well suited for grazing by domestic livestock. HCPC can be found on areas that are grazed and where the grazed plants receive adequate periods of rest during the growing season in order to recover. Historically, fires likely occurred infrequently. The potential vegetation is about 75-90% grasses, 5-15% forbs, and 5-10% woody plants. This community is dominated by cool season mid-grasses. The major grasses include rhizomatous wheatgrasses (predominantly western with some thickspike), needle-and-thread, and blue grama. A variety of forbs and half-shrubs also occur. Shrubs are not abundant. Plant diversity is high. In the 12 to 14 inch precipitation zone, the total annual production (air-dry weight) is about 1300 pounds per acre during an average year; but it can range from about 750 pounds per acre in unfavorable years to about 1750 pounds per acre in above average years. In the 15 to 17 inch precipitation zone, the total annual production (air-dry weight) is about 1500 pounds per acre during an average year, but it can range from about 1000 pounds per acre in unfavorable years to about 2000 pounds per acre in above average years. This plant community is stable and well adapted to the Northern Great Plains climatic conditions. Litter is properly distributed with very little movement off-site and natural plant mortality is very low. The diversity in plant species allows for high dry tolerance. This is a sustainable plant community in terms of soil stability, watershed function, and biologic integrity.

Blue Grama Sod with Cool-Season Mid-Grasses Plant Community (Loamy soil)

This plant community typically develops, over a period of several years, under frequent and severe defoliation during the growing season of the cool-season mid-grasses. It typically is made up of sod forming grasses with only remnants of cool-season mid-grasses remaining. The dominant grasses are blue grama and western wheatgrass. Needle-and-thread is reduced. Green needlegrass and little bluestem are nearly absent. Other grasses present include Sandberg bluegrass and prairie junegrass. Significant forbs include scarlet globemallow, wild onion, death camas, slim-flowered scurfpea, and skeletonweed. Compared to the Historic Climax Plant Community, blue grama and threadleaf sedge has increased. Green needlegrass, little bluestem, and western wheatgrass have decreased. Palatable forbs and half-shrubs such as dotted gayfeather, penstemon, American vetch, and winterfat have decreased. Fringed sagewort and broom snakeweed are increasing. Plant diversity is moderate. This plant community is stable and can become very resistant to change depending on the degree to which the sod has formed. Changes in grazing

management may take a long time to affect the plant composition. Soil erosion is low, infiltration is reduced, and overland flow is increased because of the sod-bound condition. This explains the lowered production and the off-site gully erosion that often occurs.

Go-back Land (Clayey soil)

This plant community developed where cropland was abandoned 20 to 50 years ago with either no reseeding or reseeding to crested wheatgrass that was only marginally successful. This plant community is highly variable depending on level of soil disturbance, amount of erosion that has taken place, and past grazing management. The composition can include some remnant tame pasture grasses and a variety of pioneer perennial species. The dominant grasses include threeawn, Sandberg bluegrass, cheatgrass, and six-weeks fescue. Other grasses may include crested wheatgrass and western wheatgrass. Blue grama is typically absent. Forbs can include western sticktight, western ragweed, and sweetclover. Significant shrubs in this community include broom snakeweed and green rabbitbrush. Prickly pear cactus is typically absent. Plant diversity is low and production is highly variable. In the 12 to 14 inch precipitation zone, the total annual production (air-dry weight) is about 500 pounds per acre during an average year; and it can range from about 350 pounds per acre in unfavorable years to about 650 pounds per acre in above average years. In the 15 to 17 inch precipitation zone, the total annual production (air-dry weight) is about 600 pounds per acre during an average year, but it can range from about 400 pounds per acre in unfavorable years to about 800 pounds per acre in above average years. This plant community is not resistant to change and can deteriorate rapidly because of low plant diversity. Once disturbed, it will not recover rapidly. Soil erosion is moderate. While highly variable, infiltration is reduced and runoff is increased. Range or pasture planting is typically the only option to return this community to a productive condition in a realistic time frame.

Animal Community (NRCS Ecological Site Description)

The predominance of grasses plus high forb diversity in this community favors large grazers such as pronghorn and elk. Suitable thermal and escape cover for mule deer is limited due to low shrub cover. White-tailed and black-tailed jackrabbit, badger, and coyote commonly use this community. This community also provides habitat for a wide array of smaller mammals, so diverse prey populations are available for raptors such as ferruginous and Swainson's hawks. Birds such as western kingbird, western meadowlark, lark bunting, and grasshopper sparrow will utilize this community for nesting and foraging. This community is especially favorable for ground-nesting birds because of the abundant residual vegetation available in the spring for nesting, escape and thermal cover.

Blue Grama, Western Wheatgrass Community: The reduction in taller grasses in this community results in decreased use by lark buntings and western meadowlarks. Use by long-billed curlew increases provided there is standing water within $\frac{1}{4}$ mile. Killdeer, horned larks, and McCown's longspurs will also make significant use of this community. Pronghorn may forage in this community.

Blue Grama Sod w/o Cool-season Mid-grasses Community: This community provides limited foraging for antelope and other grazers. Ground-nesting birds favoring sparse vegetation may use this community. Long-billed curlews will use this community if standing water is present within ¼ mile. Generally, this is not a target vegetative community for wildlife habitat management.

Bare Ground, Blue Grama, Invaders Community: Sparse vegetation and greater amounts of bare ground provide suitable habitat for prairie dogs, horned larks and McCown's longspurs. However, a lack of complex vegetation structure and residual cover makes this community poor habitat in general for most ground-nesting birds and big game species. Burrowing owl may occur here if the community is occupied by prairie dogs. Pronghorn may find limited forage in this community.

Low Plant Density, Excess Litter Community: This community has low habitat value for most wildlife species. Horned larks may nest in this community. Prairie dogs and jackrabbits are frequent users of this community.

Climate (NRCS Ecological Site Description)

SGCD annual precipitation ranges from 12-17 inches per year. Wide fluctuations may occur in yearly precipitation and result in more dry years than years with more than normal precipitation. Temperatures show a wide range between summer and winter and between daily maximums and minimums due to the high elevation and dry air, which permits rapid incoming and outgoing radiation. Cold air outbreaks from Canada in winter move rapidly from northwest to southeast and account for extreme minimum temperatures. Chinook winds may occur in winter and bring rapid rises in temperature. Extreme storms may occur during the winter and most severely affect ranch operations during late winter and spring. Wind speed averages about 8 mph, ranging from 10 mph during the spring to 7 mph during late summer. Daytime winds are generally stronger than nighttime and occasional strong storms may bring brief periods of high winds with gusts to more than 75 mph. Growth of native cool-season plants begins about April 1 and continues to about July 1. Native warm-season plants begin growth about May 15 and continue to about August 15. Green up of cool season plants may occur in September and October of most years.

SGCD freezes late in spring and early in fall are common. The average last occurrences of 32 degrees and 28 degrees in spring are May 13 and April 30, respectively. The average first occurrences of 32 degrees and 28 degrees in fall are September 23 and October 4, respectively. Thus, the average length of the growing season is 133 days at 32 degrees and 157 days at 28 degrees.

Land Cover in Acres, (Economic Profile System (EPS), May 2016)

Goshen County land cover totals 1,427,627 acres. Forest covers 988 acres at 0.1%. Grassland covers 1,313,417 acres at 92.0%. Shrubland covers 42,829 acres at 3.0%. Mixed cropland covers 42,829 acres at 3.0%. Other lands cover 4,939 acres at 0.3%. Other lands are generally considered barren or sparsely vegetated.

Public Lands in General (Suitewater, 2016) (Goshen County Assessor, 2016)

"Public land" as used in this section is real property owned or controlled by an agency or bureau of either the state or federal government. In SGCD state owned land makes up 7.2%. BLM land makes up 0.8%. Local government land makes up 0.2% and state owned (Wyoming Game and Fish) land makes up 0.4%. BLM land (0.8%) is generally leased for grazing. Wyoming Game and Fish land (0.4%) encompasses lands utilized by Downar Bird Farm, and Wildlife Management Areas located at Springer/Bump Sullivan, Table Mountain, and Hawk Springs Reservoirs.

Public lands total 130,712 acres in the entire county. Lands managed by Game and Fish total 2,525 acres; with recreation totaling around 2,000 acres. BLM manages 26,829 acres.

State and Federal Lands

Upon the statehood of Wyoming in 1889, the state was granted the Section 16 and 36 lands in all Townships across Wyoming. They were ceded to the state for the support of the common schools. These lands were in turn leased in most cases to adjacent landowners who acquired preference rights to graze said lands. State lands in SGCD are by majority native rangelands. As grazing leases on state lands are often integral parts of ranching operations in SGCD, any change in their management that would eliminate their continued use would not be in the best interest of the citizens of SGCD.

The Federal Land Policy and Management Act of 1976 (FLPMA), mandates the BLM to manage these lands for multiple use, including energy development, livestock grazing, recreation and timber harvesting.

The Taylor Grazing Act of 1934 designated grazing lands as either Section 3 or Section 15 lands. Section 3 lands were public lands with designated grazing districts established by the Act. Grazing permits for section 3 lands were issued for 10 years and required the permittee to have control (owned or leased) of a base private property capable of providing feed for a specified number of livestock. Base property of Section 3 lands did not have to be adjacent to the permitted grazing area, but preference was given to landholders within close proximity.

The Taylor Grazing Act also designated federally owned Section 15 lands outside of grazing districts as available for grazing *leases*. Base private property is usually adjacent, surrounding or intermixed with leased Section 15 lands, such as in the case of "checkerboard" ownership.

Current policy as laid out by the more recent FLPMA of 1976 and amendments of 1978, removed the management distinction of Section 3 and Section 15 lands and requires BLM grazing lands to be categorized as "custodial", "improve", or "maintain" management goals. Permits are authorized for 10 years. Generally, lands previously designated as Section 15 parcels, (which are smaller, isolated, federal lands) are managed as custodial (BLM, 2011). The checkerboard of private and federal lands limits the ability to manage these lands for multiple use such as recreation or oil and gas exploration. The historic human activity on these lands is livestock grazing. Private land owners whose holdings are interspersed with federal lands accept the fact that wildlife and livestock travel across ownership boundaries.

Deer, elk, antelope, cattle, sheep and domestic horses use these lands without regard to human-made boundaries.

Although management distinctions between Section 3 and Section 15 lands have been made consistent with more recent legislation, receipts from grazing on Section 3 and Section 15 lands are still handled differently. Section 3 fees are distributed with 50% to range betterment projects, 37.5% remaining in the US treasury, and 12.5% returned to the state. Fees from Section 15 lands are split with 50% used for range betterment projects and 50% returned to the state (BLM, 2011).

The large amount of federally owned land in Wyoming impacts state and county revenue streams. Goshen County contains 26,829 acres of federally owned lands. Chapter 69, Title 31 of the US Code recognizes the inability of local government to collect property taxes on federally owned land creates a financial impact (U.S. Dept. of Interior, 2016). Payment in Lieu of Taxes (PILT) from the federal government to local governments attempts to offset the cost of providing services such as roads, schools, public safety services, etc.

Goshen County Agriculture (Suitewater, 2015) (USDA 2012 Census of Agriculture)

Agriculture is a primary driver of the SGCD and Goshen County economy and the largest water user. There are 790 farms utilizing 1,370,277 acres in the county as a whole. Farm parcels typically range from less than 10 acres to over 1000 acres. Pastureland utilizes 80.9% of land use, with cattle and calf sales as the primary economic driver. BLM owned lands utilized for grazing do exist in SGCD boundaries. Cropland utilizes 17.6% of land, with other uses at 1.5%. Forageland utilized for all hay and haylage, grass silage, and green chop equals 60,953 acres. Corn, wheat and winter wheat for grain totals 66,494 acres. (USDA 2012 Census of Agriculture) Other crops grown are Dry Edible Beans (7,251 acres), Sugar Beets (2,143 acres), Barley for grain (1,575 acres), and Oats and Durham Wheat for grain (under 400 acres each). (2012 Census of Agriculture)

Industry, Minerals, and Oil and Gas Development (Suitewater, 2016)(EPS,2016)

Wind turbines and Oil and Gas wells do exist within SGCD. Mining accounts for 0.2%, Nonmetallic Minerals account for 0.2%, and mining and oil related transportation by pipeline accounts for 0.2%. (EPS,2016) Potential resources within SGCD include coal, potassium, and sulfur. Wind energy is a large potential resource within the district.

Tourism and Recreation

Tourism and recreation in SGCD includes the use of both public and private lands. Recreation interest within SGCD include hunting, fishing, wildlife viewing, bird watching, boating, and camping. Goshen County tourism accounts for 14.8% of the economy. (EPS, 2016) Gasoline stations, accommodations, and food and drinking places make up that percentage total.

SGCD has several area attractions, which include:

Downar Bird Farm, located off U.S. Highway 85, is operated by Wyoming Game and Fish, and produces over 15,000 pheasants annually. Eggs are inspected, incubated, hatched, banded, and

matured. Mature birds are released into WHMA's two times per week during general season (beginning early November until mid-December or until the farm runs out of stock). These releases are necessary to stimulate the local economy.

Springer/Bump Sullivan Wildlife Habitat Management Area (WHMA) totals 3,047 acres along U.S. Highway 85. Most of the vegetation is sagebrush grassland with a variety of native grasses, rubber rabbitbrush, sagebrush and gray horsebrush. Various types of grasses, forbs, shrubs and trees have been planted here to increase nesting, hiding and feeding areas for wildlife. Current management priorities on the Springer area are focused on geese, ducks and pheasants. Thousands of geese eggs are being laid each year in artificial nesting structures. During the spring and fall, large numbers of waterfowl use this area as a stopover point on their migration routes. Many species of ducks, Canada and snow geese, sandhill cranes and many shorebirds can also be seen. In addition, pheasants, cottontail rabbits, wild turkeys, mule deer and white-tailed deer, skunks, fox squirrels and muskrats live here. Songbirds, doves and bald eagles also use these lands. Although most of Springer Area is closed to goose hunting, public land on Bump Sullivan Reservoir and surrounding private lands provides goose-hunting opportunities during winter months. Non-toxic shot is required when attempting to take any game species when hunting with a shotgun. The area is closed to motorized vehicular travel from Labor Day through Memorial Day weekend. Off-road vehicular travel is not allowed. Fishing opportunities are limited. Bullheads, carp and perch are found in these waters. In addition to hunting and fishing, recreational opportunities include picnicking, swimming, boating, and wildlife observation.

Annual 16-Day Special Springer Pheasant Hunt (usually beginning end of October through first part of November) at Springer/Bump Sullivan WHMA. Two of the 16 days are reserved for youth hunting only. Birds are released every day during the 16 day special hunt. Even though a hunter may not draw a permit on a particular day, openings may be available and hunters can also access the unit by signing up on the walk on list posted at the check station. All hunters must check in and out at the Springer Check Station during the dates of the Springer special pheasant hunt.

Pheasant Hunters/Community Dinner, held the opening weekend of the annual pheasant hunt, is the sole fundraiser for the Yoder Women's Club, with proceeds used for scholarships and school funding.

Table Mountain Wildlife Habitat Management Area (WHMA) totals 1,716 acres and is managed by Wyoming Game and Fish and BLM for Canada Geese habitat. Extensive wetland management and improvements makes the area one of the most important wetland areas in southeast Wyoming. The land consists mainly of grasslands, sagebrush and shrub communities with greasewood, skunkbush, sumac, and saltcedar. Dry Creek and Horse Creek meander through the north and western boundaries, respectively. Both of these creeks are of archaeological significance with artifacts belonging to historic and prehistoric tribes of plains Indians. The area is a natural migration area for ducks, geese, and a great number of bird

species. Hunting opportunities include pheasant, waterfowl, rabbits, and doves. Non-toxic shot is required. Trapping for muskrat is allowed and restrictions are posted to protect nesting geese. Bird species include American bitterns, great blue herons, marsh and Swainson's hawks, great horned owls, American white pelicans, western grebes, white-faced ibis and bald eagles. Wildlife viewing besides waterfowl and bird species includes coyotes, foxes and rabbits. Vehicular access is prohibited from October 1st through Memorial Day weekend to prevent human disturbance. There are plenty of opportunities for wildlife observation and photography.

Hawk Springs State Recreation Area (HSSRA) is a small recreation site administered by Wyoming State Parks-Historic Sites & Trails Division (WSPHS&T). The site consists of 24 primitive campsites, picnic tables and fire rings, boat launching ramp, boat dock, restrooms and playground. There are seasonally operated potable water hydrants. Water based (boating, fishing, swimming) recreation opportunities are the primary activities that bring users to the site. WSPHS&T regulates and manages the land based recreation opportunities at the site while the Wyoming Game and Fish regulates the recreational activities of the water. Located off U.S. Highway 85 in southern Goshen County HSSRA offers boating, water skiing, picnicking and camping. Fishing is also popular at the site, and game fish include walleye, large-mouth bass, yellow perch and channel catfish. Ice fishing is a winter activity.

LaGrange Mini Fair, started in 1972 to show off 4-H club member projects to the local community, has continued to grow over the last 45 years. Today there is a pancake breakfast, parade, gymkhana, 5-K run, car show and more. The event is held annually in June.

LaGrange July 3 annual fireworks display presented by volunteer firefighters.

Hawk Springs Goose Cook-Off began in 1997. Funds raised are used to benefit and improve the community of Hawk Springs, WY. Competitions for best jerky, appetizer, soup/chili, or main dish with goose used as the main meat component are held each year. Every cook wins a competition prize. There is a goose calling contest for youth participants. Visitors enjoy the all you can eat meal. There are public raffles and door prizes, and an auction for hand crafted items. The event closes with music and entertainment.

Wildlife

Wildlife populations are considered a state resource and are managed solely by the Wyoming Game and Fish Department. However, wildlife and fish know no political or jurisdictional boundaries and private landowners play a key role in supporting wildlife by providing additional forage that eases pressures on sensitive wildlife habitat.

Wyoming Game and Fish Department manages three (3) Wildlife Habitat Management Areas (WHMAs) within the Goshen Wetland Complex. Extensive wetland areas have been built on Springer and Table Mountain WHMAs.

Private Lands Program (Goshen Wetlands Working Group Regional Plan, 2014)

The U.S. Fish and Wildlife Service (USFWS) and Natural Resources Conservation Service (NRCS) have supported wetland projects on private lands through several cost share programs. These include the Wetlands Reserve Program (WRP), Partners for Fish and Wildlife (PFW), and Wildlife Habitat Incentives Program (WHIP) among others. Approximately 4,000 acres of private lands in the Goshen Hole area are currently enrolled in management agreements with 50 individual cooperators (Figure 3). Roughly 30% (1,200 acres) of this area is wetland and the remainder is upland buffers. The hydrology of most constructed wetlands on private lands (about 85%) depends on irrigation runoff or enhanced groundwater table. Private land owners provide a crucial resource to our wildlife populations. The co-management of private and public lands is integral to the maintenance of wildlife in SGCD.

Thirty-two vertebrate species listed as statewide species of conservation concern depend on Goshen wetland habitats. The North Platte River is a significant migration corridor for birds, and this complex, which is part of the lower North Platte Waterfowl Management Area, is the fourth most diverse in Wyoming. In addition, the density of duck breeding pairs is the third highest in the state. Biologists also count an average of 19,000 dark geese and 30,000 ducks (mostly mallards) during annual mid-winter surveys. Roughly 200,000 Canada geese will migrate through the complex area each year. The US Fish and Wildlife Service's Partners for Fish and Wildlife program has focused on restoring habitats in the region for various ground nesting birds such as mountain plover, McCown's longspur and bobolinks, as well as an assortment of waterbirds. In addition, the Goshen Complex is also home to the Preble's meadow jumping mouse (listed as threatened in Colorado) and Ute ladies'-tresses orchids. Species of wildlife include: mule and white-tailed deer, antelope, turkeys, coyotes, pheasant, cottontail rabbits, ducks, and geese. Preble's is restricted to northeastern Colorado and southeastern Wyoming from the vicinity of the city of Colorado Springs on the east side of the Front Range of Colorado north along the Laramie Range to the vicinity of the North Platte River near Douglas, Wyoming. The subspecies is typically found at elevations between 1,420 and 2,300 m. In Wyoming, Preble's predicted range includes all or portions of 4 counties, although thus far the subspecies has only been found east of the crest of the Laramie Range. Southeast Wyoming constitutes approximately the northern third of Preble's range.

Economics

Medium annual household income in Goshen County, Wyoming is \$42,689. Per Capita income is \$25,105. Fifteen percent (15%) of the county population is considered below the national poverty level. The county's main employers based on annual payroll are professional and/or management services, education and health services, farm and agricultural services, and retail sales. (American Fact Finder, US Census 2014). When based on the percent of the county population employed, the main employers are management and professional services (31.4%); education and health care (26.4%) and agriculture/forestry/fishing/hunting/mining (13.4%); with retail trade and sales around (28.8%). **(American Fact Finder, 2000) (Economic Measures EPS, 2016)**

When compared to the nation as a whole, Goshen County is very specialized in agriculture and beef industry. Farming and cattle ranching make up the bulk of private industry at 65.8%

of reported labor earnings. (**EPS,2016**)

County revenue from property taxes are greatly impacted by the agriculture industry. In 2016, around 33% of the county's property taxes came from the agriculture industry, 30% came from industry, and the remainder from residential property. County PILT monies (discussed under **Public Lands** section) for 2015 totaled 89.4%. Total eligible acres in Goshen County for

FY 2015 totaled 27,313 acres. Of those acres BLM managed 25,569 acres. Federal land payments based on acreages in FY 2015 totaled \$77,872.00. Payment in lieu of Taxes (PILT) to the county for FY 2015 totaled \$69,588.00 (89.4%). BLM payments from the Taylor Grazing Act to the county totaled \$8,284.00 (10.6%). There were no county payments received for Federal Mining Royalties or Forest Service Revenue for FY 2015. (**EPS, May 2015**)

As a major natural resource producer, the State of Wyoming is significantly affected by the ups and downs in the national energy market, and the historic cycles of boom and bust in the oil/gas/coal industries are familiar to Wyoming residents. Agriculture is a stabilizing economic force in SGCD. Since the mid 1800's the vast open rangelands of Wyoming have been recognized for their ability to grow livestock and fiber for humans. As irrigation techniques evolved, Goshen County and specifically SGCD Goshen Hole was recognized as a suitable climate to support a variety of crops and rangeland animal health.

Custom and Culture

Culture is defined as the customary beliefs, social forms and material traits of a group; an integrated pattern of human behavior passed to succeeding generations (*Webster's New Collegiate Dictionary*, 227, 1975). Custom is a usage or practice of the people, which by long and unvarying habit, has become compulsory and has acquired the force of law with respect to the place or subject-matter to which it relates (***Bouviere's Law Dictionary*, 417, 1st ed. 1867**).

Open spaces are a defining quality of Wyoming and SGCD. A 2004 poll conducted by the University of Wyoming reports that the preservation of farms and ranches, the western lifestyle, and protecting private property rights are of particular importance to Wyoming residents (Boelter and Mays, 2004). A more recent polling identified the loss of family farms and ranches as the issue of greatest concern to Wyoming residents (Reedman and Korfanta, 2014). Seventy-nine percent of the respondents in that poll described themselves as "personally benefitting from the presence of ranches and farms in Wyoming."

Due to the nature of SGCD's landscapes and ecology, agriculture goes hand in hand with maintaining the custom and culture of open space and its attendant values. Agriculture as practiced in harmony with SGCD's ecology, provides a basis for community while maintaining those values.

Agriculture production accounts for almost 91% of the private land in SGCD (Suitewater 2016). Because agriculture is the dominant private land use in the county, the future of open spaces in SGCD will depend to a large extent on what happens to agriculture. A number of factors may adversely affect the retention of agricultural land in Wyoming including the

continued uncertainty about livestock grazing on federal lands (Taylor, et al. 2003).

There has been recent interest in assigning monetary value to open space ecosystem services. It is recognized that open landscapes provide "natural goods and services" such as water filtration and wildlife habitat, along with livestock grazing and agriculture goods (Taylor, et al. 2011). A recent study estimates the value of natural goods and services at \$22 per acre for native rangelands, \$66 per acre for pasture and hay lands, and \$55 per acre for cultivated cropland. These adjusted 2016 values are in addition to the actual market value of the land; jobs and income generated from the use of these lands.

Due to the historic and ecological nature of land use across public and privately owned land and the inherent impact on the custom, culture, and economic welfare on the residents of SGCD, we expect (1) to engage with the federal government, such as BLM and Forest Service through coordination, and (2) to be given early notification of any opportunities for cooperating agency status by all federal agencies as part of the NEPA process regarding any land use management policy or proposed projects.

Endangered Species Act

Animal species that are influenced by federal management or designation include candidate species, threatened and endangered species, species of concern, and critical habitat designations. Candidate species are species that are being considered for listing as a threatened or endangered species but are not yet the subject of a listing rule. A sensitive species or species of concern is a species for which either the Bureau of Land Management or Forest Service, through a land use plan, has established special management considerations.

These designations, along with listed threatened or endangered species, can significantly impact the use of private and federal lands by SGCD constituents.

Critical habitat is a specific geographic area that contains features (or may develop features) essential to the conservation and recovery of a listed species and may require special management or protection. Critical habitat can include areas that are not currently occupied by a listed species, but may be needed for its recovery. According to the ESA regulations issued on February 11, 2016, such habitat includes temporary habitat, ephemeral habitat, potential habitat, and migratory habitat. Although economic impacts are not considered during the species listing process, the economic impacts of a critical habitat designation must be analyzed in the designation process. Critical habitat includes private land as well as federal and state managed land.

Threatened and Endangered Species in Goshen County include:

Preble's meadow jumping mouse (*Zapus hudsonius preblui*), currently listed as "threatened," and wet meadow habitat for the threatened Ute's Ladies' tresses (*Spiranthes diluvialis*) (**Mark Hogan, pers. comm.**).

Endangered species include Least Tern, Pallid Sturgeon, Piping Plover, Whooping Crane, and Western Prairie Fringed Orchid.

Species of Concern possibly located in Goshen County include: Black-tailed Prairie Dog, Bald Eagle, and Mountain Plover. **(Wyoming Game and Fish)**

Certain species of wildlife have a negative economic impact on ranching and farming operations by way of crop loss, minor livestock loss, and irrigation destruction. In SGCD predators include coyotes, skunks, jackrabbits, porcupines, raccoons, and fox. Trappers are used to control these problem animals.

Prairie dog communities are of great concern in SGCD. Prairie dogs bring specific diseases, leave deep holes, and destroy native vegetation. Prairie dogs consume the same grasses and forbs as cattle and horses. Their colonies survive by eating native grasses down to the roots to allow full view of their surroundings. Over time this habit degrades the native grasses and replaces them with less palatable species with lower nutritional values, or destroys vegetation entirely. Their colonies, once established, will spread many acres, and mitigation is extremely cost prohibitive. The damage to native grasses can take at least a decade to repair.

SGCD Goals and Policies

The SGCD Board of Supervisors have adopted the following general policies which will help in the operation and administration of SGCD.

- i. Consults with stakeholders of SGCD and may act as a cooperator with public institutions and government agencies in the conservation of the water, soil, plants and wildlife resources within budgetary constraints
- ii. Facilitates the formation of a stakeholder committee as a district board to help develop SGCD natural resource planning documents
- iii. Provides technical and material assistance in an equitable fashion for stakeholders
- iv. Conducts statutory responsibilities in cooperation and with the trust and acceptance of stakeholders
- v. Reviews, studies and comments, when possible, on all local, state and federal legislation, rules and regulations promulgated or revised that may have an effect on this plan and stakeholders
- vi. Considers historic uses, customs, and culture during decision making to maintain a sustained yield of renewable and natural resources
- vii. Cooperates and consults with stakeholders, other interested parties, along with local, state, and federal governmental agencies in order to pursue the continued resource management and enhancement in the watersheds of SGCD in conjunction with existing or adopted resource management practices of all agencies within the jurisdictional boundaries of SGCD
- viii. Recognizes the distinction between the land use management requirements for the Section 15 and Section 3 lands (Taylor Grazing Act of 1934, as amended). SGCD will strive to provide assistance to stakeholders in their continued historical use and management of the Section 15 lands

- ix. Maintains an awareness of natural resource issues and concerns and creates information sources to share with the stakeholders regarding their on-the-ground soil and water resource management projects, to help sustain the long term economic base for future generations
- x. Coordinates with the Goshen County Commissioners and/or Goshen County Planning & Zoning Commission concerning the impacts of on-site sewage waste water systems on the groundwater and/or surface water resources of the lands affected by development
- xi. Recognizes that many of our perennial, intermittent and ephemeral streams exist within a [natural framework of highly erosive soils](#) and strives to define the water cycle to include the natural background's effect on water quality in our jurisdiction
- xii. Reserves the right to challenge local, state and federal decisions that are [inconsistent with this plan](#)
- xiii. Provides a [written copy of SGCD's Natural Resource Land Use Plan](#) to every local, state, and federal agency doing business within Goshen County within 30 days after the plan is adopted
- xiv. Requests timely notification from all local, state and federal agencies regarding legislation and rules and regulations promulgated or revised, that may have an effect on this plan and stakeholders
- xv. Encourages the local, state, and federal agencies to share information they routinely
- xvi. collect (i.e. geographic information system mapping and the assessment of new management practices and techniques) with SGCD

Internal District Operations

Goal SGCD will carry out duties established by statutes, the local public, and Board of Supervisors to maintain a structural, stable and functioning Conservation District.

Internal District Operations Policy

Employs personnel to effectively carry out SGCD goals

- ii Analyzes district supervisor and staff needs and makes every effort to secure assistance and/or training from private, local, state and federal sources
- iii Reviews the powers and duties of conservation districts and supervisors annually, as clarified in 11-16-122 of the Conservation District Law
- iv Budgets funds to carry out SGCD goals
- v Reviews the development and/or revision of conservation plans and the implementation of those scheduled conservation practices
- vi Completes and maintains an up-to-date Natural Resource Land Use Plan

- vii Increases capacity of the SGCD Board of Supervisors by utilizing associate board members and steering committees
- viii Convenes monthly board meetings in addition to special or emergency meetings as needed
- ix Seeks funding for natural resource and conservation projects
- X** Strives to improve its ability to provide services and operational programs and to work with Cooperating Agencies, Partners, and Associates
- xi Reviews subdivision site areas and plans and makes recommendations on soil suitability, potential soil erosion during and after construction, potential flooding or wetland concerns to the Goshen County Commissioners/Goshen County Planning Office as clarified in 18-5-306 (a)(xii)(B)(b) of the Wyoming State Statutes.

Range and Irrigated Land Management Program

Goal SGCD will promote Best Management Practices (BMP) for the improvement and continued use of all rangelands and irrigated cropland to sustain agriculture productivity.

Range and Irrigated Land Management Program Policy -

- i. Supports stakeholders in the pursuit of utilizing agriculture by-products. This will help provide economic stability and efficiency in agriculture practices.
- ii. Assists and promotes local stakeholders' continued use of best management practices for erosion control and vegetation management on rangeland and irrigated cropland. SGCD supports livestock grazing as a tool for the sound management of private, state and federal lands.
- iii. Works to increase productivity of land to increase and/or maintain Active Preference Animal Unit Months (AUMs) to maximum sustainable levels on rangeland in SGCD. SGCD will not support any action that causes the net loss of Animal Unit Months (AUMs) for livestock on any allotment, permit, or lease on lands owned or managed by the State of Wyoming or the United States Government, which is not based on sound science.
- iv. Discourages any action that results in a net loss of irrigated lands which produce food and fiber and affects the economic return of those lands within the district.
- v. Discourages any action that results in a net loss of open space which is beneficial to wildlife, vital to maintaining the viewshed, and maintaining water quality.
- vi. Supports the development and use of new technologies in range and irrigation management practices.
- vii. Maintains partnerships with local, state and federal agencies to provide technical assistance and/or funding to local residents.

Habitat/Wildlife

Goal SGCD encourages the control of predatory animals to reduce property damage to

protect wildlife and the local economy and tax base, including the viability of the agriculture community. SGCD is committed to proper habitat management by incorporating science in the planning, programs, and projects.

Habitat Management Policy -

- i. Supports predator control efforts as a way to protect private property, human health, and achieve state directed wildlife population goals. Predators can have a negative impact on livestock and wildlife causing an [economic loss](#).
- ii. Works with government agencies, local cooperators, and other interested parties in the management, maintenance and improvement of habitat, emphasizing voluntary and incentive based programs
- iii. Encourages the use of tools such as grazing, plantings, water development, fire, chemical application, and other best management practices for habitat management
- iv. Supports the development and use of new technologies in land use management that are alternatives to permanent reductions in stocking rates
- v. Supports cooperative effort with state, federal and private land managers to enhance cooperative weed management efforts countywide, coordinated with, and primarily managed by the Goshen County Weed and Pest Control District
- vi. Supports and strongly encourages the control of noxious weeds, invasive species, and pests by owners, managers, and users of all private, state and federal lands including easements, right-of-way, and municipalities
- vii. Supports wildlife management objectives and numbers based on what the range conditions and habitat can support. Wildlife habitats should be managed for sustainable wildlife populations that take into account obligations for livestock grazing and competing resource management objectives
- viii. Supports reasonable and science-based protection and restoration of critical winter range habitat, while respecting private property and considering the economic effects
- ix. Supports game herd population objectives and management decisions that will benefit the wildlife resource, while taking into consideration competition between wildlife species and domestic livestock

Recreation

Goal SGCD encourages recreational activities that provide [opportunities for economic development](#) and maintains the custom and culture of Goshen County, while ensuring conservation of the rangeland, water, and soil resources.

Recreation Policy

- i. Recognizes that recreation is multiple use of state and federal lands and SGCD supports the historical access on these lands
- ii. Promotes the value of natural resources through education of [multiple use](#) ethics (sharing of the land) and good stewardship by recreational users

Minerals and Oil and Gas Development

Goal SGCD supports minerals and oil and gas production and will provide information and education on the importance of natural resource conservation. Although the minerals and oil and gas industry is not a significant part of the custom and culture of the district, it may provide economic opportunity to SGCD landowners in the future.

Minerals and Oil and Gas Development Policy

- i. Supports the continued development and extraction of minerals, and oil and gas within federal and state jurisdiction in keeping with the local and regional custom and culture, in order to maintain the [economic stability](#) of Goshen County.
11. Encourages mineral, and oil and gas production to be conducted in an environmentally responsible manner and to ensure industries continuance is compatible with the principles of [multiple use](#) on public lands.

Water Quality/Quantity

Goal SGCD will strive to increase the efficient use of water and maintain and improve the quality and quantity of waters within SGCD through education, technical assistance, and Best Management Practices (BMPs).

Water Quality/Quantity Policy

Promotes BMPs that reduce non-point source pollution and promote water conservation

- i. Supports water development projects that increase water quantities for beneficial use within the district, while considering the traditional custom, culture, ecology, and economy of the area
- ii. Recognizes the [importance of irrigation systems](#) that make up a critical part of the water cycle within SGCD and supports the implementation of irrigation BMPs
- iii. Recognizes only credible scientific data in regards to water quality, which examines the biological, chemical, and physical attributes of a watershed within the context of related historical records. SGCD will collect water quality data as determined by priorities and programs.
- iv. Opposes any federal governmental control over individual water rights within the boundaries of the district and within the boundaries of the State of Wyoming
- v. Supports Wyoming's beneficial uses of water as defined under administrative policy of the State Engineer's Office
- vi. Recognizes that many of our perennial, intermittent and ephemeral streams exist within a natural framework of highly erosive soils and strive to define the water cycle to include the natural background's effect on water quality in our jurisdiction

Water Rights and Use

Goal SGCD supports the development, adoption, implementation of water storage, and water distribution that benefits individual, irrigators, irrigation and canal companies, industrial users, aquatic recreation users, municipalities, public land managers, and private

landowners.

Water Rights and Use Policy

- i. Supports agency actions that analyze impacts on facilities such as dams, reservoirs, delivery systems, monitoring facilities, etc., located on or downstream from land covered by any water related proposal
- ii. Recognizes and will protect the existence of all legal canals, laterals, or ditch rights-of-way
- m. Requires that historic and customary beneficial uses take precedence over any and all in-stream flow use designations established under current Wyoming State Law
- iv. Works with local, state and federal government to encourage and support state control of water rights and to maintain opportunities for future water right allocations

Government Agency Interaction and Coordination

Goal SGCD will continue to represent local natural resource interests in the planning and implementation efforts of local, state, and federal government within its boundaries. SGCD will facilitate efforts to participate in natural resource management planning in order to protect the natural resources, provide for the economic stability and to protect local customs and cultures.

Government Agency Interaction and Coordination Policy

- i. Participates with cooperators and government agencies in making sound natural resource decisions that are scientifically-based, legally defensible, sensitive to natural resource health, and responsive to multiple-interest users
- ii. Works with local, state and federal government to encourage and support state control of water rights and to maintain opportunities for future water right allocations
- iii. Coordinates with local, state and federal government on educating about the eradication of invasive species
- iv. Works to ensure local input on state and federal land management issues to promote multiple use of public lands (grazing - wildlife and domestic, logging, minerals, recreation) and protect private property rights
- v. Maintains partnerships with local, state and federal agencies to provide technical assistance and/or funding to local residents
- vi. Develops, promotes and defends viable alternatives to the proposed actions of other government agencies where the proposed action would adversely impact any of the resource or economic bases of SGCD
- vii. Provides comments, coordinates, or seeks to become a Cooperating Agency for federal land use planning affecting SGCD
- viii. Provides local land use policy or plan for consistency review purposes.

- ix. Supports [traditional multiple land uses](#) as a means to maintain continuity in the local economy and assures the sustainability of existing agricultural, recreational, and industrial interests while maintaining or improving the present environmental quality of life

Special Projects

Goal SGCD will strive to meet the rural and urban public's conservation needs through education, assistance, and special project efforts to promote a healthy community through conservation practices that have a public benefit

Special Projects Policy

- i. Promotes and implements urban conservation and beautification projects
- ii. Provides cost-share funding for on-the-ground natural resource conservation BMP projects
- iii. Promotes the use of renewable alternative energy sources

Public Information and Education

Goal

SGCD's goal is to share information and educate the public about natural resource issues. Natural resources and their related issues and concerns are dynamic.

Public Information and Education Policy

- i. Promotes agricultural and natural resource conservation in public schools, with youth organizations, and in other venues where youth and children receive formal education
- ii. Provides education and information to the general public on natural resource issues and topics
- iii. Promotes viable farming/ranching practices and business opportunities
- iv. Ensures that stakeholders are made aware of technical assistance and funding programs that are available
- v. Recognizes natural resource and agricultural success stories through district programs and local media
- vi. Promotes the development and application of BMPs
- vii. Provides guidance, information, and education to elected government officials and decision makers on conservation and natural resource management issues and impacts and outcomes related to policies initiated by government

Tree Program

Goal SGCD will help alleviate and manage soil erosion, improve energy flow, improve the water and nutrient cycle within SGCD by providing education to the public on the benefits of trees.

Tree Program Policy

- i. Supports the use of tree plantings and the use of other plant materials to provide for improved natural resource conditions and community aesthetics within SGCD
- ii. Provides stakeholders with information regarding selection of appropriate varieties of trees for the intended use, proper techniques of tree planting and maintenance, irrigation systems, program funding, wildlife interactions, and sources of trees through SGCD website, printed materials, educational workshops, and such other methods as may be appropriate
- iii. Provides technical assistance, equipment, and cost share for tree planting projects
- iv. Makes weed barrier and other essentials available to the community

Waste Management

Goal SGCD will coordinate, support and implement recycling, waste reduction, and proper waste disposal programs.

Waste Management Policy

- i. Promotes, maintains, and enhances recycling efforts
- ii. Provides education/information regarding recycling awareness
- iii. Promotes awareness of new technology and resources associated with waste management and recycling

Endangered Species Act - (Candidate, Threatened & Endangered, Species of Concern, Critical Habitat Designations)

Goal SGCD will be involved in the review of federal actions regarding ESA listings, delisting, and management plans.

*Endangered Species Act Policy***Sensitive Species/Species of Concern**

- i. Supports the use of credible data or information BLM and USFS can 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
- ii. Opposes the management of non-ESA listed species (e.g., species of concern, species of special concern, or any other non-ESA designation) as though they are listed and protected by the rules of the Endangered Species Act
- iii. Opposes the listing and supports the delisting of any species with insufficient, unsupported, or questionable data not meeting the minimum criteria for its listing or

protection level

- iv. Supports management plans not created for single species and are consistent with multiple use mandates
- v. Supports creating a unified {cross-agency {i.e. BLM and Forest Service}} definition for "species of concern"
- vi. Supports the development of local solutions to keep a species from being listed as a sensitive species/species of concern.
- vii. Supports the development of management activities on federal lands as part of the local solutions to keep a species from being listed as a sensitive species/species of concern.
- viii. Supports control of predators, zoonotic, and vector borne diseases that negatively impact sensitive species/species of concern.

Threatened or Endangered Species

- iv. Cooperates and/or coordinates with federal rulemaking, including any NEPA analysis related to the designation of critical habitat and development of recovery plans
- v. Recognizes threatened and endangered species that are listed based on clear, convincing, peer reviewed, scientific data. There is an additional financial burden imposed on private landowners by the listing of threatened or endangered species because of laws and regulations.
- vi. Requires the full analysis of the economic impacts on all proposed critical habitat designations or species management plans
- vii. Supports cooperation between private landowners and federal agencies to reduce the risk of listing under the Endangered Species Act
- viii. Opposes the introduction or reintroduction of listed species into SGCD, unless SGCD deems no harm will come to its constituents, or SGCD consents to terms and conditions or standard operating criteria that avoid disrupting current land uses
- ix. Participates as a cooperating agency in all decisions and proposed actions which affect SGCD regarding threatened or endangered species
- x. Supports the development of recovery plans within 18 months of a species listing that include clear objectives to reach for delisting to occur; for species already listed, supports the development of a recovery plan within 18 months of the adoption of this Plan
- xi. Requires the petition of the immediate delisting of a species when population or recovery plan objectives have been met
- xii. Supports the development of local solutions to keep a species from being listed under the Endangered Species Act

- xiii. Supports the development of management activities on federal lands as part of the local solutions to keep a species from being listed under the Endangered Species Act
- xiv. Requires the avoidance of single-species management in all planning efforts and requires multiple uses of lands and resources as required by federal law
- xv. Requires the data used in any listing decision meeting the minimum criteria defined in (Bureau of Land Management 2006) Data Administration and Management and FS Handbooks FSH 1909.12 (United States Forest Service 2013) Supporting Land Management Planning
- xvi. Supports control of predators, zoonotic, and vector borne diseases that negatively impact listed species
- xvii. Supports involvement of SGCD in discussions and decisions regarding any proposed introduction of experimental populations
- xviii. Opposes management actions increasing the population of any listed species in SGCD without an approved recovery plan. Without a recovery plan, management cannot focus on increasing the species population or habitat, and cannot move closer to a potential delisting.
- xix. Supports returning to existing approved management documents(s) when litigation is pursued (e.g., revert to the State or local plan rather than the BLM/USFS Sage-grouse Land Use Plan Amendment)
- xx. Requires the continued use of existing valid permits and lease rights on lands with listed species wherever possible
- xxi. Requires copies of legal descriptions showing the exact boundaries of all designated critical habitat to SGCD for distribution to impacted private landowners
- xxii. 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
- xxiii. Requires completion of exclusion analysis regarding critical habitat designations for all lands within SGCD

Special Designation Areas

Goal SGCD supports special land use designations only when they are consistent with surrounding conservation management; do not preclude future conservation options for rangeland resources, soil conservation, and conservation, development and utilization of water resources; and contribute to sound policy of multiple use, economic viability and community stability.

Special Designation Areas Policy

- i. Supports not allowing federal agencies to engage in endless and repetitive wilderness review or studies that expand lands managed as wilderness or as *defacto* wilderness while reducing the land base available for multiple use

- fi. Opposes any impairment or diminution by any wilderness or other special use designations to those interests associated with ditches, reservoirs, water conveyance facilities, and easements, or rights-of-way
- ifi. Supports the release of wilderness study areas that were not recommended for wilderness from non-impairment management, and supports an end to the informal *de facto* wilderness management of other "study areas"
- iv. Opposes proposed special designations until it is determined and substantiated by verifiable scientific data that; a need exists for the designation, protections cannot be provided by other methods, and the area in question is truly unique when compared to other area lands

Travel Management/Access

Goal SGCD supports the historic right to travel over federal and state lands.

Travel Management/Access Policy

- i. Supports access to and across public lands, as critical to the use, management, and development of those lands and adjoining state and private land
- ii. Opposes closure, withdrawal, or abandonment of roads, trails, rights-of-way, easements or other traditional access for the transportation of people, products, recreation, energy or livestock, without full public disclosure and analysis
- iii. Supports access to all water related facilities such as dams, reservoirs, delivery systems, monitoring facilities, livestock water and handling facilities, etc., for maintenance purposes

Wild Horses, Burros, and Estray Livestock

Goal SGCD supports wild horse management for viable healthy herds that will not adversely impact the rangeland resource, wildlife habitat or wildlife, soil resources or other approved multiple uses.

Wild Horses, Burros, and Estray Livestock Policy

- i. Opposes the introduction or reintroduction of wild horses or burros or estray livestock on public lands within SGCD
- ii. Supports herd management plans that include provisions for periodic gathers of all horses in the herd management area to limit populations to planned levels, remove trespass horses, and test for equine diseases as prescribed by the Wyoming State Veterinarian and prevent habitat degradation
- iii. Works to ensure that forage adjustments to livestock grazing also make proportionate adjustments for wild horses, when wild horses are a causal factor in the area not meeting the Wyoming Healthy Rangeland Standards
- iv. Encourages wild horse management tools that will permit long-term, cost-effective solutions, but recommends use of short-term remedies to ensure that the wild

horses are not left on the public or private lands

Forest Management (Wildfire, and Community Wildfire Planning)

Goal SGCD encourages proper rangeland, forest, and woodland management to ensure healthy and vibrant watersheds for current and future generations and to sustain the stability of ranching and agriculture.

Forest Management Policy

- i. Supports maintenance and restoration of watershed health by demonstrating active rangeland, forest, and woodland management
- ii. Supports local, regional, state and federal partnerships in the manufacture and use of forest and forest by-products including innovative ways to harvest timber
- iii. Supports the use of fire, such as in prescribed burns, thinning, or as vegetative treatments, and salvage logging in burned forest areas
- iv. Recognizes the benefits of wildfire in certain habitats
- v. Supports aggressively suppressing and preventing wildfires when private property structures are threatened
- vi. Encourages development of policies for grazing rest prescriptions related to either wildfires or prescribed burns on a site-specific basis taking into account the needs of the vegetation and flexibility to meet the needs of the rancher
- vii. Encourages the development of vegetation treatments and use of livestock grazing to keep fuel loads within appropriate limits

Air Quality

Goal SGCD supports an air quality monitoring plan, as it is critical to the health and well-being of our residents.

Air Quality Policy

- i. Requires that air quality baselines for the area must be established with the full participation of SGCD
- ii. Requires all air quality studies undertaken by or on behalf of a public land management agency by the Wyoming DEQ-Air Quality Division to be coordinated with SGCD

Broad Issue Policies Specific to SGCD

In order to develop broad issue based policies, this Plan recognizes priority issues of concern within the following resource area categories. Current specific policies of the District are provided as follows, recognizing that significant programmatic overlap occurs. For example, **education is a necessary component of all priority issues to varying degrees.**

- 1. Water Quality**
- 2. Weed Management - Pest Management**

3. **Soil Health**
4. **Irrigation- Water Management**
5. **Shelterbelts - Windbreaks**
6. **Grazing - Land Conservation**
7. **Special Projects**

WATER: LOCAL SUPPORT DATA

Protection of water resources (water quality, quantity, and demands) was identified as the most important issue to constituents within SGCD in a survey conducted in 2017. Concerns include agricultural sustainability and local economy affected by drought, demands of downstream water users, and effects of flood and pivot irrigation concerning groundwater recharge and sediment movement.

Without water, there is no life. In the interest of protecting, preserving, and sustaining our water supply, the Board gives serious consideration to this resource.

Policy: Water

#1: The District opposes the use, sale, or lease by the State of any Wyoming basin water to out of state entities. Any sale, or lease, of water out of basin, will be mitigated by storage, before the transaction is approved. Further, the District does not support trans-basin diversions.

#2: The District opposes interstate water transfers as they have adverse impacts on Wyoming water rights, existing commitments to maintain flows in the North Platte River system, and adverse impacts to future water development in Wyoming.

#3: The District advocates protecting of existing water rights and water uses within the District for long-term conservation and enhancement of our natural resources which will contribute to the economic stability of the District and its residents.

#4: The District encourages and facilitates development of water storage facilities to meet Wyoming water needs.

#5: The District supports efforts to ensure Wyoming Water Law, as it exists, is adhered to in all cases. Further, the District wants to ensure historic and customary beneficial uses under Wyoming State Law take precedence over any, and all, in-stream flow use designations.

#6: The District supports water quality monitoring as a part of all energy and right-of-way development projects to ensure groundwater and surface water quality is not degraded.

#7: The District supports Wyoming State Water Law and the State's right to administer all water. Further, the District is opposed to any federal government action which adversely affects state's rights where water law is concerned.

#8: The District supports private rights in the administration of riparian or wetland areas.

#9: The District supports a fair monetary compensation for agriculture water right takings for any environmental or wildlife purposes.

#10: Any new demands for water needed under the Platte River Cooperative Agreement in the habitat area in central Nebraska would need to come from non-traditional sources, such as cloud seeding, to protect the current water use system in the district and a policy established after public input for low water years.

Objectives: Water

Strive to maintain and improve the quality and quantity of the District's waters through education, technical assistance, Best Management Practices, and coordination, and increase the efficient use of water through the same processes.

Participate in watershed studies and plans to maintain and/or improve the ecological health and quality of water within all watersheds in the District.

In conjunction with local, state and federal planning partners, develop strategies to maintain and improve watershed conditions that address availability of water for critical needs, including municipal uses and agriculture, while attaining stream bank stability, habitat, and riparian health.

SOIL: LOCAL SUPPORT DATA

Agriculture is the foundational building block of Goshen County. The value of the Wyoming agricultural sector for 2014 was about 50 billion dollars. Wyoming ranks eleventh in the nation for total land in farms and ranches (USDA 2015). Goshen County ranked first in Wyoming for agriculture production and first in Wyoming for all cattle which clearly makes it an important contributor to Wyoming's agricultural economics.

Policy: Soil

#1: Agricultural land and subsequent operations are primarily responsible for the economic stability of the District. Therefore, the Board promotes to retain farming and ranching as the preferred land uses in Goshen County.

#2: The District encourages promotion of best management practices of all lands.

#3: The District encourages innovative farming/grazing practices that promote improved soil health.

#4: The District supports the uniform use of ecological site descriptions developed by NRCS as the foundation for the inventory, evaluation, setting of monitoring objectives, and management of rangelands.

Objectives: Soil

Promote public awareness and understanding of local agriculture, and successful conservation measures currently employed by local farmers and ranchers who are good stewards of the land.

Facilitate efforts to participate in natural resource management planning in order to provide for the economic stability and to protect local customs and cultures. Protect prime and statewide important lands in agricultural production.

Support traditional multiple land uses as a means to maintain continuity in the local economy, and assure the sustainability of existing agricultural, recreational, and industrial interests while maintaining or improving the present environmental quality of life.

Provide cost-share funding for on-the-ground natural resource conservation Best Management Practice (BMP) projects.

Support the increase or stabilization of soil organic matter (no net loss through wind or water erosion).

RANGE: LOCAL SUPPORT DATA

Soils meeting their range of ecosystem functions requires a combination of physical, chemical, and biological properties that are a reflection of the environmental forces that formed the soil, including the climate, parent material, topography, and vegetation acting over a long period of time. Most natural resource work whether for agriculture, energy, or wildlife purposes begins with the evaluation of the soils to determine site potential. This information is necessary for accurate analysis of disturbance impacts, reclamation, and rangeland health evaluations to name a few.

Policy: Range

#1: The District supports private landowner rights to manage grazing lands, and supports proper and appropriate livestock grazing practices as a tool for the sound management of private, state, and federal lands.

#2: The District supports maintaining and improving existing grazing conditions to promote optimum production of forage for continued ecosystem function.

#3: The District supports and strongly encourages the control of noxious, invasive, and chemical resistant weeds and pests by owners, managers, and users of all lands.

#4: The District acknowledges that prescribed fire can be beneficial when used properly.

#5: The District supports and strongly encourages the control of prairie dogs by owners, managers, and users of all lands.

Objectives: Range

Encourage landowners to use the Natural Resources Conservation Service (NRCS) to attain proper seeding mixes of legumes, grasses, and forbs to improve soil structure and build organic matter.

Encourage landowners to use technical assistance from NRCS to gain knowledge of proper grazing practices and stocking rates to promote grazing systems that will build soil, rangeland health, and improve watershed conditions.

Promote productive and sustainable range management through incorporation of Best Management Practices (BMPs), proven grazing principles, and improved grazing practices.

Work with agriculture producers and partnering agencies to facilitate alternative and innovative methods for rangeland improvements.

Encourage landowners to use expertise of Goshen County Weed and Pest to reduce the distribution of noxious, invasive, and chemical resistant weeds.

DEVELOPMENT: LOCAL SUPPORT DATA

Land development is probably the most controversial area of this plan and yet is one of the most important. As the world environment changes and technology allows for us to experience global happenings as they occur, it is becoming increasingly harder to hold firm to local culture of a quiet agrarian society with strong values yet needing to keep pace with new technologies and growth. It is important to keep our open spaces open but is equally important to not fall behind on the global market.

Policy: Development

#1: The District supports new residential developments and commercial sites in or adjacent to areas currently zoned as residential and commercial zoning, and concurs with the Goshen County Zoning Resolution statement.

#2: The District strives to achieve a sustainable balance between the needs of the community, energy development, agriculture, and the environment.

#3: Social, cultural, and environmental impacts of energy and industrial mineral development shall be fully analyzed during all NEPA analysis.

#4: The District supports local, state, and federal agencies in requiring proper construction, maintenance, and reclamation of transportation corridors such as access roads, pipelines, transmission lines, etc. to prevent resource deterioration.

#5: The District supports obtaining an executed surface use agreement providing for compensation to the surface owner for damages to the land and improvements as provided in W.S. 30-5-405(a) for all oil and gas operations where a split estate between mineral rights and surface ownership exists. Further, the District directs that a surface use agreement is for the protection of the surface resources, reclamation activities, timely completion of reclamation of the disturbed areas, and payment for damages caused by the oil and gas operations.

#6: The District supports all Constitutional private property rights in local, state, and federal agency policies, regulations, rules, and actions.

#7: The District supports utilizing legal remedies when federal or state governmental action operates to take property rights or some portion of the property right.

#8: The District supports federal and state agencies rejecting the submission of resource data that was collected while trespassing. Further, the District supports the prosecution of anyone guilty of trespassing to unlawfully collect resource data.

Objectives: Development

Stay abreast of emerging issues - including energy conservation, alternative energy, threatened and endangered species, public land issues, and other related topics.

Provide natural resource education opportunities to residents of all ages that encourage awareness of natural resources.

Support the minimization of ground disturbance associated with energy development (new roads and utility rights-of-way), and locate, when possible, outside of important habitats.

Support restriction of surface occupancy to already disturbed areas or edges of habitat, or adjacent to previously disturbed corridors, so impacts on native plant or wildlife will be minimal.

Support reseeding disturbed areas with native species, develop weed management plans, and work with agencies to provide soil and reclamation information to energy development projects.

COMMUNITY: LOCAL SUPPORT DATA

Natural assets such as rivers, forests, grasslands and wetlands benefit society through the ecosystem services they provide, including water purification, air quality improvements, and flood protection, among other benefits. However, these services are frequently left out of resource management decisions because they aren't easily quantified or assigned a monetary value. As a result, society undervalues these environmental benefits, contributing to the loss of natural systems. Environmental markets can provide incentives to preserve ecosystems and the services they provide. To better understand what impacts projects may have on landscapes, culture, and customs, it is of great interest to have federal agencies fully characterize the socioeconomic bearings of projects both quantitatively and qualitatively.

Generally, however, the public does not have an adequate understanding of agriculture and the conservation measures that many farmers and ranchers already employ, since media attention is generally focused around negative stories. This lack of understanding has increased greatly during the past 50 years of increasing urbanization, as fewer and fewer people make their living directly from agriculture. The lack of understanding can lead to misperceptions about the industry and environmental impacts, and can contribute to the communications gap between the agricultural community and urban/environmental interests, reducing their ability to work together constructively to address current issues.

Policy: Community Services

#1: The balance between local economic growth and quality of life, and community stability of customs and culture are important to the District. Therefore, local, state, and federal agency plans or management recommendations shall include a socio-economic impact description that addresses the effects on the District natural resources, economies, and health and welfare of the District citizens.

#2: The District shall review subdivision plans and make recommendations on soil suitability, potential soil erosion during and after construction, potential flooding, or wetland concerns to the Goshen County Commissioners/Goshen County Planning Office as clarified in 18-5-306 (a)(xii)(B)(b) of the Wyoming State Statutes.

#3: The District will provide cooperators with program funding and information regarding selection of appropriate varieties of trees for the intended use, the use of trees as windbreaks

and living snow fences, proper tree planting techniques and maintenance, tree irrigation systems, and wildlife interactions.

#4: The District strives to reduce risk of groundwater contamination by offering a collection day for urban and rural pesticides and fertilizers, hazardous household chemicals, and electronic waste.

#5: The District will participate in the Local Work Group to address resource concerns and NRCS programs.

#6: The District will work with local educators to provide natural resource presentations which enhance their students' natural resource knowledge, and provide agriculture and natural resource education in public schools, with youth organizations, and in other venues where youth and children receive formal education.

#7: The District will provide educational opportunities to the public on natural resource issues and topics through seminars, events, workshops, tours, and hands-on experiences.

Objectives: Community Service

Participate as a Cooperating Agency with special expertise as provided by the National Environmental Policy Act in federal land planning and implementation.

Participate in educational opportunities to gain knowledge and skills for resource issues and to provide current information to district residents.

Expand educational resource, technical assistance, and funding availability information through all mediums at our disposal (newspapers, radio, social media, website, newsletters, and posters).

Provide guidance, information, and education to elected government officials and decision makers on conservation and natural resource management issues, and supply education and education materials to schools, organizations, and cooperators/landowners.

Support education of the benefits of trees, and make available affordable trees and planting services to provide for improved natural resource conditions and community aesthetics within the District.

Proactively plan, coordinate, and install new living snow fences, and promote maintenance of existing living snow fences.

Take advantage of any training opportunities regarding ecosystem services.

WILDLIFE: LOCAL SUPPORT DATA

Wildlife within the District represent a national treasure in terms of opportunities to view and hunt, but management is required to ensure balance of species propagation without undue burden on landowners. The District will focus on species recovery by improving ecosystem health instead of single species listings.

Policy: Wildlife

#1: The District promotes wildlife conservation, sustainability of healthy wildlife habitat and populations, and their contributions to the local economy while accounting for wildlife effects on economic stability.

#2: The District supports the following 17 points, as adopted by the Western Coalition of Conservation Districts, as it pertains to the Endangered Species Act (ESA):

Provide full compensation to individual for current and long-term "takings". Take into consideration cost-benefit analysis and mitigate for adverse economic, social, and cultural needs of the human element.

Consider and evaluate cumulative effects in accordance with the National Environmental Policy Act (NEPA). Single species management does not consider ecosystem needs and may be detrimental to the well-being of other organisms.

Focus on species recovery by improving ecosystem health instead of single species listing. Listing should be incentive based rather than regulatory.

Seek scientific consensus and require mandatory non-governmental, no-biased peer review prior to the listing of any species.

Petitioners requesting endangered or threatened species designation should be responsible for costs incurred if a listing is determined to be unwarranted.

Require appropriate bonding by any petitioner for a proposed listing of a species. Bond to be forfeited if a species is determined not warranted to be listed.

Ensure agency regulations conform to ESA law.

Allow states to design, control, and implement functionally equivalent, state-specific programs for endangered species recovery planning and critical habitat designation with federal funding.

Codify applicant status to make clear that permit applicants (consists of any individual seeking a federal permit or license) are provided the opportunity of direct involvement in the Section 7 process.

Allow implementation action of any project or activity already underway prior to completion and formal approval of a Recovery Plan

Direct the Secretaries of Agriculture, Commerce and Interior to streamline the ESA Section 7 consultation process through a tiered programmatic consultation at the national, state, and local level.

Eliminate the proposed listing of any sub-species.

Not allow taxpayer funds to be utilized by non-government entities to sue the Government or others

Enhance the incidental take rules to reduce the need for civil violations penalties.

Expedite the delisting process.

Revise the "taking" definition to protect private and state property rights in conformance with the United States Constitution. (Section 3(19))

Provide for "safe-harbor" provisions to make the act more flexible and to encourage landowners to manage lands in a more "endangered species friendly" manner.

#3: The District supports the Wyoming Game and Fish Department being the sole agency responsible for managing all wildlife species in Wyoming not listed as threatened or endangered per the Endangered Species Act.

#4: The District supports proactive management of candidate and sensitive species to avoid further ESA listing protections.

#5: The District encourages using livestock and other tools to improve wildlife habitat.

Objectives: Wildlife

Maintain cooperative efforts with federal and state wildlife agencies on their respective projects to avoid or mitigate adverse impacts to wildlife species and habitats.

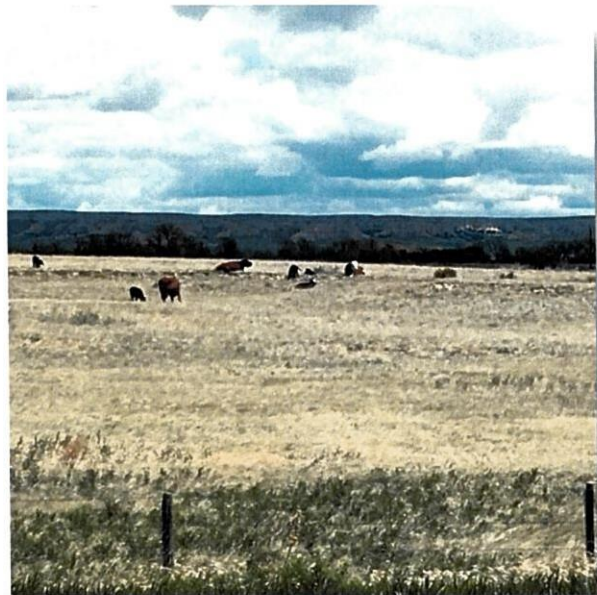
Promote the critical role agricultural producers have in providing habitat to wildlife within the District.

Support wildlife habitat improvement and wildlife friendly fencing projects.

Promote projects that improve the quality of riparian and upland habitats that support wildlife.

Work with government agencies, local cooperators, and other interested parties in the management, maintenance and improvement of wildlife habitat, emphasizing voluntary and incentive based programs.

Work to encourage the use of tools such as grazing, plantings, water development, fire, chemical application, and other best management practices to improve wildlife habitat.



DEFINITION OF TERMS

AUM- animal unit months; the forage consumption on the basis of one standard mature 1,000-pound cow, either dry or with calf up to 6 months old as consuming 26 pounds of oven dry forage per day; Using these figures an AUM is 780 to 806 pounds of oven dry forage.

BLM-Bureau of Land Management

BMP-best management practices; those land management practices generally determined to be effective and practicable means to reduce negative impacts and maximize beneficial outcomes of various land uses

Category C- custodial allotment; a designation by BLM defined as an allotment where public lands produce less than 10 percent of the forage in the allotment or are less than 10 percent of the land area; An allotment is generally not designated Category C if the public land in the allotment contains: 1. Critical habitat for a threatened or endangered species, 2. Wetlands negatively affected by livestock grazing.

Category I- improve allotment; a designation by BLM defined as an allotment where current livestock grazing management or level of use on public land is, or is expected to be, a significant causal factor in the non-achievement of land health standards, or where a change in mandatory terms and conditions in the grazing authorization is or may be necessary

Category M- maintain allotment; a designation by BLM defined as an allotment where public land health standards are met or where livestock grazing on public land is not a significant causal factor for not meeting the standards and current livestock management is in conformance with guidelines

Checkerboard- a checkerboard pattern of alternating private and public land; a remnant of the Union Pacific Act of 1862 when the US Congress gave every other section of land within 20 miles of the railroad to Union Pacific, with the idea that sales of that land would fund the railroad project; Overtime Union Pacific granted sections have been sold into private ownership with the remaining alternate sections retained by the federal ownership.

Cooperating agency- any agency that has jurisdiction by law or special expertise as per the National Environmental Policy Act of 1976; Cooperating agencies are to assist the lead Federal agency in developing EA's or EIS's as per the Council on Environmental Quality (40 CFR §1501.6).

Credible data- scientifically valid chemical, physical and biological monitoring data collected under an accepted sampling and analysis plan, including quality control, quality assurance procedures and available historical data. W.S. 35-11-103 (c) (xix)

EA- environmental assessment; the assessment of the environmental consequences (positive and negative) of a federal plan, policy, program or concrete project prior to the decision to move forward with the proposed action

EIS- environmental impact statement; the public review process when a proposed federal action is determined to significantly affect the quality of the human environment; The regulatory requirement for an Environmental Impact Statement are more detailed and rigorous than the requirements for an Environmental Assessment.

ESA-Endangered Species Act of 1973; provides for the conservation of species that are endangered or threatened (of extinction); "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future.

FLPMA-Federal Land Policy and Management Act of 1976; the primary law that governs the management of federal lands administered by the Bureau of Land Management

Multiple Use- the mandate within the Federal Land Policy and Management and National Forest Management Acts that federal lands must be managed for a variety of uses including (but not limited to) energy development, livestock grazing, timber harvest, recreation, and wildlife habitat

NEPA- National Environmental Policy Act; the review process when a federal agency develops a proposal to take a major federal action; The NEPA process can involve three levels of analysis: Categorical Exclusion when the act is determined to not have a significant effect on the human environment; Environmental Assessment which determines the potential to cause significant environmental effects; and Environmental Impact Statement in which a proposed federal action is determined to significantly affect the quality of the human environment. The regulatory requirement for an Environmental Impact Statement are more detailed and rigorous than the requirements for an Environmental Assessment.

NFMA-National Forest Management Act of 1976; the primary statute governing the administration of national forests and was an amendment to the Forest and Rangeland Renewable Resources Planning Act of 1974

PILT-payment in lieu of taxes; federal payment to local governments that help offset losses in property taxes due to non-taxable federal lands within their boundaries

Rangeland- land on which the indigenous vegetation is predominantly grasses, grass-like plants, forbs, or shrubs and is managed as a natural ecosystem, dependent on naturally occurring precipitation and hydrologic regimes

Special Designation Areas- Special designations occur in two ways: Congressional designation and Administrative designations. Congressional designations include National Monuments, National Conservation Areas, National Recreation Areas, Cooperative Management and Protection Areas, National Wilderness Areas, Outstanding Natural Areas, National Wild and Scenic Rivers, Game Preserves, Forest Reserves, and National Scenic and Historic Trails. Administrative designations by the BLM and USFS include Wilderness Study Areas, Areas of Critical Environmental Concern, Scenic Byways, Back Country Byways, National Recreation Trails, Roadless Areas, Watchable Wildlife Viewing Sites, Wild and Scenic River Study Areas, Wild Horse and Burro Ranges, Recreation Areas, Natural Areas, Experimental Forests or Range, and Primitive Areas, etc. (DO1-BLM, 2005b; USDA-USFS, 2008) U.S. Fish and Wildlife may also designate Critical Habitat Areas.

Statutory- enacted, created, or regulated by law

Stakeholders- individuals or groups who may be affected by, or have an interest in, the policy or plans of a managing agency

RMP-Resource Management Plan; a blueprint plan explaining how the BLM will manage areas of public land over a period of time (generally 10-15 years); BLM Field Offices

prepare RMPs for the lands within their boundaries. RMPs contain decisions that guide future management actions and subsequent site-specific implementation decisions. RMPs establish goals and objectives for resource management (desired outcomes) and the measures needed to achieve these goals and objectives (management actions and allowable uses).

USFS-United States Forest Service

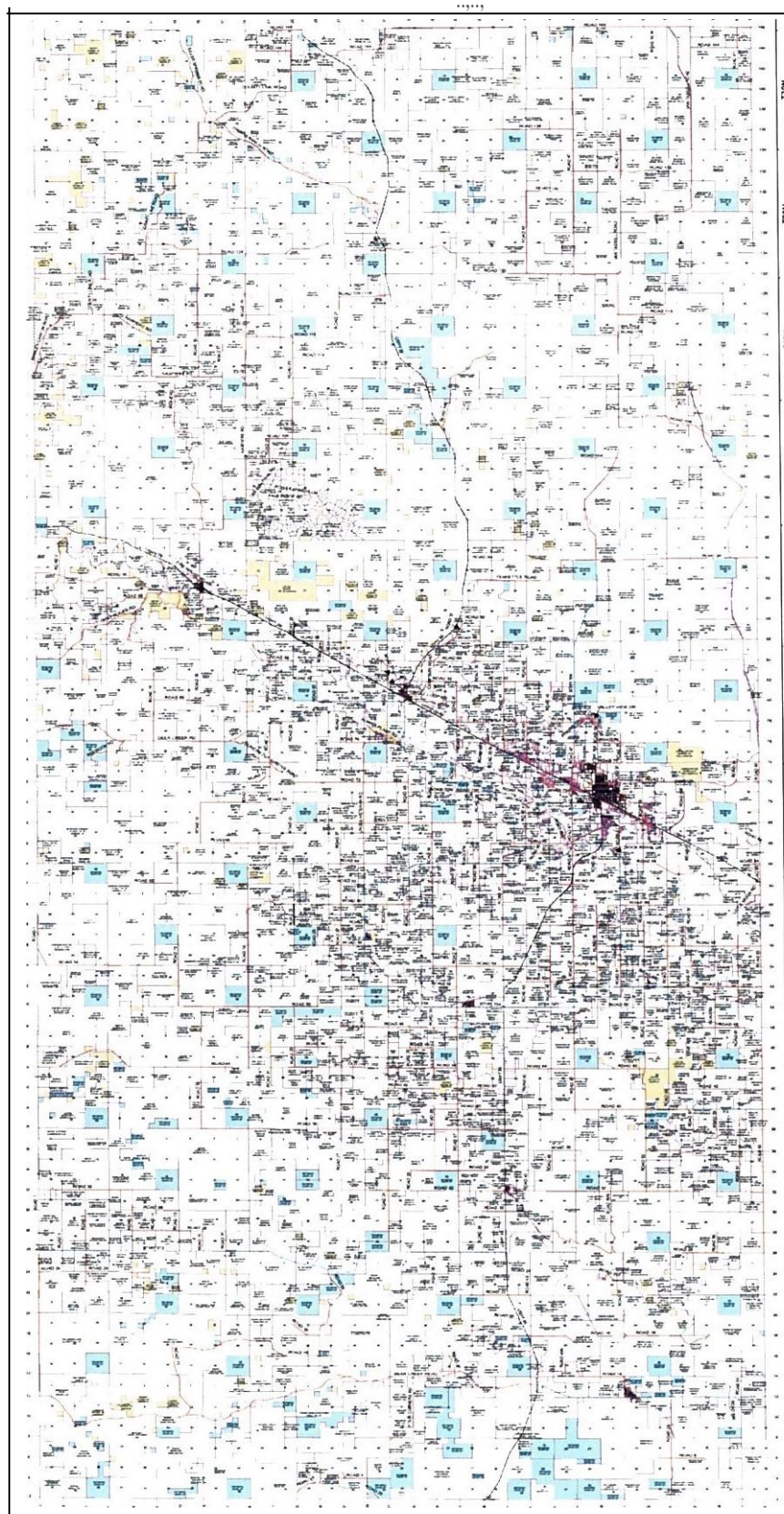
Viewshed- the area visible to an observer from a certain vantage point

SGCD-South Goshen Conservation District



Goshen County Parcel Map

September 21, 2015



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12/19/2022

The South Conservation District Board of Supervisors is committed to providing its residents solid, principled natural resources management leadership, and promoting practical conservation methodology. The Board encourages a comprehensive coordination effort between landowners, operators, this district, and cooperating organizations to ensure long-term benefits to our land, water quality and quantity, and air.

Therefore, be it resolved, the South Goshen Conservation District Board of Supervisors adopts this Local Land Use and Natural Resource Management Plan for 2023-2027

Boyle Vice chairman

SD Ross

Scott D Ross

Supervisor

W. Jackson

WAIL JACKSON

Supervisor